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DHS SCIENCE AND TECHNOLOGY REFORM AND IMPROVEMENT ACT OF 2015

DECEMBER 8, 2015.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. MCCAUL, from the Committee on Homeland Security, submitted the following

R E P O R T

[To accompany H.R. 3578]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security, to whom was referred the bill (H.R. 3578) to amend the Homeland Security Act of 2002 to strengthen and make improvements to the Directorate of Science and Technology of the Department of Homeland Security, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "DHS Science and Technology Reform and Improvement Act of 2015".

SEC. 2. SCIENCE AND TECHNOLOGY IN SUPPORT OF HOMELAND SECURITY.

(a) IN GENERAL.—Title III of the Homeland Security Act of 2002 is amended—

(1) in section 301 (6 U.S.C. 181)—

(A) by striking "There" and inserting the following:

"(a) IN GENERAL.—There"; and

(B) by adding at the end the following new subsection:

"(b) MISSION.—The Directorate of Science and Technology shall be the primary research, development, testing, and evaluation arm of the Department, responsible for coordinating the research, development, testing, and evaluation of the Department to strengthen the security and resiliency of the United States. The Directorate shall—

"(1) develop and deliver knowledge, analyses, and innovative solutions that are responsive to homeland security capability gaps identified by components and offices of the Department, the first responder community, and the Homeland Security Enterprise (as such term is defined in section 322) and that can be integrated into operations of the Department;

"(2) seek innovative, system-based solutions to complex homeland security problems; and

"(3) build partnerships and leverage technology solutions developed by other Federal agencies and laboratories, State, local, and tribal governments, universities, and the private sector.";

(2) in section 302 (6 U.S.C. 182)—

(A) in the matter preceding paragraph (1), by striking "The Secretary, acting through the Under Secretary for Science and Technology, shall" and inserting the following:

"(a) IN GENERAL.—The Secretary, acting through the Under Secretary for Science and Technology, shall carry out the mission described in subsection (b) of section 301 and shall";

(B) in subsection (a), as so designated by subparagraph (A) of this paragraph—

(i) in paragraph (1), by inserting "and serving as the senior scientific advisor to the Secretary" before the semicolon at the end;

(ii) in paragraph (2)—

(I) by striking "national";

(II) by striking "biological,," and inserting "biological,"; and

(III) by inserting "that may serve as a basis of a national strategy" after "terrorist threats";

(iii) in paragraph (3), by striking "the Under Secretary for Intelligence and Analysis and the Assistant Secretary for Infrastructure Protection" and inserting "components and offices of the Department";

(iv) in paragraph (4), by striking "except that such responsibility does not extend to human health-related research and development activities" and inserting the following: "including coordinating with relevant components and offices of the Department appropriate to—

"(A) identify and prioritize technical capability requirements and create solutions that include researchers, the private sector, and operational end users, and

"(B) develop capabilities to address issues on research, development, testing, evaluation, technology, and standards for the first responder community,

except that such responsibility does not extend to the human health-related research and development activities".

(v) in paragraph (5)(A), by striking "biological,," and inserting "biological,";

(vi) by amending paragraph (12) to read as follows:

"(12) coordinating and integrating all research, development, demonstration, testing, and evaluation activities of the Department, including through a centralized Federal clearinghouse established pursuant to paragraph (1) of section 313(b) for information relating to technologies that would further the mission of the Department, and providing advice, as necessary, regarding major acquisition programs;".

(vii) in paragraph (13), by striking "and" at the end;

(viii) in paragraph (14), by striking the period at the end and inserting a semicolon; and

(ix) by adding at the end the following new paragraphs:

"(15) establishing a process that—

"(A) includes consideration by Directorate leadership, senior component leadership, first responders, and outside expertise;

"(B) is strategic, transparent, and repeatable with a goal of continuous improvement;

"(C) through which research and development projects undertaken by the Directorate are assessed on a regular basis; and

"(D) includes consideration of metrics to ensure research and development projects meet Directorate and Department goals and inform departmental budget and program planning;

"(16) developing and overseeing the administration of guidelines for periodic external review of departmental research and development programs or activities, including through—

"(A) consultation with experts, including scientists and practitioners, regarding the research and development activities conducted by the Directorate of Science and Technology; and

"(B) biennial independent, external review—

"(i) initially at the division level; or

"(ii) when divisions conduct multiple programs focused on significantly different subjects, at the program level;

"(17) partnering with components and offices of the Department to develop and deliver knowledge, analyses, and innovative solutions that are responsive to identified homeland security capability gaps and raise the science-based, analytic capability and capacity of appropriate individuals throughout the Department by providing guidance on how to better identify homeland security capability gaps that may be addressed through a technological solution and by partnering with such components and offices to—

"(A) support technological assessments of major acquisition programs throughout the acquisition lifecycle;

"(B) help define appropriate technological requirements and perform feasibility analysis;

"(C) assist in evaluating new and emerging technologies against capability gaps;

"(D) support evaluation of alternatives;

"(E) improve the use of technology Department-wide; and

"(F) provide technical assistance in the development of acquisition lifecycle cost for technologies;

"(18) acting as a coordinating office for technology development for the Department by helping components and offices define technological requirements, and building partnerships with appropriate entities (such as within the Department and with other Federal agencies and laboratories, State, local, and tribal governments, universities, and the private sector) to help each such component and office attain the technology solutions it needs; and

"(19) coordinating with organizations that provide venture capital to businesses, particularly small businesses, as appropriate, to assist in the commercialization of innovative homeland security technologies that are expected to be ready for commercialization in the near term and within 36 months."; and

(C) by adding at the end the following new subsection:

"(b) REVIEW OF RESPONSIBILITIES.—Not later than 180 days after the date of the enactment of this subsection, the Under Secretary for Science and Technology shall submit to the appropriate congressional committees a report on the implementation of paragraphs (2) (including how the policy and strategic plan under such paragraph may serve as a basis for a national strategy referred to in such paragraph), (11), (12), (13), (16), and (17) of subsection (a).";

(3) in section 303(1) (6 U.S.C. 183(1)), by striking subparagraph (F);

(4) in section 305 (6 U.S.C. 185)—

(A) by striking "The" and inserting the following:

"(a) ESTABLISHMENT.—The"; and

(B) by adding at the end the following new subsection:

"(b) CONFLICTS OF INTEREST.—The Secretary shall review and revise, as appropriate, the policies of the Department relating to personnel conflicts of interest to ensure that such policies specifically address employees of federally funded research and development centers established pursuant to subsection (a) who are in a position to make or materially influence research findings or agency decision making.";

(5) in section 306 (6 U.S.C. 186)—

(A) in subsection (c), by adding at the end the following new sentence: "If such regulations are issued, the Under Secretary shall report to the appropriate congressional committees prior to such issuance."; and

(B) by amending subsection (d) to read as follows:

"(d) PERSONNEL.—In hiring personnel for the Directorate of Science and Technology, the Secretary shall have the hiring and management authorities described in section 1101 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (5 U.S.C. 3104 note; Public Law 105–261). The term of appointments for employees under subsection (c)(1) of such section may not exceed five years before the granting of any extension under subsection (c)(2) of such section.";

(6) in section 308 (6 U.S.C. 188)—

(A) in subsection (b)(2)—

(i) in subparagraph (B)—

(I) in clause (iv), by striking "and nuclear countermeasures or detection" and inserting "nuclear, and explosives countermeasures or detection (which may include research into remote sensing and remote imaging)"; and

(II) by adding after clause (xiv) the following new clause:

"(xv) Cybersecurity."; and

(ii) by amending subparagraph (D) to read as follows:

"(D) ANNUAL REPORT TO CONGRESS.—Not later than one year after the date of the enactment of this subparagraph and annually thereafter, the Secretary shall submit to Congress a report on the implementation of this section. Each such report shall—

"(i) indicate which center or centers have been designated pursuant to this section;

"(ii) describe how such designation or designations enhance homeland security;

"(iii) provide information on any decisions to revoke or modify such designation or designations;

"(iv) describe research that has been tasked and completed by each center that has been designated during the preceding year;

"(v) describe funding provided by the Secretary for each center under clause (iv) for that year; and

"(vi) describe plans for utilization of each center or centers in the forthcoming year."; and

(B) by adding at the end the following new subsection:

"(d) TEST, EVALUATION, AND STANDARDS DIVISION.—

"(1) ESTABLISHMENT.—There is established in the Directorate of Science and Technology a Test, Evaluation, and Standards Division.

"(2) DIRECTOR.—The Test, Evaluation, and Standards Division shall be headed by a Director of Test, Evaluation, and Standards, who shall be appointed by the Secretary and report to the Under Secretary for Science and Technology.

"(3) RESPONSIBILITIES, AUTHORITIES, AND FUNCTIONS.—The Director of Test, Evaluation, and Standards—

"(A) through the Under Secretary for Science and Technology, serve as an adviser to the Secretary and the Under Secretary of Management on all test and evaluation or standards activities in the Department; and

"(B) shall—

"(i) establish and update as necessary test and evaluation policies for the Department, including policies to ensure that operational testing is done at facilities that already have relevant and appropriate safety and material certifications to the extent such facilities are available;

"(ii) oversee and ensure that adequate test and evaluation activities are planned and conducted by or on behalf of components and offices of the Department with respect to major acquisition programs of the Department, as designated by the Secretary, based on risk, acquisition level, novelty, complexity, and size of any such acquisition program, or as otherwise established in statute;

"(iii) review major acquisition program test reports and test data to assess the adequacy of test and evaluation activities conducted by or on behalf of components and offices of the Department, including test and evaluation activities planned or conducted pursuant to clause (ii); and

"(iv) review available test and evaluation infrastructure to determine whether the Department has adequate resources to carry out its testing and evaluation responsibilities, as established under this title.

"(4) LIMITATION.—The Test, Evaluation, and Standards Division is not required to carry out operational testing of major acquisition programs.

