

SHORT TITLE

Pub. L. 110-161, div. E, title VI, §601, Dec. 26, 2007, 121 Stat. 2094, provided that: “This title [enacting this chapter] may be cited as the ‘Border Infrastructure and Technology Modernization Act of 2007’.”

§§ 1402, 1403. Repealed. Pub. L. 113-188, title X, § 1001(b), Nov. 26, 2014, 128 Stat. 2022

Section 1402, Pub. L. 110-161, div. E, title VI, §603, Dec. 26, 2007, 121 Stat. 2094, related to the Port of Entry Infrastructure Assessment Study.

Section 1403, Pub. L. 110-161, div. E, title VI, §604, Dec. 26, 2007, 121 Stat. 2095, related to the National Land Border Security Plan.

§ 1404. Repealed. Pub. L. 114-4, title V, § 566, Mar. 4, 2015, 129 Stat. 73

Section, Pub. L. 110-161, div. E, title VI, §605, Dec. 26, 2007, 121 Stat. 2096, related to the port of entry technology demonstration program.

§ 1405. Authorization of appropriations

(a) In general

In addition to any funds otherwise available, there are authorized to be appropriated such sums as may be necessary to carry out this chapter for fiscal years 2009 through 2013.

(b) International agreements

Funds authorized to be appropriated under this chapter may be used for the implementation of projects described in the Declaration on Embracing Technology and Cooperation to Promote the Secure and Efficient Flow of People and Commerce across our Shared Border between the United States and Mexico, agreed to March 22, 2002, Monterrey, Mexico (commonly known as the Border Partnership Action Plan) or the Smart Border Declaration between the United States and Canada, agreed to December 12, 2001, Ottawa, Canada that are consistent with the provisions of this chapter.

(Pub. L. 110-161, div. E, title VI, §606, Dec. 26, 2007, 121 Stat. 2097.)

CHAPTER 6—CYBERSECURITY

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LIMITATION RELATING TO ESTABLISHMENT OR SUPPORT OF CYBERSECURITY UNIT WITH THE RUSSIAN FEDERATION

Pub. L. 116-92, div. E, title LXVII, §6701, Dec. 20, 2019, 133 Stat. 2221, provided that:

“(a) APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.—In this section, the term ‘appropriate congressional committees’ means—

- “(1) the congressional intelligence committees;
- “(2) the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives; and
- “(3) the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives.

“(b) LIMITATION.—

“(1) IN GENERAL.—No amount may be expended by the Federal Government, other than the Department of Defense, to enter into or implement any bilateral agreement between the United States and the Russian Federation regarding cybersecurity, including the establishment or support of any cybersecurity unit, unless, at least 30 days prior to the conclusion of any such agreement, the Director of National Intelligence submits to the appropriate congressional committees a report on such agreement that includes the elements required by subsection (c).

“(2) DEPARTMENT OF DEFENSE AGREEMENTS.—Any agreement between the Department of Defense and the Russian Federation regarding cybersecurity shall be conducted in accordance with section 1232 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) [130 Stat. 2488], as amended by section 1231 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115-91) [131 Stat. 1657].

“(c) ELEMENTS.—If the Director submits a report under subsection (b) with respect to an agreement, such report shall include a discussion of each of the following:

- “(1) The purpose of the agreement.
- “(2) The nature of any intelligence to be shared pursuant to the agreement.
- “(3) The expected value to national security resulting from the implementation of the agreement.
- “(4) Such counterintelligence concerns associated with the agreement as the Director may have and such measures as the Director expects to be taken to mitigate such concerns.

“(d) RULE OF CONSTRUCTION.—This section shall not be construed to affect any existing authority of the Director of National Intelligence, the Director of the Central Intelligence Agency, or another head of an element of the intelligence community, to share or receive foreign intelligence on a case-by-case basis.”

[For definitions of “congressional intelligence committees” and “intelligence community” as used in section 6701 of div. E of Pub. L. 116-92, set out above, see section 5003 of div. E of Pub. L. 116-92, set out as a note under section 3003 of Title 50, War and National Defense.]