"(5) EVALUATION OF DEPARTMENT OF DEFENSE TECHNOLOGIES.—The Director of Test, Evaluation, and Standards may evaluate technologies currently in use or being developed by the Department of Defense to assess whether such technologies can be leveraged to address homeland security capability gaps.";

(7) in section 309(a) (6 U.S.C. 189(a)), by adding at the end the following new paragraph:

"(3) TREATMENT OF CERTAIN FUNDS.—Notwithstanding any other provision of law, any funds provided to a Department of Energy national laboratory by the Department may not be treated as an assisted acquisition.";

(8) in section 310 (6 U.S.C. 190), by adding at the end the following new subsection:

"(e) SUCCESSOR FACILITY.—Any successor facility to the Plum Island Animal Disease Center, including the National Bio and Agro-Defense Facility (NBAF) under construction as of the date of the enactment of this subsection, which is intended to the replace the Plum Island Animal Disease Center shall be subject to the requirements of this section in the same manner and to the same extent as the Plum Island Animal Disease Center under this section.";

(9) in section 311 (6 U.S.C. 191)—

(A) in subsection (b)—

(i) in paragraph (1), in the first sentence—

(I) by striking "20 members" and inserting "not fewer than 15 members and not more than 30 members"; and

(II) by inserting "academia, national labs, private industry, and" after "representatives of";

(ii) by redesignating paragraph (2) as paragraph (3); and

(iii) by inserting after paragraph (1) the following new paragraph:

"(2) SUBCOMMITTEES.—The Advisory Committee may establish subcommittees that focus on research and development challenges, as appropriate.";

(B) in subsection (c)—

(i) in paragraph (1), by inserting "on a rotating basis" before the period at the end;

(ii) by striking paragraph (2) and redesignating paragraph (3) as paragraph (2); and

(iii) in paragraph (2), as so redesignated, by striking "be appointed" and inserting "serve";

(C) in subsection (e), in the second sentence, by striking "the call of";

(D) in subsection (h)—

(i) in paragraph (1)—

(I) in the first sentence—

(aa) by striking "render" and inserting "submit"; and

(bb) by striking "Congress" and inserting "the appropriate congressional committees";

(II) in the second sentence, by inserting ", and incorporate the findings and recommendations of the Advisory Committee subcommittees," before "during"; and

(ii) in paragraph (2)—

(I) striking "render" and inserting "submit"; and

(II) by striking "Congress" and inserting "the appropriate congressional committees";

(E) in subsection (i), by inserting before the period at the end the following: ", except that the Advisory Committee shall file a charter with Congress every two years in accordance with subsection (b)(2) of such section 14";

(F) in subsection (j), by striking "2008" and inserting "2020";

(10) in section 313 (6 U.S.C. 193)—

(A) by redesignating subsection (c) as subsection (d); and

(B) by inserting after subsection (b) the following new subsection:

"(c) APPLICATION OF PROGRAM.—The Secretary, acting through the Under Secretary for Science and Technology, shall use the program established under subsection (a) to—

"(1) enhance the cooperation between components and offices of the Department on projects that have similar goals, timelines, or outcomes;

"(2) ensure the coordination of technologies to eliminate unnecessary duplication of research and development;

"(3) ensure technologies are accessible for component and office use on a Department website; and

"(4) carry out any additional purpose the Secretary determines necessary.";

(11) by adding after section 317 (6 U.S.C. 195c) the following new sections:

"SEC. 318. IDENTIFICATION AND PRIORITIZATION OF RESEARCH AND DEVELOPMENT.

"(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this section, the Under Secretary for Science and Technology shall establish a process to define, identify, prioritize, fund, and task the basic and applied homeland security research and development activities of the Directorate of Science and Technology to meet the needs of the components and offices of the Department, the first responder community, and the Homeland Security Enterprise (as such term is defined in section 322).

"(b) PROCESS.—The process established under subsection (a) shall—

"(1) be responsive to near-, mid-, and long-term needs, including unanticipated needs to address emerging threats;

"(2) utilize gap analysis and risk assessment tools where available and applicable;

"(3) include protocols to assess—

"(A) off-the-shelf technology to determine if an identified homeland security capability gap can be addressed through the acquisition process instead of commencing research and development of technology to address such capability gap; and

"(B) communication and collaboration for research and development activities pursued by other executive agencies, to determine if technology can be leveraged to identify and address homeland security capability gaps and avoid unnecessary duplication of efforts;

"(4) provide for documented and validated research and development requirements;

"(5) strengthen first responder participation to identify and prioritize homeland security technological gaps, including by—

"(A) soliciting feedback from appropriate national associations and advisory groups representing the first responder community and first responders within the components and offices of the Department; and

"(B) establishing and promoting a publicly accessible portal to allow the first responder community to help the Directorate of Science and Technology develop homeland security research and development goals;

"(6) institute a mechanism to publicize the Department's homeland security technology priorities for the purpose of informing Federal, State, and local governments, first responders, and the private sector;

"(7) establish considerations to be used by the Directorate in selecting appropriate research entities, including the national laboratories, federally funded research and development centers, university-based centers, and the private sector, to carry out research and development requirements;

"(8) incorporate feedback derived as a result of the mechanism established in section 323, ensuring the Directorate is utilizing regular communication with components and offices of the Department; and

"(9) include any other criteria or measures the Under Secretary for Science and Technology considers necessary for the identification and prioritization of research requirements.

"SEC. 319. DEVELOPMENT OF DIRECTORATE STRATEGY AND RESEARCH AND DEVELOPMENT PLAN.

"(a) STRATEGY.—

"(1) IN GENERAL.—Not later than one year after the date of the enactment of this section, the Under Secretary for Science and Technology shall develop and submit to the appropriate congressional committees a strategy to guide the activities of the Directorate of Science and Technology. Such strategy shall be updated at least once every five years and shall identify priorities and objectives for the development of science and technology solutions and capabilities addressing homeland security operational needs. Such strategy shall include the coordination of such priorities and activities within the Department. Such strategy shall take into account the priorities and needs of stakeholders in the Homeland Security Enterprise (as such term is defined in section 322). In developing such strategy, efforts shall be made to support collaboration and avoid unnecessary duplication across the Federal Government. Such strategy shall be risk-based and aligned with other strategic guidance provided by—

"(A) the National Strategy for Homeland Security;

"(B) the Quadrennial Homeland Security Review; and

"(C) any other relevant strategic planning documents, as determined by the Under Secretary.

"(2) CONTENTS.—The strategy required under paragraph (1) shall be prepared in accordance with applicable Federal requirements and guidelines, and shall include the following:

"(A) An identification of the long-term strategic goals, objectives, and metrics of the Directorate.

"(B) A technology transition strategy for the programs of the Directorate.

"(C) Short- and long-term strategic goals, and objectives for increasing the number of designations and certificates issued under subtitle G of title VIII, including cybersecurity technologies that could significantly reduce, or mitigate the effects of, cybersecurity risks (as such term is defined in subsection (a)(1) of the second section 226, relating to the national cybersecurity and communications integration center), without compromising the quality of the evaluation of applications for such designations and certificates.

"(b) FIVE-YEAR RESEARCH AND DEVELOPMENT PLAN.—

"(1) IN GENERAL.—The Under Secretary for Science and Technology shall develop, and update at least once every five years, a five-year research and development plan for the activities of the Directorate of Science and Technology. The Under Secretary shall develop the first such plan by the date that is not later than one year after the date of the enactment of this section.

"(2) CONTENTS.—Each five-year research and development plan developed and revised under subsection (a) shall—

"(A) define the Directorate of Science and Technology's research, development, testing, and evaluation activities, priorities, performance metrics, and key milestones and deliverables for, as the case may be, the five-fiscal-year period from 2016 through 2020, and for each five-fiscal-year period thereafter;

"(B) describe, for the activities of the strategy developed under subsection (a), the planned annual funding levels for the period covered by each such five-year research and development plan;

"(C) indicate joint investments with other Federal partners where applicable, and enhanced coordination with organizations as specified in paragraph (19) of section 302, as appropriate;

"(D) analyze how the research programs of the Directorate support achievement of the strategic goals and objectives identified in the strategy required under subsection (a);

"(E) describe how the activities and programs of the Directorate meet the requirements or homeland security capability gaps identified by customers within and outside of the Department, including the first responder community; and

"(F) describe the policies of the Directorate regarding the management, organization, and personnel of the Directorate.

"(3) SCOPE.—The Under Secretary for Science and Technology shall ensure that each five-year research and development plan developed and revised under subsection (a)—

"(A) reflects input from a wide range of stakeholders; and

"(B) takes into account how research and development by other Federal, State, private sector, and nonprofit institutions contributes to the achievement of the priorities identified in each plan, and avoids unnecessary duplication with such efforts.

"(4) REPORTS.—At the time the President submits each annual budget request under section 1105(a) of title 31, United States Code, the Under Secretary for Science and Technology shall submit to the appropriate congressional committees a report on the status and results to date of implementation of the current five-year research and development plan, including—

"(A) a summary of the research and development activities for the previous fiscal year in each topic area, including such activities to address homeland security risks, including threats, vulnerabilities, and consequences, and a summary of the coordination activities undertaken by the Directorate of Science and Technology for components and offices of the Department, together with the results of the process specified in paragraph (15) of section 302;

"(B) clear links between the Directorate's budget and each topic area or program, including those topic areas or programs to address homeland security risks, including threats, vulnerabilities, and consequences, specifying which topic areas or programs fall under which budget lines, and clear links between Directorate coordination work and priorities and annual expenditures for such work and priorities, including joint investments with other Federal partners, where applicable;

"(C) an assessment of progress of the research and development activities based on the performance metrics and milestones set forth in such plan; and

"(D) any changes to such plan.

"SEC. 320. MONITORING OF PROGRESS.

"(a) IN GENERAL.—The Under Secretary for Science and Technology shall establish and utilize a system to track the progress of the research, development, testing, and evaluation activities undertaken by the Directorate of Science and Technology, and shall provide to the appropriate congressional committees and customers of such activities, at a minimum on a biannual basis, regular updates on such progress.

"(b) REQUIREMENTS.—In order to provide the progress updates required under subsection (a), the Under Secretary for Science and Technology shall develop a system that—

"(1) monitors progress toward project milestones identified by the Under Secretary;

"(2) maps progress toward deliverables identified in each five-year research and development plan required under section 319(b);

"(3) generates up-to-date reports to customers that transparently disclose the status and progress of research, development, testing, and evaluation efforts of the Directorate of Science and Technology; and

"(4) allows the Under Secretary to report the number of products and services developed by the Directorate that have been transitioned into acquisition programs and resulted in successfully fielded technologies.

"(c) EVALUATION METHODS.—

"(1) EXTERNAL INPUT, CONSULTATION, AND REVIEW.—The Under Secretary for Science and Technology shall implement procedures to engage outside experts to assist in the evaluation of the progress of research, development, testing, and evaluation activities of the Directorate of Science and Technology, including through—

"(A) consultation with experts, including scientists and practitioners, to gather independent expert peer opinion and advice on a project or on specific issues or analyses conducted by the Directorate; and

"(B) periodic, independent, external review to assess the quality and relevance of the Directorate's programs and projects.

"(2) COMPONENT FEEDBACK.—The Under Secretary for Science and Technology shall establish a formal process to collect feedback from customers of the Directorate of Science and Technology on the performance of the Directorate that includes—

"(A) appropriate methodologies through which the Directorate can assess the quality and usefulness of technology and services delivered by the Directorate;

"(B) development of metrics for measuring the usefulness of any technology or service provided by the Directorate; and

"(C) standards for high-quality customer service.