EX. ORD. No. 13800. STRENGTHENING THE CYBERSECURITY OF FEDERAL NETWORKS AND CRITICAL INFRASTRUCTURE

Ex. Ord. No. 13800, May 11, 2017, 82 F.R. 22391, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of

America, and to protect American innovation and values, it is hereby ordered as follows:

SECTION 1. *Cybersecurity of Federal Networks.*

(a) *Policy.* The executive branch operates its information technology (IT) on behalf of the American people. Its IT and data should be secured responsibly using all United States Government capabilities. The President will hold heads of executive departments and agencies (agency heads) accountable for managing cybersecurity risk to their enterprises. In addition, because risk management decisions made by agency heads can affect the risk to the executive branch as a whole, and to national security, it is also the policy of the United States to manage cybersecurity risk as an executive branch enterprise.

(b) *Findings.*

(i) Cybersecurity risk management comprises the full range of activities undertaken to protect IT and data from unauthorized access and other cyber threats, to maintain awareness of cyber threats, to detect anomalies and incidents adversely affecting IT and data, and to mitigate the impact of, respond to, and recover from incidents. Information sharing facilitates and supports all of these activities.

(ii) The executive branch has for too long accepted antiquated and difficult-to-defend IT.

(iii) Effective risk management involves more than just protecting IT and data currently in place. It also requires planning so that maintenance, improvements, and modernization occur in a coordinated way and with appropriate regularity.

(iv) Known but unmitigated vulnerabilities are among the highest cybersecurity risks faced by executive departments and agencies (agencies). Known vulnerabilities include using operating systems or hardware beyond the vendor's support lifecycle, declining to implement a vendor's security patch, or failing to execute security-specific configuration guidance.

(v) Effective risk management requires agency heads to lead integrated teams of senior executives with expertise in IT, security, budgeting, acquisition, law, privacy, and human resources.

(c) *Risk Management.*

(i) Agency heads will be held accountable by the President for implementing risk management measures commensurate with the risk and magnitude of the harm that would result from unauthorized access, use, disclosure, disruption, modification, or destruction of IT and data. They will also be held accountable by the President for ensuring that cybersecurity risk management processes are aligned with strategic, operational, and budgetary planning processes, in accordance with chapter 35, subchapter II of title 44, United States Code.

(ii) Effective immediately, each agency head shall use The Framework for Improving Critical Infrastructure Cybersecurity (the Framework) developed by the National Institute of Standards and Technology, or any successor document, to manage the agency's cybersecurity risk. Each agency head shall provide a risk management report to the Secretary of Homeland Security and the Director of the Office of Management and Budget (OMB) within 90 days of the date of this order. The risk management report shall:

(A) document the risk mitigation and acceptance choices made by each agency head as of the date of this order, including:

(1) the strategic, operational, and budgetary considerations that informed those choices; and

(2) any accepted risk, including from unmitigated vulnerabilities; and

(B) describe the agency's action plan to implement the Framework.

(iii) The Secretary of Homeland Security and the Director of OMB, consistent with chapter 35, subchapter II of title 44, United States Code, shall jointly assess each agency's risk management report to determine whether the risk mitigation and acceptance choices set forth in the reports are appropriate and sufficient to manage the cybersecurity risk to the executive branch enterprise in the aggregate (the determination).

(iv) The Director of OMB, in coordination with the Secretary of Homeland Security, with appropriate support from the Secretary of Commerce and the Administrator of General Services, and within 60 days of receipt of the agency risk management reports outlined in subsection (c)(ii) of this section, shall submit to the President, through the Assistant to the President for Homeland Security and Counterterrorism, the following:

(A) the determination; and

(B) a plan to:

(1) adequately protect the executive branch enterprise, should the determination identify insufficiencies;

(2) address immediate unmet budgetary needs necessary to manage risk to the executive branch enterprise;

(3) establish a regular process for reassessing and, if appropriate, reissuing the determination, and addressing future, recurring unmet budgetary needs necessary to manage risk to the executive branch enterprise;

(4) clarify, reconcile, and reissue, as necessary and to the extent permitted by law, all policies, standards, and guidelines issued by any agency in furtherance of chapter 35, subchapter II of title 44, United States Code, and, as necessary and to the extent permitted by law, issue policies, standards, and guidelines in furtherance of this order; and

(5) align these policies, standards, and guidelines with the Framework.