"SEC. 321. HOMELAND SECURITY SCIENCE AND TECHNOLOGY FELLOWS PROGRAM.

"(a) ESTABLISHMENT.—The Secretary, acting through the Under Secretary for Science and Technology and the Under Secretary for Management, shall establish a fellows program, to be known as the Homeland Security Science and Technology Fellows Program (in this section referred to as the 'Program'), under which the Under Secretary for Science and Technology, in coordination with the Office of University Programs of the Department, shall facilitate the placement of fellows in relevant scientific or technological fields for up to two years in components and offices of the Department with a need for scientific and technological expertise.

"(b) UTILIZATION OF FELLOWS.—

"(1) IN GENERAL.—Under the Program, the Department may employ fellows—

"(A) for the use of the Directorate of Science and Technology; or

"(B) for the use of a component or office of the Department outside the Directorate, under a memorandum of agreement with the head of such a component or office under which such component or office will reimburse the Directorate for the costs of such employment.

"(2) RESPONSIBILITIES.—Under an agreement referred to in subparagraph (B) of paragraph (1)—

"(A) the Under Secretary for Science and Technology and the Under Secretary for Management shall—

"(i) solicit and accept applications from individuals who are currently enrolled in or who are graduates of postgraduate programs in scientific and engineering fields related to the promotion of securing the homeland or critical infrastructure sectors;

"(ii) screen applicants and interview them as appropriate to ensure that such applicants possess the appropriate level of scientific and engineering expertise and qualifications;

"(iii) provide a list of qualified applicants to the heads of components and offices of the Department seeking to utilize qualified fellows;

"(iv) subject to the availability of appropriations, pay financial compensation to such fellows;

"(v) coordinate with the Chief Security Officer to facilitate and expedite provision of security and suitability clearances to such fellows, as appropriate; and

"(vi) otherwise administer all aspects of the employment of such fellows with the Department; and

"(B) the head of the component or office of the Department utilizing a fellow shall—

"(i) select such fellow from the list of qualified applicants provided by the Under Secretary;

"(ii) reimburse the Under Secretary for the costs of employing such fellow, including administrative costs; and

"(iii) be responsible for the day-to-day management of such fellow.

"(c) APPLICATIONS FROM NONPROFIT ORGANIZATIONS.—The Under Secretary for Science and Technology may accept an application under subsection (b)(2)(A) that is submitted by a nonprofit organization on behalf of individuals whom such nonprofit organization has determined may be qualified applicants under the Program.

"SEC. 322. CYBERSECURITY RESEARCH AND DEVELOPMENT.

"(a) IN GENERAL.—The Under Secretary for Science and Technology shall support research, development, testing, evaluation, and transition of cybersecurity technology, including fundamental research to improve the sharing of information, analytics, and methodologies related to cybersecurity risks and incidents, consistent with current law.

"(b) ACTIVITIES.—The research and development supported under subsection (a) shall serve the components of the Department and shall—

"(1) advance the development and accelerate the deployment of more secure information systems;

"(2) improve and create technologies for detecting attacks or intrusions, including real-time continuous diagnostics and real-time analytic technologies;

"(3) improve and create mitigation and recovery methodologies, including techniques and policies for real-time containment of attacks, and development of resilient networks and information systems;

"(4) support, in coordination with private sector, the review of source code that underpins critical infrastructure information systems;

"(5) develop and support infrastructure and tools to support cybersecurity research and development efforts, including modeling, testbeds, and data sets for assessment of new cybersecurity technologies;

"(6) assist the development and support of technologies to reduce vulnerabilities in industrial control systems; and

"(7) develop and support cyber forensics and attack attribution.

"(c) COORDINATION.—In carrying out this section, the Under Secretary for Science and Technology shall coordinate activities with—

"(1) the Under Secretary appointed pursuant to section 103(a)(1)(H);

"(2) the heads of other relevant Federal departments and agencies, including the National Science Foundation, the Defense Advanced Research Projects Agency, the Information Assurance Directorate of the National Security Agency, the National Institute of Standards and Technology, the Department of Commerce, the Networking and Information Technology Research and Development Program Office, Sector Specific Agencies for critical infrastructure, and other appropriate working groups established by the President to identify unmet needs and cooperatively support activities, as appropriate; and

"(3) industry and academia.

"(d) TRANSITION TO PRACTICE.—The Under Secretary for Science and Technology shall support projects through the full life cycle of such projects, including research, development, testing, evaluation, pilots, and transitions. The Under Secretary shall identify mature technologies that address existing imminent cybersecurity gaps in public or private information systems and networks of information systems, identify and support necessary improvements identified during pilot programs and testing and evaluation activities, and introduce new cybersecurity technologies throughout the Homeland Security Enterprise through partnerships and commercialization. The Under Secretary shall target federally funded cybersecurity research that demonstrates a high probability of successful transition to the commercial market within two years and that is expected to have notable impact on the cybersecurity of the information systems or networks of information systems of the United States.

"(e) DEFINITIONS.—In this section:

"(1) CYBERSECURITY RISK.—The term 'cybersecurity risk' has the meaning given such term in the second section 226, relating to the national cybersecurity and communications integration center.

"(2) HOMELAND SECURITY ENTERPRISE.—The term 'Homeland Security Enterprise' means relevant governmental and nongovernmental entities involved in homeland security, including Federal, State, local, and tribal government officials, private sector representatives, academics, and other policy experts.

"(3) INCIDENT.—The term 'incident' has the meaning given such term in the second section 226, relating to the national cybersecurity and communications integration center.

"(4) INFORMATION SYSTEM.—The term 'information system' has the meaning given that term in section 3502(8) of title 44, United States Code.

"SEC. 323. INTEGRATED PRODUCT TEAMS.

"(a) IN GENERAL.—The Secretary shall establish integrated product teams to serve as a central mechanism for the Department to identify, coordinate, and align research and development efforts with departmental missions. Each team shall be managed by the Under Secretary for Science and Technology and the relevant senior leadership of operational components, and shall be responsible for the following:

"(1) Identifying and prioritizing homeland security capability gaps within a specific mission area and technological solutions to address such gaps.

"(2) Identifying ongoing departmental research and development activities and component acquisitions of technologies that are outside of departmental research and development activities to address a specific mission area.

"(3) Assessing the appropriateness of a technology to address a specific mission area.

"(4) Identifying unnecessary redundancy in departmental research and development activities within a specific mission area.

"(5) Informing the Secretary and the annual budget process regarding whether certain technological solutions are able to address homeland security capability gaps within a specific mission area.

"(b) CONGRESSIONAL OVERSIGHT.—Not later than two years after the date of enactment of this section, the Secretary shall provide to the appropriate congressional committees information on the impact and effectiveness of the mechanism described in subsection (a) on research and development efforts, component relationships, and how the process has informed the research and development budget and enhanced decision making, including acquisition decision making, at the Department. The Secretary shall seek feedback from the Under Secretary for Science and Technology, Under Secretary for Management, and the senior leadership of operational components regarding the impact and effectiveness of such mechanism and include such feedback in the information provided under this subsection.

"SEC. 324. HOMELAND SECURITY-STEM SUMMER INTERNSHIP PROGRAM.

"(a) IN GENERAL.—The Under Secretary for Science and Technology shall establish a Homeland Security-STEM internship program (in this section referred to as the 'program') to carry out the objectives of this subtitle.

"(b) PROGRAM.—The program shall provide students with exposure to Department mission-relevant research areas to encourage such students to pursue STEM careers in homeland security related fields. Internships offered under the program shall be for up to ten weeks during the summer.

"(c) ELIGIBILITY.—The Under Secretary for Science and Technology shall develop criteria for participation in the program, including the following:

"(1) At the time of application, an intern shall—

"(A) have successfully completed not less than one academic year of study at an institution of higher education in a STEM field;

"(B) be enrolled in a course of study in a STEM field at an institution of higher education; and

"(C) plan to continue such course of study or pursue an additional course of study in a STEM field at an institution of higher education in the academic year following the internship.

"(2) An intern shall be pursuing career goals aligned with the Department's mission, goals, and objectives.

"(3) Any other criteria the Under Secretary determines appropriate.

"(d) COOPERATION.—The program shall be administered in cooperation with the university-based centers for homeland security under section 308. Interns in the program shall be provided hands-on research experience and enrichment activities focused on Department research areas.

"(e) ACADEMIC REQUIREMENTS; OPERATION.—The Under Secretary for Science and Technology shall determine the academic requirements, other selection criteria, and standards for successful completion of each internship period in the program. The Under Secretary shall be responsible for the design, implementation, and operation of the program.

"(f) RESEARCH MENTORS.—The Under Secretary for Science and Technology shall ensure that each intern in the program is assigned a research mentor to act as counselor and advisor and provide career-focused advice.

"(g) OUTREACH TO CERTAIN UNDER-REPRESENTED STUDENTS.—The Under Secretary for Science and Technology shall conduct outreach to students who are members of groups under-represented in STEM careers to encourage their participation in the program.

"(h) INSTITUTION OF HIGHER EDUCATION DEFINED.—In this section, the term 'institution of higher education' has the meaning given the term in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002), except that the term does not include institutions described in subparagraph (C) of such section 102(a)(1).".

(b) EFFECTIVE DATE.—The amendments made by subsection (a) shall take effect on the date that is 30 days after the date of the enactment of this section.

(c) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Homeland Security Act of 2002 is amended by inserting after the item relating to section 317 the following new items:

"Sec. 318. Identification and prioritization of research and development.
"Sec. 319. Development of Directorate strategy and research and development plan.
"Sec. 320. Monitoring of progress.

"Sec. 321. Homeland Security Science and Technology Fellows Program.
"Sec. 322. Cybersecurity research and development.
"Sec. 323. Integrated product teams.
"Sec. 324. Homeland Security-STEM summer internship program.".

(d) RESEARCH AND DEVELOPMENT PROJECTS.—Section 831 of the Homeland Security Act of 2002 (6 U.S.C. 391) is amended—

(1) in subsection (a)—

(A) in the matter preceding paragraph (1), by striking "2015" and inserting "2020";

(B) in paragraph (1), by striking the last sentence; and

(C) by adding at the end the following new paragraph:

"(3) PRIOR APPROVAL.—In any case in which a component or office of the Department seeks to utilize the authority under this section, such office or component shall first receive prior approval from the Secretary by providing to the Secretary a proposal that includes the rationale for the use of such authority, the funds to be spent on the use of such authority, and the expected outcome for each project that is the subject of the use of such authority. In such a case, the authority for evaluating the proposal may not be delegated by the Secretary to anyone other than the Under Secretary for Management.";

(2) in subsection (c)—

(A) in paragraph (1), in the matter preceding subparagraph (A), by striking "2015" and inserting "2020"; and

(B) by amending paragraph (2) to read as follows:

"(2) REPORT.—The Secretary shall annually submit to the appropriate congressional committees a report detailing the projects for which the authority granted by subsection (a) was used, the rationale for such use, the funds spent using such authority, the extent of cost-sharing for such projects among Federal and non-federal sources, the extent to which use of such authority has addressed a homeland security capability gap identified by the Department, the total amount of payments, if any, that were received by the Federal Government as a result of the use of such authority during the period covered by each such report, the outcome of each project for which such authority was used, and the results of any audits of such projects."; and

(3) by adding at the end the following new subsections:

"(e) TRAINING.—The Secretary shall develop a training program for acquisitions staff in the use of other transaction authority to help ensure the appropriate use of such authority.

"(f) OTHER TRANSACTION AUTHORITY DEFINED.—In this section, the term 'other transaction authority' means authority under subsection (a).".

(e) AMENDMENT TO DEFINITION.—Paragraph (2) of subsection (a) of the second section 226 of the Homeland Security Act of 2002 (6 U.S.C. 148; relating to the national cybersecurity and communications integration center) is amended to read as follows:

"(2) INCIDENT.—The term 'incident' means an occurrence that actually or imminently jeopardizes, without lawful authority, the integrity, confidentiality, or availability of information on an information system, or actually or imminently jeopardizes, without lawful authority, an information system.".

(f) GAO STUDY OF UNIVERSITY-BASED CENTERS.—

(1) IN GENERAL.—Not later than 120 days after the date of the enactment of this Act, the Comptroller General of the United States shall initiate a study to assess the university-based centers for homeland security program authorized by section 308(b)(2) of the Homeland Security Act of 2002 (6 U.S.C. 188(b)(2)), and provide recommendations to the Committee on Homeland Security and the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate for appropriate improvements.

(2) SUBJECT MATTERS.—The study required under subsection (a) shall include the following:

(A) A review of the Department of Homeland Security's efforts to identify key areas of study needed to support the homeland security mission, and criteria that the Department utilized to determine such key areas for which the Department should maintain, establish, or eliminate university-based centers.

(B) A review of the method by which university-based centers, federally funded research and development centers, and Department of Energy national laboratories receive tasking from the Department of Homeland Security, including a review of how university-based research is identified, prioritized, and funded.

(C) A review of selection criteria for designating university-based centers and a weighting of such criteria.

(D) An examination of best practices from other departments' and agencies' efforts to organize and use university-based research to support their missions.

(E) A review of the Department of Homeland Security's criteria and metrics to measure demonstrable progress achieved by university-based centers in fulfilling Department taskings, and mechanisms for delivering and disseminating the research results of designated university-based centers within the Department and to other Federal, State, and local agencies.

(F) An examination of the means by which academic institutions that are not designated or associated with the designated university-based centers can optimally contribute to the research mission of the Directorate of Science and Technology of the Department of Homeland Security.

(G) An assessment of the interrelationship between the different university-based centers and the degree to which outreach and collaboration among a diverse array of academic institutions is encouraged by the Department of Homeland Security, particularly with historically Black colleges and universities and minority-serving institutions.

(H) A review of any other essential elements of the programs determined in the conduct of the study.

(g) PRIZE AUTHORITY.—The Under Secretary for Science and Technology of the Department of Homeland Security shall utilize, as appropriate, prize authority granted pursuant to current law.

(h) PROHIBITION ON NEW FUNDING.—No funds are authorized to be appropriated to carry out this section and the amendments made by this section. Such section and amendments shall be carried out using amounts otherwise appropriated or made available for such purposes.

CONTENTS

	Page
Purpose and Summary	12
Background and Need for Legislation	12
Hearings	15
Committee Consideration	15
Committee Votes	16
Committee Oversight Findings	16
New Budget Authority, Entitlement Authority, and Tax Expenditures	16
Congressional Budget Office Estimate	16
Statement of General Performance Goals and Objectives	17
Duplicative Federal Programs	18
Congressional Earmarks, Limited Tax Benefits, and Limited Tariff Benefits	18
Federal Mandates Statement	18
Preemption Clarification	18
Disclosure of Directed Rule Makings	19
Advisory Committee Statement	19
Applicability to Legislative Branch	19
Section-by-Section Analysis of the Legislation	19
Changes in Existing Law Made by the Bill, as Reported	26

PURPOSE AND SUMMARY

The purpose of H.R. 3578 is to amend the Homeland Security Act of 2002 to strengthen and make improvements to the Directorate of Science and Technology of the Department of Homeland Security, and for other purposes.

The DHS Science and Technology Reform and Improvement Act of 2015 makes tailored improvements to how the Science and Technology Directorate of the Department of Homeland Security carries out its responsibility to conduct research and development. No new funding is authorized in this legislation.

BACKGROUND AND NEED FOR LEGISLATION

The Department of Homeland Security's Directorate of Science and Technology (DHS S&T) was established by Congress in Title

III of the Homeland Security Act (HSA) of 2002. DHS S&T is the primary research and development arm of DHS. The Directorate manages basic and applied research and development of science and technology for the Department's operational components and first responders that protect the Homeland. DHS S&T conducts basic and applied research, development, demonstration, testing, and evaluation activities relevant to DHS.

Threats and technologies are always changing. DHS S&T monitors those threats and utilizes technological advancements to develop and deliver solutions and to address critical needs of the Homeland Security Enterprise. DHS S&T focuses its work in six primary areas: first responders, borders and maritime security, cybersecurity, chemical and biological defense, explosives, and resilience. The Directorate is organized into four groups that work together to ensure each aspect of the Directorate's work (operational analyses, requirements generation, test and evaluation, technology development, and acquisition support) is given the appropriate amount of emphasis.

Within DHS S&T, the Support to the Homeland Security Enterprise and First Responders Group is responsible for technology interoperability and compatibility, the transfer of technologies to first responders, and oversight of the National Urban Security Technology Laboratory. The Homeland Security Advanced Research Projects Agency (HSARPA) focuses on identifying, developing, and transitioning technologies and capabilities to counter chemical, biological, explosive, and cyber terrorist threats, as well as protecting our nation's borders and infrastructure. The Acquisition Support and Operational Analysis Group provides analyses, engineering, and test expertise and products connecting Research, Development, and Acquisition to the operational end-user. The Research and Development Partnerships Group builds partnerships that deliver technology solutions to the Homeland Security Enterprise (HSE). Within the Research and Development Partnerships Group, the Homeland Security Science and Technology Advisory Committee (HSSTAC) serves as a source of independent expert advice to the Under Secretary for Science and Technology. The Interagency Office supports the transition and transfer of the DHS S&T solutions to customers. The Office of National Laboratories—(ONL) develops and utilizes a coordinated network of DHS S&T laboratories and Department of Energy National Laboratories to facilitate the delivery of capabilities to DHS and the national homeland security mission. And, the Office of University Programs supports the Centers of Excellence, education programs and minority serving institutions programs.

DHS S&T works to strengthen America's security and resiliency by providing knowledge products and innovative technology solutions for the Homeland Security Enterprise (HSE). DHS S&T provides the HSE with strategic and focused technology options and operational process enhancements. DHS S&T seeks innovative, system-based solutions to complex homeland security problems. DHS S&T has the technical depth and reach to discover, adapt and leverage technology solutions developed by federal agencies and lab-

oratories, state, local and tribal governments, universities, and the private sector—across the United States and internationally.[1]

The Directorate has a history of management challenges resulting in several reorganizations by different Under Secretaries. Coordination and collaboration with the DHS components is a recurring issue.

One of the authorities and requirements given to the Under Secretary for Science andTechnology in the Homeland Security Act of 2002 is "coordinating and integrating all research, development, demonstration, testing and evaluation activities of the Department."[2] Coordination of research across the Department has been difficult to carry out, R&D is also conducted by the Coast Guard and the Domestic Nuclear Detection Office, two DHS components where the Under Secretary has limited authority.[3]

In 2012, the Government Accountability Office (GAO) found[4] fragmented R&D throughout DHS because S&T, Coast Guard, and Domestic Nuclear Detection Office (DNDO) are each given specific authority to conduct R&D by the Homeland Security Act. The HSA states DHS components are allowed to conduct R&D as long as efforts are coordinated through the Under Secretary for Science and Technology.

Unlike many other industries with well-defined sets of products, technologies, and customers, the Homeland Security Industrial Base (HSIB) is a highly fragmented federation of product and service providers serving a broad constituency. Customers and their needs vary widely. This fragmentation means that many companies with cutting-edge technologies are often small businesses and are more challenging to locate and engage. Simultaneously, federal, state, and local agencies are spending less on R&D for next-generation technologies. Therefore, it is critical that S&T collaborate with the HSIB to capitalize on and leverage industry investments in R&D and encourage the development of force multiplying solutions that defend, defeat, and mitigate threats to the nation.

H.R. 3578 makes improvements to how the DHS S&T carries out its responsibility to conduct homeland security research and development. The bill defines a clear mission statement for S&T and codifies the Directorate's portfolio review process to engage key leadership and stakeholders in ensuring research and development meet S&T and DHS goals and objectives. The bill also ensures the Directorate: identifies technical capability requirements and creates solutions with researchers and the private sector; links the Directorate's budget with research and development topic areas and programs, both within the Directorate and across the Department; ensures cyber research and development includes technologies for information sharing, analytics and methodologies; requires S&T to establish a process to identify, prioritize, and task research and development activities; and requires clear and strong communication between S&T and its clients.

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[1] Department of Homeland Security, Science and Technology Directorate, accessed at: *http://www.dhs.gov/science-and-technology-directorate*.

[2] Homeland Security Act of 2002 (Pub. L. 107-296), Sec. 302.

[3] The DHS S&T Directorate: Selected Issues for Congress, Congressional Research Service, April 14, 2014. *http://www.crs.gov/reports/pdf/R43064*.

[4] *Department of Homeland Security, Oversight and Coordination of Research and Development Should Be Strengthened*, Government Accountability Office, Sept. 2012, GAO -12-837. *http://www.gao.gov/assets/650/648152.pdf*.

HEARINGS

The Committee did not hold any hearings on H.R. 3578, however the Committee held the following oversight hearings:

On February 12, 2015, the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies held a hearing entitled "Examining DHS Science and Technology Directorate's Engagement with Academia and Industry." The Subcommittee received testimony from Mr. Jake Parker, Director Government Relations, Security Industry Association; Mr. Marc Pearl, President and Chief Executive Officer, Homeland Security and Defense Business Council; and Dr. Samuel H. Aronson, President, American Physical Society.