(v) The agency risk management reports described in subsection (c)(ii) of this section and the determination and plan described in subsections (c)(iii) and (iv) of this section may be classified in full or in part, as appropriate.

(vi) Effective immediately, it is the policy of the executive branch to build and maintain a modern, secure, and more resilient executive branch IT architecture.

(A) Agency heads shall show preference in their procurement for shared IT services, to the extent permitted by law, including email, cloud, and cybersecurity services.

(B) The Director of the American Technology Council shall coordinate a report to the President from the Secretary of Homeland Security, the Director of OMB, and the Administrator of General Services, in consultation with the Secretary of Commerce, as appropriate, regarding modernization of Federal IT. The report shall:

(1) be completed within 90 days of the date of this order; and

(2) describe the legal, policy, and budgetary considerations relevant to—as well as the technical feasibility and cost effectiveness, including timelines and milestones, of—transitioning all agencies, or a subset of agencies, to:

(aa) one or more consolidated network architectures; and

(bb) shared IT services, including email, cloud, and cybersecurity services.

(C) The report described in subsection (c)(vi)(B) of this section shall assess the effects of transitioning all agencies, or a subset of agencies, to shared IT services with respect to cybersecurity, including by making recommendations to ensure consistency with [former] section 227 [now 2209] of the Homeland Security Act ([former] 6 U.S.C. 148) [now 6 U.S.C. 659] and compliance with policies and practices issued in accordance with section 3553 of title 44, United States Code. All agency heads shall supply such information concerning their current IT architectures and plans as is necessary to complete this report on time.

(vii) For any National Security System, as defined in section 3552(b)(6) of title 44, United States Code, the Secretary of Defense and the Director of National Intelligence, rather than the Secretary of Homeland Security and the Director of OMB, shall implement this order to the maximum extent feasible and appropriate. The Secretary of Defense and the Director of National Intelligence shall provide a report to the Assistant to

the President for National Security Affairs and the Assistant to the President for Homeland Security and Counterterrorism describing their implementation of subsection (c) of this section within 150 days of the date of this order. The report described in this subsection shall include a justification for any deviation from the requirements of subsection (c), and may be classified in full or in part, as appropriate.

SEC. 2. Cybersecurity of Critical Infrastructure.

(a) *Policy.* It is the policy of the executive branch to use its authorities and capabilities to support the cybersecurity risk management efforts of the owners and operators of the Nation's critical infrastructure (as defined in section 5195c(e) of title 42, United States Code) (critical infrastructure entities), as appropriate.

(b) *Support to Critical Infrastructure at Greatest Risk.* The Secretary of Homeland Security, in coordination with the Secretary of Defense, the Attorney General, the Director of National Intelligence, the Director of the Federal Bureau of Investigation, the heads of appropriate sector-specific agencies, as defined in Presidential Policy Directive 21 of February 12, 2013 (Critical Infrastructure Security and Resilience) (sector-specific agencies), and all other appropriate agency heads, as identified by the Secretary of Homeland Security, shall:

(i) identify authorities and capabilities that agencies could employ to support the cybersecurity efforts of critical infrastructure entities identified pursuant to section 9 of Executive Order 13636 of February 12, 2013 (Improving Critical Infrastructure Cybersecurity), to be at greatest risk of attacks that could reasonably result in catastrophic regional or national effects on public health or safety, economic security, or national security (section 9 entities);

(ii) engage section 9 entities and solicit input as appropriate to evaluate whether and how the authorities and capabilities identified pursuant to subsection (b)(i) of this section might be employed to support cybersecurity risk management efforts and any obstacles to doing so;

(iii) provide a report to the President, which may be classified in full or in part, as appropriate, through the Assistant to the President for Homeland Security and Counterterrorism, within 180 days of the date of this order, that includes the following:

(A) the authorities and capabilities identified pursuant to subsection (b)(i) of this section;

(B) the results of the engagement and determination required pursuant to subsection (b)(ii) of this section; and

(C) findings and recommendations for better supporting the cybersecurity risk management efforts of section 9 entities; and

(iv) provide an updated report to the President on an annual basis thereafter.