On May 19, 2015, the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies held a hearing entitled "Examining the DHS Science and Technology Directorate's Engagement with Academia and Industry." Witnesses included: Marc Pearl, President and CEO, Homeland Security and Defense Business Council; Jake Parker, Director of Government Relations, Security Industry Association; and Samuel H. Aronson, President, American Physical Society and former Director of Brookhaven National Laboratory.

COMMITTEE CONSIDERATION

The Committee met on September 30, 2015, to consider H.R. 3578, and ordered the measure to be reported to the House with a favorable recommendation, as amended, by voice vote. The Committee took the following actions:

The following amendments were offered:

An Amendment in the Nature of a Substitute offered by MR. RATCLIFFE (#1); was AGREED TO, as amended, by voice vote.

An Amendment by MEMBER to the Amendment in the Nature of a Substitute (#1a); was WITHDRAWN by unanimous consent.

An en bloc amendment to the Amendment in the Nature of a Substitute to H.R. 3578 offered by MR. THOMPSON of Mississippi (#1A); was AGREED TO by voice vote.

Consisting of the following amendments:

Page 7, line 8, strike "and".

Page 7, line 17, strike "needs.", the closing quotes, the semicolon, and "and" and insert "needs; and".

Page 7, beginning line 18, insert the following: "(19) coordinating with organizations that provide venture capital to businesses, particularly small businesses, as appropriate, to assist in the commercialization of innovative homeland security technologies that are expected to be ready for commercialization in the near term and within 36 months.".

Page 22, line 2, insert before the semicolon the following: ", and enhanced coordination with organizations as specified in paragraph (19) of section 302, as appropriate".

Page 9, line 13, strike "(B)".

Page 9, lines 14 and 18, redesignate clauses (i) and (ii) as subclauses (I) and (II), respectively, and move such subclauses two ems to the right.

Page 9, beginning line 14, insert the following: (i) in subparagraph (B)-

Page 9, beginning line 21, insert the following: (ii) by amending subparagraph (D) with a new paragraph entitled "(D) Annual Report to Congress."

Page 37, beginning line 17, insert a new paragraph entitle "(f) GAO Study of University-Based Centers."

An en bloc amendment to the Amendment in the Nature of a Substitute to H.R. 3578 offered by MR. LANGEVIN (#1B); was AGREED TO by voice vote.

Consisting of the following amendments:

Page 30, line 13, insert the following (and redesignate subsequent paragraphs accordingly and make necessary technical and conforming changes): "(4) support, in coordination with private sector, the review of source code that underpins critical infrastructure information systems;".

Page 34, beginning line 16, insert a new section entitled "Sec. 324. Homeland Security-STEM Summer Internship Program."

An amendment to the Amendment in the Nature of a Substitute to H.R. 3578 offered by MR. HIGGINS (#1C); was AGREED TO by voice vote.

Page 9, line 17, insert: "(which may include research into remote sensing and remote imaging)" after "detection".;

An amendment to the Amendment in the Nature of a Substitute to H.R. 3578 offered by MR. RICHMOND (#1D); was AGREED TO by voice vote.

Page 28, line 6, insert before the semicolon the following: "or critical infrastructure sectors".;

An amendment to the Amendment in the Nature of a Substitute to H.R. 3578 offered by MR. DONOVAN listed on the roster as by MR. MARINO (#1E); was AGREED TO by voice vote.

Page 31, line 2, strike "and".

Page 31, line 14, strike the period at the end and insert "; and".

Page 31, beginning line 15, insert the following: (3) industry and academia.

COMMITTEE VOTES

Clause 3(b) of Rule XIII of the Rules of the House of Representatives requires the Committee to list the recorded votes on the motion to report legislation and amendments thereto.

No recorded votes were requested during consideration of H.R. 3578.

COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 3(c)(1) of Rule XIII of the Rules of the House of Representatives, the Committee has held oversight hearings and made findings that are reflected in this report.

NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

In compliance with clause 3(c)(2) of Rule XIII of the Rules of the House of Representatives, the Committee finds that H.R. 3578, the DHS Science and Technology Reform and Improvements Act of 2015, would result in no new or increased budget authority, entitlement authority, or tax expenditures or revenues.

CONGRESSIONAL BUDGET OFFICE ESTIMATE

The Committee adopts as its own the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, October 29, 2015.

Hon. MICHAEL MCCAUL,
Chairman, Committee on Homeland Security,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3578, the DHS Science and Technology Reform and Improvement Act of 2015.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Mark Grabowicz.

Sincerely,

KEITH HALL.

Enclosure.

H.R. 3578—DHS Science and Technology Reform and Improvement Act of 2015

H.R. 3578 would direct the Department of Homeland Security (DHS) to establish a program to employ, for up to two years, current students or graduates of postgraduate programs in scientific or engineering fields. The bill also would require the Government Accountability Office (GAO) to report to the Congress on the department's use of universities to carry out DHS research.

Based on information from DHS about previous efforts to hire students or recent graduates, CBO estimates that the new program would cost about $1 million annually. Based on the cost of similar reports, CBO also estimates that it would cost GAO less than $500,000 to prepare the report required by the bill. Such spending would be subject to the availability of appropriated funds.

Because enacting the legislation would not affect direct spending or revenues, pay-as-you-go procedures do not apply. CBO also estimates that enacting H.R. 3578 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2026.

H.R. 3578 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not affect the budgets of state, local, or tribal governments.

The CBO staff contact for this estimate is Mark Grabowicz. The estimate was approved by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause 3(c)(4) of Rule XIII of the Rules of the House of Representatives, H.R. 3578 contains the following general performance goals and objectives, including outcome related goals and objectives authorized.

H.R. 3578 codifies the Directorate's portfolio review process to ensure research and development meets Directorate and Department goals and objectives. The bill states the Directorate's responsibility to act as a coordinating office for technology development for the Department and to define technological capability gaps, build partnerships, and help components and offices attain technology solutions. H.R. 3578 updates the Homeland Security Science and Technology Advisory Committee to support stakeholder en-

gagement in identifying homeland security research areas of importance for the Directorate. The bill requires DHS S&T to establish a process to identify, prioritize, and task research and development activities and report to Congress on a strategy and five year plan for the Directorate. H.R. 3578 ensures the Directorate utilizes the centralized Federal clearinghouse for technology to enhance cooperation between components, limit unnecessary duplication on research and development projects, and ensure technologies are accessible for the Department. The bill responds to critiques of the Directorate by requiring clear and strong communication between DHS S&T and its clients. Finally, H.R. 3578 codifies a mechanism for the Department to identify, coordinate, and align research and development efforts with departmental missions.

DUPLICATIVE FEDERAL PROGRAMS

Pursuant to clause 3(c) of Rule XIII, the Committee finds that H.R. 3578 contains provisions that establish or reauthorize the following programs. GAO-12-342SP found that strategic planning is needed to better manage overlapping science, technology, engineering, and mathematics education programs across multiple agencies. The Homeland Security-related (HS) STEM Summer Internship Program at the Department of Homeland Security was listed as a STEM education program in table 14 of the report. Since 2014, the Federal effort to coordinate and consolidate STEM programs has made significant progress. The DHS HS STEM Summer Internship program targets students with specific interest in homeland security-related STEM subjects and supports the homeland security enterprise workforce. This program is not duplicative of other Federal STEM education programs because of its specific goals and the students it serves.

CONGRESSIONAL EARMARKS, LIMITED TAX BENEFITS, AND LIMITED TARIFF BENEFITS

In compliance with Rule XXI of the Rules of the House of Representatives, this bill, as reported, contains no congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(e), 9(f), or 9(g) of the Rule XXI.

FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

PREEMPTION CLARIFICATION

In compliance with section 423 of the Congressional Budget Act of 1974, requiring the report of any Committee on a bill or joint resolution to include a statement on the extent to which the bill or joint resolution is intended to preempt State, local, or Tribal law, the Committee finds that H.R. 3578 does not preempt any State, local, or Tribal law.

DISCLOSURE OF DIRECTED RULE MAKINGS

The Committee estimates that H.R. 3578 would require no directed rule makings.

ADVISORY COMMITTEE STATEMENT

No advisory committees within the meaning of section 5(b) of the Federal Advisory Committee Act were created by this legislation. However, H.R. 3578 updates expired authorities for the Homeland Security Science and Technology Advisory Committee (Homeland Security Act of 2002, sec. 311(6 U.S.C. 191)).

APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

Section 1. Short Title.

This section provides that this bill may be cited as the "DHS Science and Technology Reform and Improvements Act of 2015".

Sec. 2. Science and Technology in Support of Homeland Security.

This section amends Section 301 of 6 U.S.C.:

Section 301 is amended to establish a mission statement that codifies the Science and Technology Directorate as the primary research, development, testing, and evaluation arm of the Department that is responsible for coordinating the research and development of the Department. The mission also requires the Directorate to build partnerships and leverage solutions developed by other Federal agencies, the private sector, and academia.

The Committee views the Science and Technology Directorate as the primary research and development component for the Department and the stated mission codifies that role. The Committee intends, to the extent practicable, technology solutions employed and leveraged by the Directorate be affordable, reliable and easily maintained.

Committee hearings and outreach with stakeholders reinforced the invaluable nature of private sector and industry collaboration. The Committee supports these relationships and the Directorate's partnerships and encourages the Directorate to maintain and enhance current collaboration and partnership efforts.

This section amends Section 302 of 6 U.S.C.:

Section 302 is amended with technical edits and to update the responsibilities of the Under Secretary for Science and Technology. These include ensuring that the Under Secretary carries out the mission established in section 301, serves as the senior scientific advisor to the Secretary, and develops a strategy to identify and develop countermeasures to terrorist threats that may serve as the basis for a national strategy.

The Committee intends to support the Directorate in its work to strengthen coordination, collaboration and cooperation with all De-

partment components and offices in order to create a research and development strategy for the Department. The Committee views the Directorate's role in coordination of research and development across the Department essential for the Department's continued "unity of effort" work and to ensure the reduction of unnecessary duplication of research and development. The Committee believes that the Department strategy established by the Science and Technology Directorate should serve as the basis for a national strategy on homeland security research and development.

New sections of the Responsibilities and Authorities of the Under Secretary for Science and Technology include: coordinating and integrating all research, development, testing, and evaluation activities of the Department, including through a centralized Federal clearinghouse for information relating to technologies that would further the mission of the Department; establishing a process to engage senior Directorate and DHS leadership and assess R&D projects to ensure they meet Directorate and Department goals; developing and overseeing the administration of guidelines for periodic external review of Department research and development programs; partnering with components to provide guidance on how to identify capability gaps to build science-based, analytic capability and capacity throughout the Department; acting as a coordinating office for technology development for the Department; and coordinating with venture capital organizations to assist in the commercialization of innovative homeland security technologies.

The Committee intends to codify the Directorate's portfolio review process that examines and assesses individual research and development projects and the overall portfolio. The portfolio review process ensures the Directorate's research and development portfolio reflects the highest-priority needs of the Homeland Security Enterprise and aligns with the Directorate's and the Department's strategic priorities.

The Committee intends to codify the Directorate's work with venture capital organizations, including non-profit organizations, to ensure technology investments can be realized by federal government partners and the private sector. Targeted venture capital investments can accelerate product development and add mission-critical capabilities to deliver cutting-edge technologies quickly and efficiently. The Committee intends to codify the Department's activities in this area, and encourages the Department to continue to coordinate with venture capital organizations to provide support to business, especially small businesses, assisting in the commercialization of innovative homeland security technologies.

This section also includes a reporting requirement for the Directorate to inform Congress on the implementation of its responsibilities and authorities.

This section amends Section 303 of 6 U.S.C.:

Section 303 is amended to strike an obsolete reference.

This section amends Section 305 of 6 U.S.C.:

Section 305 is amended to require the Secretary to review and revise the policies of the Department related to Federally Funded Research and Development Centers (FFRDCs) regarding personal conflicts of interest to prohibit employees from making or materially influencing research findings or agency decision making.

This section amends Section 306 of 6 U.S.C.:

Section 306 is amended to include language to ensure Congress is notified prior to the Directorate establishing new regulations. This section also provides the Directorate with the same hiring authority for scientists and engineers as the Homeland Security Advanced Research Projects Agency (HSARPA).

HSARPA currently uses this hiring authority to support the mission of the Department when recruiting qualified candidates. The Committee intends to allow this authority to extend across the Directorate to augment program work and allow the Directorate the flexibility to manage, prioritize, and assign new dimensions of technical skills and credibility across the Directorate.

This section amends Section 308 of 6 U.S.C.:

Section 308 is amended so that the University-Based Centers criteria for designation includes nuclear, explosive countermeasures or detection (which may include research into remote sensing and remote imaging) and cybersecurity. This section amends the information required in the report to Congress to include Centers designated pursuant to the section, a description of how the designations enhance homeland security, information on decisions to revoke or modify designations, a description of research tasked and completed by Centers, a description of funding, and a description of plans for utilizing Centers.

The Committee intends for S&T to provide Congress with additional information on the implementation of the University-Based Centers program.

This section establishes a Test, Evaluation, and Standards Division with a Director responsible for advising the Under Secretary for Science and Technology, as well as Secretary of Homeland Security and Under Secretary of Management, on test and evaluation or standards activities in the Department. The Director is required to establish and update policies on operational testing, oversee and ensure adequate test and evaluation activities, review major acquisition test reports and data, and review available test and evaluation infrastructure. The Division is not required to conduct operational testing of major acquisition programs. This section allows the Director to evaluate Department of Defense technologies to assess whether those technologies can be leveraged to address homeland security capability gaps.

The Committee recognizes that current as well as future enhancements to our Nation's technical threat detection systems can be lengthy and deliberative to test, evaluate, and field. The Committee also recognizes that this process may take significant time to move from concept to commercialization, rendering some capabilities "out of date" by the time they are fielded. Constant advancements and evolution in the threat environment often subject new capabilities to new and enhanced threats beyond the original scope envisioned when initially deployed. The dynamic nature and rapid evolution of the threat environment can lead to a serious compromise in security posture for the Nation. The Department may consider tools or programs to expedite initial R&D to rapid fielding and deployment in the field to 4 years or less.

This section amends Section 309 of 6 U.S.C.:

Section 309 is amended to clarify that funds from the Directorate to Department of Energy National Laboratories would not be treated as assisted acquisitions. The federal acquisition regulations (FAR) define assisted acquisitions as a type of interagency acquisition where a servicing agency performs acquisition activities on a requesting agency's behalf, such as awarding and administering a contract, task order, or delivery order (FAR 2.101). According to the FAR 17.5 before a solicitation is issued, the servicing agency and the requesting agency must sign a written interagency agreement that establishes the general terms and conditions governing the relationship between the parties. The requesting agency must provide the servicing agency any unique terms, conditions, and applicable agency-specific statutes, regulations, directives, and other applicable requirements for incorporation into the order or contract (FAR 17.502).

This section amends Section 310 of 6 U.S.C.:

Section 310 is amended to require that any successor facility to the Plum Island Animal Disease Center, including the National Bio and Argo-Defense Facility, which is intended to replace Plum Island, be subject to the requirements of this section.

This section amends Section 311 of 6 U.S.C.:

Section 311 is amended with a number of updates to existing statute regarding the Homeland Security Science and Technology Advisory Committee. This section would establish a minimum of 15 and a maximum of 30 members on the Committee and would ensure academia, national labs and private industry are represented on the Committee. The Committee would sunset after five years.

The Committee intends to update the existing statutory language in support of the Homeland Security Science and Technology Advisory Committee to ensure outside expertise from the Advisory Committee will continue and be utilized by the Directorate. It is the Committee's understanding that the Directorate may be planning to include more than 30 experts on the board. If that has occurred prior to enactment of this legislation, it is expected that the Advisory Committee will lower its membership through natural attrition.

This section amends Section 313 of 6 U.S.C.:

Section 313 is amended to require Science and Technology Directorate to utilize the centralized Federal clearinghouse to enhance cooperation between components, limit unnecessary duplication between components on research and development projects, ensure technologies are accessible for components, and for any additional purposes the Secretary finds necessary.

The Committee intends to ensure the technology clearinghouse is used to encourage and support innovative solutions to enhance homeland security and to support coordination and collaboration on technologies across the Department.

At the end of section 317 the following new sections are included:

Sec. 318. Identification and Prioritization of Research and Development.

This section requires the Under Secretary for Science and Technology to establish a process to define, identify, prioritize, fund,

and task the basic and applied homeland security research and development activities of the Directorate. This process would be responsive to near, mid, and long-term needs, including unanticipated needs to address emerging threats.

The Committee intends for the Directorate to establish a clear process by which research and development is defined, identified and prioritized. Establishing such a process will facilitate the Directorate's mission, goals and work and support stronger coordination and collaboration on research and development across the Department. When establishing considerations to be used in selecting appropriate research entities, the Directorate should include total life cycle cost, return on investment, and opportunities for competition and re-competition.

Sec. 319. Development of Directorate Strategy and Research and Development Plan.

This section requires the Under Secretary for Science and Technology to develop and submit to Congress a strategy to guide the activities of the Directorate. This strategy would identify priorities and objectives for national development of civilian science and technology solutions and capabilities to address homeland security operational needs.

This section requires the Under Secretary to develop and update a five-year research and development plan for the activities of the Directorate. This plan would define the Directorate's research, development, testing, and evaluation activities, priorities and performance metrics.

The Committee intends for the Directorate to work with components and identify mission needs to inform the strategy and research and development plan.

Sec. 320. Monitoring of Progress.

This section requires the Under Secretary for Science and Technology to establish a system to monitor the progress of research, development, testing, and evaluation activities undertaken by the Directorate and to report to Congress on these activities. The system must monitor progress toward project milestones, map progress toward deliverables identified in each five-year R&D plan, and allow the Under Secretary to report the number of products and services developed by the Directorate that have resulted in fielded technologies.

The Committee views the establishment of a system to monitor the progress of research and development as necessary to ensure clear and strong communication between the Directorate and its clients. This system will address critiques of the Directorate.

Sec. 321. Homeland Security Science and Technology Fellows Program.

This section requires the Secretary, acting through the Under Secretary for Science and Technology, to establish a Fellows program within the Department for the temporary placement of scientists in relevant scientific or technological fields for up to two years. Fellows would be placed in Department components that have a need for scientific and technological expertise.

The Committee has concerns with the Department's suitability review process and encourages the Department to consider ways to better facilitate and expedite the process throughout the Department.

Sec. 322. Cybersecurity Research and Development.

This section requires the Under Secretary for Science and Technology to support research, development, testing, evaluation, and transition of cybersecurity technologies to advance the development and deployment of secure information systems, create technologies to detect attacks or intrusions, support, in coordination with the private sector, the review of source code that underpins critical infrastructure information systems; assist the development of technologies to reduce vulnerabilities in industrial control systems, and support forensics and attack attribution. This section requires the Under Secretary to coordinate cybersecurity R&D efforts with other Federal agencies, including National Science Foundation, Defense Advanced Research Projects Agency, National Security Agency, Sector Specific Agencies and industry and academia. This section codifies the Transition to Practice program to support the life cycle of projects, research, development, test, evaluation, pilots, and transition. This section requires the Under Secretary to target federally funded research that demonstrates a high probability of successful transition to the commercial market within two years.

The Committee intends for this R&D to address cybersecurity risks and incidents, including advancing the development and deployment of more secure information systems, creating technologies to detect and analyze intrusions and anomalous behavior, as well as manage data loss and manipulation, with attention to insider threats.

The Committee intends to codify the transition to practice program to ensure labs have a more uniform way to conduct the transfer of technology relevant to the security of the homeland. The transition to practice program takes advantage of research already conducted and funds already spent to support robust cyber tools nationwide. The Committee intends federally funded to refer to federal labs, including Department of Energy and Federally Funded Research and Development Centers and academic institutions funded by the National Science Foundation (NSF) that the NSF recommends to DHS.

The critical infrastructure sectors, as defined by the DHS, include the Chemical Sector; Commercial Facilities Sector; Communications Sector; Critical Manufacturing Sector; Dams Sector; Defense Industrial Base Sector; Emergency Services Sector; Energy Sector; Financial Services Sector; Food and Agriculture Sector; Government Facilities Sector; Healthcare and Public Health Sector; Information Technology Sector; Nuclear Reactors, Materials, and Waste Sector; Transportation Systems Sector; and Water and Wastewater Systems Sector.

Sec. 323. Integrated Product Teams.

This section requires the Secretary to establish Integrated Product Teams (IPTs) to serve as a central mechanism for the Department to identify, coordinate, and align research and development efforts with Departmental missions. These IPTs will be managed

by the Under Secretary for Science and Technology and relevant senior leadership of operational components and be responsible for identifying and prioritizing homeland security capability gaps, assessing the appropriateness of technology to address a specific mission area, and informing the annual budget process regarding technological solutions to address homeland security capability gaps. This section requires the Secretary to provide to Congress information on the impact and effectiveness of the IPTs.