(c) *Supporting Transparency in the Marketplace.* The Secretary of Homeland Security, in coordination with the Secretary of Commerce, shall provide a report to the President, through the Assistant to the President for Homeland Security and Counterterrorism, that examines the sufficiency of existing Federal policies and practices to promote appropriate market transparency of cybersecurity risk management practices by critical infrastructure entities, with a focus on publicly traded critical infrastructure entities, within 90 days of the date of this order.

(d) *Resilience Against Botnets and Other Automated, Distributed Threats.* The Secretary of Commerce and the Secretary of Homeland Security shall jointly lead an open and transparent process to identify and promote action by appropriate stakeholders to improve the resilience of the internet and communications ecosystem and to encourage collaboration with the goal of dramatically reducing threats perpetrated by automated and distributed attacks (e.g., botnets). The Secretary of Commerce and the Secretary of Homeland Security shall consult with the Secretary of Defense, the Attorney General, the Director of the Federal Bureau of Investigation, the heads of sector-specific agencies, the

Chairs of the Federal Communications Commission and Federal Trade Commission, other interested agency heads, and appropriate stakeholders in carrying out this subsection. Within 240 days of the date of this order, the Secretary of Commerce and the Secretary of Homeland Security shall make publicly available a preliminary report on this effort. Within 1 year of the date of this order, the Secretaries shall submit a final version of this report to the President.

(e) *Assessment of Electricity Disruption Incident Response Capabilities.* The Secretary of Energy and the Secretary of Homeland Security, in consultation with the Director of National Intelligence, with State, local, tribal, and territorial governments, and with others as appropriate, shall jointly assess:

(i) the potential scope and duration of a prolonged power outage associated with a significant cyber incident, as defined in Presidential Policy Directive 41 of July 26, 2016 (United States Cyber Incident Coordination), against the United States electric subsector;

(ii) the readiness of the United States to manage the consequences of such an incident; and

(iii) any gaps or shortcomings in assets or capabilities required to mitigate the consequences of such an incident.

The assessment shall be provided to the President, through the Assistant to the President for Homeland Security and Counterterrorism, within 90 days of the date of this order, and may be classified in full or in part, as appropriate.

(f) *Department of Defense Warfighting Capabilities and Industrial Base.* Within 90 days of the date of this order, the Secretary of Defense, the Secretary of Homeland Security, and the Director of the Federal Bureau of Investigation, in coordination with the Director of National Intelligence, shall provide a report to the President, through the Assistant to the President for National Security Affairs and the Assistant to the President for Homeland Security and Counterterrorism, on cybersecurity risks facing the defense industrial base, including its supply chain, and United States military platforms, systems, networks, and capabilities, and recommendations for mitigating these risks. The report may be classified in full or in part, as appropriate.

SEC. 3. Cybersecurity for the Nation.

(a) *Policy.* To ensure that the internet remains valuable for future generations, it is the policy of the executive branch to promote an open, interoperable, reliable, and secure internet that fosters efficiency, innovation, communication, and economic prosperity, while respecting privacy and guarding against disruption, fraud, and theft. Further, the United States seeks to support the growth and sustainment of a workforce that is skilled in cybersecurity and related fields as the foundation for achieving our objectives in cyberspace.

(b) *Deterrence and Protection.* Within 90 days of the date of this order, the Secretary of State, the Secretary of the Treasury, the Secretary of Defense, the Attorney General, the Secretary of Commerce, the Secretary of Homeland Security, and the United States Trade Representative, in coordination with the Director of National Intelligence, shall jointly submit a report to the President, through the Assistant to the President for National Security Affairs and the Assistant to the President for Homeland Security and Counterterrorism, on the Nation's strategic options for deterring adversaries and better protecting the American people from cyber threats.