The Committee notes that DHS Secretary Jeh Johnson circulated a memorandum to all component heads that announced the establishment of Integrated Product Teams to "improve acquisition and research and development (R&D) processes across DHS to deliver technologies and close identified capability gaps" and explained that the IPTs would be "aligned to the DHS mission areas and will incorporate an S&T-led technology assessment for all major acquisitions in the Department." The Committee intends for the Integrated Product Teams to support the Directorate's role in coordinating research and development across the Department. This section seeks to reform the current culture throughout the Department to ensure components are directly engaged with the Science and Technology Directorate in the conduct of R&D and ensures both are working together to identify mission gaps. This section would support the overall goal of strengthening R&D at the Department.

Sec. 324.Homeland Security-STEM Summer Internship Program.

This section codifies the Homeland Security STEM internship program. The program provides students with exposure to Department mission-relevant research areas to encourage students to pursue STEM careers in homeland security related fields. Interns must have successfully completed at least a year of higher education in a STEM field, be enrolled in a STEM course of study, plan to continue such course of study, and pursue career goals aligned with the Department's Mission, goals, and objectives. The Under Secretary must determine the academic requirements, and selection criteria and standards for successful completion of the internship. The program shall be administered with the university-based centers and ensure each intern is assigned a research mentor. The Under Secretary must conduct outreach to students who are members of groups under-represented in STEM careers to encourage participation in the program. The term "institution of higher education" is defined.

All amendments made by the bill would take effect 30 days after the date of enactment.

The bill amends the table of contents of the Homeland Security Act.

This section amends Section 831 of 6 U.S.C.:

Section 831 is amended to extend Other Transaction Authority (OTA) until 2020 and would require the Secretary to approve the OTA prior to its use. This section updates existing reporting requirements and requires training of acquisition staff in the use of OTA.

Additionally, this bill updates the definition of "incident" currently found in the second section 226 of the Homeland Security Act.

The bill requires GAO to initiate a study to assess the university-based centers program authorized by section 308(b)(2) of the Homeland Security Act.

The bill requires the Secretary to make use of the prize authority existing under current law.

No new funds are authorized to carry out the legislation.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, and existing law in which no change is proposed is shown in roman):

HOMELAND SECURITY ACT OF 2002

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Homeland Security Act of 2002".

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

* * * * * * *

TITLE III—SCIENCE AND TECHNOLOGY IN SUPPORT OF HOMELAND SECURITY

* * * * * * *

Sec. 318. Identification and prioritization of research and development.
Sec. 319. Development of Directorate strategy and research and development plan.
Sec. 320. Monitoring of progress.
Sec. 321. Homeland Security Science and Technology Fellows Program.
Sec. 322. Cybersecurity research and development.
Sec. 323. Integrated product teams.
Sec. 324. Homeland Security-STEM summer internship program.

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TITLE II—INFORMATION ANALYSIS AND INFRASTRUCTURE PROTECTION

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Subtitle C—Information Security

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SEC. 226. NATIONAL CYBERSECURITY AND COMMUNICATIONS INTEGRATION CENTER.

(a) DEFINITIONS.—In this section—

(1) the term "cybersecurity risk" means threats to and vulnerabilities of information or information systems and any related consequences caused by or resulting from unauthorized access, use, disclosure, degradation, disruption, modification, or

destruction of information or information systems, including such related consequences caused by an act of terrorism;

[(2) the term "incident" means an occurrence that—

[(A) actually or imminently jeopardizes, without lawful authority, the integrity, confidentiality, or availability of information on an information system; or

[(B) constitutes a violation or imminent threat of violation of law, security policies, security procedures, or acceptable use policies;]

(2) INCIDENT.—The term "incident" means an occurrence that actually or imminently jeopardizes, without lawful authority, the integrity, confidentiality, or availability of information on an information system, or actually or imminently jeopardizes, without lawful authority, an information system.

(3) the term "information sharing and analysis organization" has the meaning given that term in section 212(5); and

(4) the term "information system" has the meaning given that term in section 3502(8) of title 44, United States Code.

(b) CENTER.—There is in the Department a national cybersecurity and communications integration center (referred to in this section as the "Center") to carry out certain responsibilities of the Under Secretary appointed under section 103(a)(1)(H).

(c) FUNCTIONS.—The cybersecurity functions of the Center shall include—

(1) being a Federal civilian interface for the multi-directional and cross-sector sharing of information related to cybersecurity risks, incidents, analysis, and warnings for Federal and non-Federal entities;

(2) providing shared situational awareness to enable real-time, integrated, and operational actions across the Federal Government and non-Federal entities to address cybersecurity risks and incidents to Federal and non-Federal entities;

(3) coordinating the sharing of information related to cybersecurity risks and incidents across the Federal Government;

(4) facilitating cross-sector coordination to address cybersecurity risks and incidents, including cybersecurity risks and incidents that may be related or could have consequential impacts across multiple sectors;

(5)(A) conducting integration and analysis, including cross-sector integration and analysis, of cybersecurity risks and incidents; and

(B) sharing the analysis conducted under subparagraph (A) with Federal and non-Federal entities;

(6) upon request, providing timely technical assistance, risk management support, and incident response capabilities to Federal and non-Federal entities with respect to cybersecurity risks and incidents, which may include attribution, mitigation, and remediation; and

(7) providing information and recommendations on security and resilience measures to Federal and non-Federal entities, including information and recommendations to—

(A) facilitate information security; and

(B) strengthen information systems against cybersecurity risks and incidents.

(d) COMPOSITION.—

(1) IN GENERAL.—The Center shall be composed of—

(A) appropriate representatives of Federal entities, such as—

(i) sector-specific agencies;

(ii) civilian and law enforcement agencies; and

(iii) elements of the intelligence community, as that term is defined under section 3(4) of the National Security Act of 1947 (50 U.S.C. 3003(4));

(B) appropriate representatives of non-Federal entities, such as—

(i) State and local governments;

(ii) information sharing and analysis organizations; and

(iii) owners and operators of critical information systems;

(C) components within the Center that carry out cybersecurity and communications activities;

(D) a designated Federal official for operational coordination with and across each sector; and

(E) other appropriate representatives or entities, as determined by the Secretary.

(2) INCIDENTS.—In the event of an incident, during exigent circumstances the Secretary may grant a Federal or non-Federal entity immediate temporary access to the Center.

(e) PRINCIPLES.—In carrying out the functions under subsection (c), the Center shall ensure—

(1) to the extent practicable, that—

(A) timely, actionable, and relevant information related to cybersecurity risks, incidents, and analysis is shared;

(B) when appropriate, information related to cybersecurity risks, incidents, and analysis is integrated with other relevant information and tailored to the specific characteristics of a sector;

(C) activities are prioritized and conducted based on the level of risk;

(D) industry sector-specific, academic, and national laboratory expertise is sought and receives appropriate consideration;

(E) continuous, collaborative, and inclusive coordination occurs—

(i) across sectors; and

(ii) with—

(I) sector coordinating councils;

(II) information sharing and analysis organizations; and

(III) other appropriate non-Federal partners;

(F) as appropriate, the Center works to develop and use mechanisms for sharing information related to cybersecurity risks and incidents that are technology-neutral, interoperable, real-time, cost-effective, and resilient; and

(G) the Center works with other agencies to reduce unnecessarily duplicative sharing of information related to cybersecurity risks and incidents;

(2) that information related to cybersecurity risks and incidents is appropriately safeguarded against unauthorized access; and

(3) that activities conducted by the Center comply with all policies, regulations, and laws that protect the privacy and civil liberties of United States persons.

(f) NO RIGHT OR BENEFIT.—

(1) IN GENERAL.—The provision of assistance or information to, and inclusion in the Center of, governmental or private entities under this section shall be at the sole and unreviewable discretion of the Under Secretary appointed under section 103(a)(1)(H).

(2) CERTAIN ASSISTANCE OR INFORMATION.—The provision of certain assistance or information to, or inclusion in the Center of, one governmental or private entity pursuant to this section shall not create a right or benefit, substantive or procedural, to similar assistance or information for any other governmental or private entity.

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TITLE III—SCIENCE AND TECHNOLOGY IN SUPPORT OF HOMELAND SECURITY

SEC. 301. UNDER SECRETARY FOR SCIENCE AND TECHNOLOGY.

[There] *(a) IN GENERAL.—There* shall be in the Department a Directorate of Science and Technology headed by an Under Secretary for Science and Technology.

(b) MISSION.—The Directorate of Science and Technology shall be the primary research, development, testing, and evaluation arm of the Department, responsible for coordinating the research, development, testing, and evaluation of the Department to strengthen the security and resiliency of the United States. The Directorate shall—

(1) develop and deliver knowledge, analyses, and innovative solutions that are responsive to homeland security capability gaps identified by components and offices of the Department, the first responder community, and the Homeland Security Enterprise (as such term is defined in section 322) and that can be integrated into operations of the Department;

(2) seek innovative, system-based solutions to complex homeland security problems; and

(3) build partnerships and leverage technology solutions developed by other Federal agencies and laboratories, State, local, and tribal governments, universities, and the private sector.

SEC. 302. RESPONSIBILITIES AND AUTHORITIES OF THE UNDER SECRETARY FOR SCIENCE AND TECHNOLOGY.

[The Secretary, acting through the Under Secretary for Science and Technology, shall] *(a) IN GENERAL.—The Secretary, acting through the Under Secretary for Science and Technology, shall carry out the mission described in subsection (b) of section 301 and shall* have the responsibility for—

(1) advising the Secretary regarding research and development efforts and priorities in support of the Department's mis-

sions *and serving as the senior scientific advisor to the Secretary*;

(2) developing, in consultation with other appropriate executive agencies, a [national] policy and strategic plan for, identifying priorities, goals, objectives and policies for, and coordinating the Federal Government's civilian efforts to identify and develop countermeasures to chemical, [biological,,] *biological,* and other emerging terrorist threats *that may serve as a basis of a national strategy*, including the development of comprehensive, research-based definable goals for such efforts and development of annual measurable objectives and specific targets to accomplish and evaluate the goals for such efforts;

(3) supporting [the Under Secretary for Intelligence and Analysis and the Assistant Secretary for Infrastructure Protection] *components and offices of the Department*, by assessing and testing homeland security vulnerabilities and possible threats;

(4) conducting basic and applied research, development, demonstration, testing, and evaluation activities that are relevant to any or all elements of the Department, through both intramural and extramural programs, [except that such responsibility does not extend to human health-related research and development activities] *including coordinating with relevant components and offices of the Department appropriate to—*

(A) identify and prioritize technical capability requirements and create solutions that include researchers, the private sector, and operational end users, and

(B) develop capabilities to address issues on research, development, testing, evaluation, technology, and standards for the first responder community,

except that such responsibility does not extend to the human health-related research and development activities;

(5) establishing priorities for, directing, funding, and conducting national research, development, test and evaluation, and procurement of technology and systems for—