(c) *International Cooperation.* As a highly connected nation, the United States is especially dependent on a globally secure and resilient internet and must work with allies and other partners toward maintaining the policy set forth in this section. Within 45 days of the date of this order, the Secretary of State, the Secretary of the Treasury, the Secretary of Defense, the Secretary of Commerce, and the Secretary of Homeland Security, in coordination with the Attorney General and the Director of the Federal Bureau of Investigation, shall submit reports to the President on their international cybersecurity priorities, including those

concerning investigation, attribution, cyber threat information sharing, response, capacity building, and cooperation. Within 90 days of the submission of the reports, and in coordination with the agency heads listed in this subsection, and any other agency heads as appropriate, the Secretary of State shall provide a report to the President, through the Assistant to the President for Homeland Security and Counterterrorism, documenting an engagement strategy for international cooperation in cybersecurity.

(d) *Workforce Development.* In order to ensure that the United States maintains a long-term cybersecurity advantage:

(i) The Secretary of Commerce and the Secretary of Homeland Security, in consultation with the Secretary of Defense, the Secretary of Labor, the Secretary of Education, the Director of the Office of Personnel Management, and other agencies identified jointly by the Secretary of Commerce and the Secretary of Homeland Security, shall:

(A) jointly assess the scope and sufficiency of efforts to educate and train the American cybersecurity workforce of the future, including cybersecurity-related education curricula, training, and apprenticeship programs, from primary through higher education; and

(B) within 120 days of the date of this order, provide a report to the President, through the Assistant to the President for Homeland Security and Counterterrorism, with findings and recommendations regarding how to support the growth and sustainment of the Nation's cybersecurity workforce in both the public and private sectors.

(ii) The Director of National Intelligence, in consultation with the heads of other agencies identified by the Director of National Intelligence, shall:

(A) review the workforce development efforts of potential foreign cyber peers in order to help identify foreign workforce development practices likely to affect long-term United States cybersecurity competitiveness; and

(B) within 60 days of the date of this order, provide a report to the President through the Assistant to the President for Homeland Security and Counterterrorism on the findings of the review carried out pursuant to subsection (d)(ii)(A) of this section.

(iii) The Secretary of Defense, in coordination with the Secretary of Commerce, the Secretary of Homeland Security, and the Director of National Intelligence, shall:

(A) assess the scope and sufficiency of United States efforts to ensure that the United States maintains or increases its advantage in national-security-related cyber capabilities; and

(B) within 150 days of the date of this order, provide a report to the President, through the Assistant to the President for Homeland Security and Counterterrorism, with findings and recommendations on the assessment carried out pursuant to subsection (d)(iii)(A) of this section.

(iv) The reports described in this subsection may be classified in full or in part, as appropriate.

SEC. 4. *Definitions.* For the purposes of this order:

(a) The term "appropriate stakeholders" means any non-executive-branch person or entity that elects to participate in an open and transparent process established by the Secretary of Commerce and the Secretary of Homeland Security under section 2(d) of this order.

(b) The term "information technology" (IT) has the meaning given to that term in section 11101(6) of title 40, United States Code, and further includes hardware and software systems of agencies that monitor and control physical equipment and processes.

(c) The term "IT architecture" refers to the integration and implementation of IT within an agency.

(d) The term "network architecture" refers to the elements of IT architecture that enable or facilitate communications between two or more IT assets.

SEC. 5. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of OMB relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) All actions taken pursuant to this order shall be consistent with requirements and authorities to protect intelligence and law enforcement sources and methods. Nothing in this order shall be construed to supersede measures established under authority of law to protect the security and integrity of specific activities and associations that are in direct support of intelligence or law enforcement operations.

(d) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP.

EX. ORD. NO. 13870. AMERICA'S CYBERSECURITY WORKFORCE

Ex. Ord. No. 13870, May 2, 2019, 84 F.R. 20523, provided: By the authority vested in me as President by the Constitution and the laws of the United States of America, and to better ensure continued American economic prosperity and national security, it is hereby ordered as follows:

SECTION 1. *Policy.* (a) America's cybersecurity workforce is a strategic asset that protects the American people, the homeland, and the American way of life. The National Cyber Strategy, the President's 2018 Management Agenda, and Executive Order 13800 of May 11, 2017 (Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure) [set out above], each emphasize [sic] that a superior cybersecurity workforce will promote American prosperity and preserve peace. America's cybersecurity workforce is a diverse group of practitioners who govern, design, defend, analyze, administer, operate, and maintain the data, systems, and networks on which our economy and way of life depend. Whether they are employed in the public or private sectors, they are guardians of our national and economic security.

(b) The United States Government must enhance the workforce mobility of America's cybersecurity practitioners to improve America's national cybersecurity. During their careers, America's cybersecurity practitioners will serve in various roles for multiple and diverse entities. United States Government policy must facilitate the seamless movement of cybersecurity practitioners between the public and private sectors, maximizing the contributions made by their diverse skills, experiences, and talents to our Nation.

(c) The United States Government must support the development of cybersecurity skills and encourage ever-greater excellence so that America can maintain its competitive edge in cybersecurity. The United States Government must also recognize and reward the country's highest-performing cybersecurity practitioners and teams.

(d) The United States Government must create the organizational and technological tools required to maximize the cybersecurity talents and capabilities of American workers—especially when those talents and capabilities can advance our national and economic security. The Nation is experiencing a shortage of cybersecurity talent and capability, and innovative approaches are required to improve access to training that maximizes individuals' cybersecurity knowledge, skills, and abilities. Training opportunities, such as work-based learning, apprenticeships, and blended learning approaches, must be enhanced for both new workforce entrants and those who are advanced in their careers.

(e) In accordance with Executive Order 13800, the President will continue to hold heads of executive de-

partments and agencies (agencies) accountable for managing cybersecurity risk to their enterprises, which includes ensuring the effectiveness of their cybersecurity workforces.

SEC. 2. *Strengthening the Federal Cybersecurity Workforce.* (a) To grow the cybersecurity capability of the United States Government, increase integration of the Federal cybersecurity workforce, and strengthen the skills of Federal information technology and cybersecurity practitioners, the Secretary of Homeland Security, in consultation with the Director of the Office of Management and Budget (OMB) and the Director of the Office of Personnel Management (OPM), shall establish a cybersecurity rotational assignment program, which will serve as a mechanism for knowledge transfer and a development program for cybersecurity practitioners. Within 90 days of the date of this order [May 2, 2019], the Secretary of Homeland Security, in consultation with the Directors of OMB and OPM, shall provide a report to the President that describes the proposed program, identifies its resource implications, and recommends actions required for its implementation. The report shall evaluate how to achieve the following objectives, to the extent permitted by applicable law, as part of the program:

(i) The non-reimbursable detail of information technology and cybersecurity employees, who are nominated by their employing agencies, to serve at the Department of Homeland Security (DHS);

(ii) The non-reimbursable detail of experienced cybersecurity DHS employees to other agencies to assist in improving those agencies' cybersecurity risk management;

(iii) The use of the National Initiative for Cybersecurity Education Cybersecurity Workforce Framework (NICE Framework) as the basis for cybersecurity skill requirements for program participants;

(iv) The provision of training curricula and expansion of learning experiences to develop participants' skill levels; and

(v) Peer mentoring to enhance workforce integration.

(b) Consistent with applicable law and to the maximum extent practicable, the Administrator of General Services, in consultation with the Director of OMB and the Secretary of Commerce, shall:

(i) Incorporate the NICE Framework lexicon and taxonomy into workforce knowledge and skill requirements used in contracts for information technology and cybersecurity services;

(ii) Ensure that contracts for information technology and cybersecurity services include reporting requirements that will enable agencies to evaluate whether personnel have the necessary knowledge and skills to perform the tasks specified in the contract, consistent with the NICE Framework; and

(iii) Provide a report to the President, within 1 year of the date of this order, that describes how the NICE Framework has been incorporated into contracts for information technology and cybersecurity services, evaluates the effectiveness of this approach in improving services provided to the United States Government, and makes recommendations to increase the effective use of the NICE Framework by United States Government contractors.

(c) Within 180 days of the date of this order, the Director of OPM, in consultation with the Secretary of Commerce, the Secretary of Homeland Security, and the heads of other agencies as appropriate, shall identify a list of cybersecurity aptitude assessments for agencies to use in identifying current employees with the potential to acquire cybersecurity skills for placement in reskilling programs to perform cybersecurity work. Agencies shall incorporate one or more of these assessments into their personnel development programs, as appropriate and consistent with applicable law.

(d) Agencies shall ensure that existing awards and decorations for the uniformed services and civilian personnel recognize performance and achievements in the

areas of cybersecurity and cyber-operations, including by ensuring the availability of awards and decorations equivalent to citations issued pursuant to Executive Order 10694 of January 10, 1957 (Authorizing the Secretaries of the Army, Navy, and Air Force To Issue Citations in the Name of the President of the United States to Military and Naval Units for Outstanding Performance in Action) [22 F.R. 253], as amended. Where necessary and appropriate, agencies shall establish new awards and decorations to recognize performance and achievements in the areas of cybersecurity and cyber-operations. The Assistant to the President for National Security Affairs may recommend to agencies that any cyber unified coordination group or similar ad hoc interagency group that has addressed a significant cybersecurity or cyber-operations-related national security crisis, incident, or effort be recognized for appropriate awards and decorations.

(e) The Secretary of Homeland Security, in consultation with the Secretary of Defense, the Director of the Office of Science and Technology Policy, the Director of OMB, and the heads of other appropriate agencies, shall develop a plan for an annual cybersecurity competition (President's Cup Cybersecurity Competition) for Federal civilian and military employees. The goal of the competition shall be to identify, challenge, and reward the United States Government's best cybersecurity practitioners and teams across offensive and defensive cybersecurity disciplines. The plan shall be submitted to the President within 90 days of the date of this order. The first competition shall be held no later than December 31, 2019, and annually thereafter. The plan for the competition shall address the following:

(i) The challenges and benefits of inviting advisers, participants, or observers from non-Federal entities to observe or take part in the competition and recommendations for including them in future competitions, as appropriate;

(ii) How the Department of Energy, through the National Laboratories, in consultation with the Administrator of the United States Digital Service, can provide expert technical advice and assistance to support the competition, as appropriate;

(iii) The parameters for the competition, including the development of multiple individual and team events that test cybersecurity skills related to the NICE Framework and other relevant skills, as appropriate. These parameters should include competition categories involving individual and team events, software reverse engineering and exploitation, network operations, forensics, big data analysis, cyber analysis, cyber defense, cyber exploitation, secure programming, obfuscated coding, cyber-physical systems, and other disciplines;

(iv) How to encourage agencies to select their best cybersecurity practitioners as individual and team participants. Such practitioners should include Federal employees and uniformed services personnel from Federal civilian agencies, as well as Department of Defense active duty military personnel, civilians, and those serving in a drilling reserve capacity in the Armed Forces Reserves or National Guard;

(v) The extent to which agencies, as well as uniformed services, may develop a President's Cup awards program that is consistent with applicable law and regulations governing awards and that allows for the provision of cash awards of not less than \$25,000. Any such program shall require the agency to establish an awards program before allowing its employees to participate in the President's Cup Cybersecurity Competition. In addition, any such program may not preclude agencies from recognizing winning and non-winning participants through other means, including honorary awards, informal recognition awards, rating-based cash awards, time-off awards, Quality Step Increases, or other agency-based compensation flexibilities as appropriate and consistent with applicable law; and

(vi) How the uniformed services, as appropriate and consistent with applicable law, may designate service

members who win these competitions as having skills at a time when there is a critical shortage of such skills within the uniformed services. The plan should also address how the uniformed services may provide winning service members with a combination of bonuses, advancements, and meritorious recognition to be determined by the Secretaries of the agencies concerned.

(f) The Director of OMB shall, in consultation with appropriate agencies, develop annually a list of agencies and subdivisions related to cybersecurity that have a primary function of intelligence, counterintelligence, investigative, or national security work, including descriptions of such functions. The Director of OMB shall provide this list to the President, through the Deputy Assistant to the President for Homeland Security and Counterterrorism (DAPHSCT), every year starting September 1, 2019, for consideration of whether those agencies or subdivisions should be exempted from coverage under the Federal Labor-Management Relations Program, consistent with the requirements of section 7103(b)(1) of title 5, United States Code.

SEC. 3. *Strengthening the Nation's Cybersecurity Workforce.* (a) The Secretary of Commerce and the Secretary of Homeland Security (Secretaries), in coordination with the Secretary of Education and the heads of other agencies as the Secretaries determine is appropriate, shall execute, consistent with applicable law and to the greatest extent practicable, the recommendations from the report to the President on Supporting the Growth and Sustainment of the Nation's Cybersecurity Workforce (Workforce Report) developed pursuant to Executive Order 13800. The Secretaries shall develop a consultative process that includes Federal, State, territorial, local, and tribal governments, academia, private-sector stakeholders, and other relevant partners to assess and make recommendations to address national cybersecurity workforce needs and to ensure greater mobility in the American cybersecurity workforce. To fulfill the Workforce Report's vision of preparing, growing, and sustaining a national cybersecurity workforce that safeguards and promotes America's national security and economic prosperity, priority consideration will be given to the following imperatives:

(i) To launch a national Call to Action to draw attention to and mobilize public- and private-sector resources to address cybersecurity workforce needs;

(ii) To transform, elevate, and sustain the cybersecurity learning environment to grow a dynamic and diverse cybersecurity workforce;

(iii) To align education and training with employers' cybersecurity workforce needs, improve coordination, and prepare individuals for lifelong careers; and

(iv) To establish and use measures that demonstrate the effectiveness and impact of cybersecurity workforce investments.

(b) To strengthen the ability of the Nation to identify and mitigate cybersecurity vulnerabilities in critical infrastructure and defense systems, particularly cyber-physical systems for which safety and reliability depend on secure control systems, the Secretary of Defense, the Secretary of Transportation, the Secretary of Energy, and the Secretary of Homeland Security, in coordination with the Director of OPM and the Secretary of Labor, shall provide a report to the President, through the DAPHSCT, within 180 days of the date of this order that:

(i) Identifies and evaluates skills gaps in Federal and non-Federal cybersecurity personnel and training gaps for specific critical infrastructure sectors, defense critical infrastructure, and the Department of Defense's platform information technologies; and

(ii) Recommends curricula for closing the identified skills gaps for Federal personnel and steps the United States Government can take to close such gaps for non-Federal personnel by, for example, supporting the development of similar curricula by education or training providers.

(c) Within 1 year of the date of this order, the Secretary of Education, in consultation with the

DAPHSCT and the National Science Foundation, shall develop and implement, consistent with applicable law, an annual Presidential Cybersecurity Education Award to be presented to one elementary and one secondary school educator per year who best instill skills, knowledge, and passion with respect to cybersecurity and cybersecurity-related subjects. In developing and implementing this award, the Secretary of Education shall emphasize demonstrated superior educator accomplishment—without respect to research, scholarship, or technology development—as well as academic achievement by the educator's students.

(d) The Secretary of Commerce, the Secretary of Labor, the Secretary of Education, the Secretary of Homeland Security, and the heads of other appropriate agencies shall encourage the voluntary integration of the NICE Framework into existing education, training, and workforce development efforts undertaken by State, territorial, local, tribal, academic, non-profit, and private-sector entities, consistent with applicable law. The Secretary of Commerce shall provide annual updates to the President regarding effective uses of the NICE Framework by non-Federal entities and make recommendations for improving the application of the NICE Framework in cybersecurity education, training, and workforce development.

SEC. 4. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of OMB relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP.

SUBCHAPTER I—CYBERSECURITY INFORMATION SHARING

§ 1501. Definitions

In this subchapter:

(1) Agency

The term “agency” has the meaning given the term in section 3502 of title 44.

(2) Antitrust laws

The term “antitrust laws”—

(A) has the meaning given the term in section 12 of title 15;

(B) includes section 45 of title 15 to the extent that section 45 of title 15 applies to unfair methods of competition; and

(C) includes any State antitrust law, but only to the extent that such law is consistent with the law referred to in subparagraph (A) or the law referred to in subparagraph (B).

(3) Appropriate Federal entities

The term “appropriate Federal entities” means the following:

(A) The Department of Commerce.

(B) The Department of Defense.

(C) The Department of Energy.

(D) The Department of Homeland Security.

(E) The Department of Justice.

(F) The Department of the Treasury.

(G) The Office of the Director of National Intelligence.