(A) preventing the importation of chemical, [biological,,] *biological,* and related weapons and material; and

(B) detecting, preventing, protecting against, and responding to terrorist attacks;

(6) establishing a system for transferring homeland security developments or technologies to Federal, State, local government, and private sector entities;

(7) entering into work agreements, joint sponsorships, contracts, or any other agreements with the Department of Energy regarding the use of the national laboratories or sites and support of the science and technology base at those facilities;

(8) collaborating with the Secretary of Agriculture and the Attorney General as provided in section 212 of the Agricultural Bioterrorism Protection Act of 2002 (7 U.S.C. 8401), as amended by section 1709(b);

(9) collaborating with the Secretary of Health and Human Services and the Attorney General in determining any new biological agents and toxins that shall be listed as "select agents" in Appendix A of part 72 of title 42, Code of Federal Regula-

tions, pursuant to section 351A of the Public Health Service Act (42 U.S.C. 262a);

(10) supporting United States leadership in science and technology;

(11) establishing and administering the primary research and development activities of the Department, including the long-term research and development needs and capabilities for all elements of the Department;

[(12) coordinating and integrating all research, development, demonstration, testing, and evaluation activities of the Department;]

(12) coordinating and integrating all research, development, demonstration, testing, and evaluation activities of the Department, including through a centralized Federal clearinghouse established pursuant to paragraph (1) of section 313(b) for information relating to technologies that would further the mission of the Department, and providing advice, as necessary, regarding major acquisition programs;

(13) coordinating with other appropriate executive agencies in developing and carrying out the science and technology agenda of the Department to reduce duplication and identify unmet needs; [and]

(14) developing and overseeing the administration of guidelines for merit review of research and development projects throughout the Department, and for the dissemination of research conducted or sponsored by the Department[.]*;*

(15) establishing a process that—

(A) includes consideration by Directorate leadership, senior component leadership, first responders, and outside expertise;

(B) is strategic, transparent, and repeatable with a goal of continuous improvement;

(C) through which research and development projects undertaken by the Directorate are assessed on a regular basis; and

(D) includes consideration of metrics to ensure research and development projects meet Directorate and Department goals and inform departmental budget and program planning;

(16) developing and overseeing the administration of guidelines for periodic external review of departmental research and development programs or activities, including through—

(A) consultation with experts, including scientists and practitioners, regarding the research and development activities conducted by the Directorate of Science and Technology; and

(B) biennial independent, external review—

(i) initially at the division level; or

(ii) when divisions conduct multiple programs focused on significantly different subjects, at the program level;

(17) partnering with components and offices of the Department to develop and deliver knowledge, analyses, and innovative solutions that are responsive to identified homeland security capability gaps and raise the science-based, analytic capa-

bility and capacity of appropriate individuals throughout the Department by providing guidance on how to better identify homeland security capability gaps that may be addressed through a technological solution and by partnering with such components and offices to—

(A) support technological assessments of major acquisition programs throughout the acquisition lifecycle;

(B) help define appropriate technological requirements and perform feasibility analysis;

(C) assist in evaluating new and emerging technologies against capability gaps;

(D) support evaluation of alternatives;

(E) improve the use of technology Department-wide; and

(F) provide technical assistance in the development of acquisition lifecycle cost for technologies;

(18) acting as a coordinating office for technology development for the Department by helping components and offices define technological requirements, and building partnerships with appropriate entities (such as within the Department and with other Federal agencies and laboratories, State, local, and tribal governments, universities, and the private sector) to help each such component and office attain the technology solutions it needs; and

(19) coordinating with organizations that provide venture capital to businesses, particularly small businesses, as appropriate, to assist in the commercialization of innovative homeland security technologies that are expected to be ready for commercialization in the near term and within 36 months.

(b) REVIEW OF RESPONSIBILITIES.—Not later than 180 days after the date of the enactment of this subsection, the Under Secretary for Science and Technology shall submit to the appropriate congressional committees a report on the implementation of paragraphs (2) (including how the policy and strategic plan under such paragraph may serve as a basis for a national strategy referred to in such paragraph), (11), (12), (13), (16), and (17) of subsection (a).

SEC. 303. FUNCTIONS TRANSFERRED.

In accordance with title XV, there shall be transferred to the Secretary the functions, personnel, assets, and liabilities of the following entities:

(1) The following programs and activities of the Department of Energy, including the functions of the Secretary of Energy relating thereto (but not including programs and activities relating to the strategic nuclear defense posture of the United States):

(A) The chemical and biological national security and supporting programs and activities of the nonproliferation and verification research and development program.

(B) The nuclear smuggling programs and activities within the proliferation detection program of the nonproliferation and verification research and development program. The programs and activities described in this subparagraph may be designated by the President either for transfer to the Department or for joint operation by the Secretary and the Secretary of Energy.

(C) The nuclear assessment program and activities of the assessment, detection, and cooperation program of the international materials protection and cooperation program.

(D) Such life sciences activities of the biological and environmental research program related to microbial pathogens as may be designated by the President for transfer to the Department.

(E) The Environmental Measurements Laboratory.

[(F) The advanced scientific computing research program and activities at Lawrence Livermore National Laboratory.]

(2) The National Bio-Weapons Defense Analysis Center of the Department of Defense, including the functions of the Secretary of Defense related thereto.

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SEC. 305. FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS.

[The] *(a) ESTABLISHMENT.—The* Secretary, acting through the Under Secretary for Science and Technology, shall have the authority to establish or contract with 1 or more federally funded research and development centers to provide independent analysis of homeland security issues, or to carry out other responsibilities under this Act, including coordinating and integrating both the extramural and intramural programs described in section 308.

(b) CONFLICTS OF INTEREST.—The Secretary shall review and revise, as appropriate, the policies of the Department relating to personnel conflicts of interest to ensure that such policies specifically address employees of federally funded research and development centers established pursuant to subsection (a) who are in a position to make or materially influence research findings or agency decision making.

SEC. 306. MISCELLANEOUS PROVISIONS.

(a) CLASSIFICATION.—To the greatest extent practicable, research conducted or supported by the Department shall be unclassified.

(b) CONSTRUCTION.—Nothing in this title shall be construed to preclude any Under Secretary of the Department from carrying out research, development, demonstration, or deployment activities, as long as such activities are coordinated through the Under Secretary for Science and Technology.

(c) REGULATIONS.—The Secretary, acting through the Under Secretary for Science and Technology, may issue necessary regulations with respect to research, development, demonstration, testing, and evaluation activities of the Department, including the conducting, funding, and reviewing of such activities. *If such regulations are issued, the Under Secretary shall report to the appropriate congressional committees prior to such issuance.*

[(d) NOTIFICATION OF PRESIDENTIAL LIFE SCIENCES DESIGNATIONS.—Not later than 60 days before effecting any transfer of Department of Energy life sciences activities pursuant to section 303(1)(D) of this Act, the President shall notify the appropriate congressional committees of the proposed transfer and shall include the reasons for the transfer and a description of the effect of the transfer on the activities of the Department of Energy.]

(d) PERSONNEL.—In hiring personnel for the Directorate of Science and Technology, the Secretary shall have the hiring and management authorities described in section 1101 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (5 U.S.C. 3104 note; Public Law 105–261). The term of appointments for employees under subsection (c)(1) of such section may not exceed five years before the granting of any extension under subsection (c)(2) of such section.

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SEC. 308. CONDUCT OF RESEARCH, DEVELOPMENT, DEMONSTRATION, TESTING AND EVALUATION.

(a) IN GENERAL.—The Secretary, acting through the Under Secretary for Science and Technology, shall carry out the responsibilities under section 302(4) through both extramural and intramural programs.

(b) EXTRAMURAL PROGRAMS.—

(1) IN GENERAL.—The Secretary, acting through the Under Secretary for Science and Technology, shall operate extramural research, development, demonstration, testing, and evaluation programs so as to—

(A) ensure that colleges, universities, private research institutes, and companies (and consortia thereof) from as many areas of the United States as practicable participate;

(B) ensure that the research funded is of high quality, as determined through merit review processes developed under section 302(14); and

(C) distribute funds through grants, cooperative agreements, and contracts.

(2) UNIVERSITY-BASED CENTERS FOR HOMELAND SECURITY.—

(A) DESIGNATION.—The Secretary, acting through the Under Secretary for Science and Technology, shall designate a university-based center or several university-based centers for homeland security. The purpose of the center or these centers shall be to establish a coordinated, university-based system to enhance the Nation's homeland security.

(B) CRITERIA FOR DESIGNATION.—Criteria for the designation of colleges or universities as a center for homeland security, shall include, but are not limited to, demonstrated expertise in—

(i) The training of first responders.

(ii) Responding to incidents involving weapons of mass destruction and biological warfare.

(iii) Emergency and diagnostic medical services.

(iv) Chemical, biological, radiological, [and nuclear countermeasures or detection] *nuclear, and explosives countermeasures or detection (which may include research into remote sensing and remote imaging).*

(v) Animal and plant health and diagnostics.

(vi) Food safety.

(vii) Water and wastewater operations.

(viii) Port and waterway security.

(ix) Multi-modal transportation.

(x) Information security and information engineering.

(xi) Engineering.

(xii) Educational outreach and technical assistance.

(xiii) Border transportation and security.

(xiv) The public policy implications and public dissemination of homeland security related research and development.

(xv) Cybersecurity.

(C) DISCRETION OF SECRETARY.—To the extent that exercising such discretion is in the interest of homeland security, and with respect to the designation of any given university-based center for homeland security, the Secretary may except certain criteria as specified in section 308(b)(2)(B) and consider additional criteria beyond those specified in section 308(b)(2)(B). Upon designation of a university-based center for homeland security, the Secretary shall that day publish in the Federal Register the criteria that were excepted or added in the selection process and the justification for the set of criteria that were used for that designation.

[(D) REPORT TO CONGRESS.—The Secretary shall report annually, from the date of enactment, to Congress concerning the implementation of this section. That report shall indicate which center or centers have been designated and how the designation or designations enhance homeland security, as well as report any decisions to revoke or modify such designations.]

(D) ANNUAL REPORT TO CONGRESS.—Not later than one year after the date of the enactment of this subparagraph and annually thereafter, the Secretary shall submit to Congress a report on the implementation of this section. Each such report shall—

(i) indicate which center or centers have been designated pursuant to this section;

(ii) describe how such designation or designations enhance homeland security;

(iii) provide information on any decisions to revoke or modify such designation or designations;

(iv) describe research that has been tasked and completed by each center that has been designated during the preceding year;

(v) describe funding provided by the Secretary for each center under clause (iv) for that year; and

(vi) describe plans for utilization of each center or centers in the forthcoming year.

(E) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this paragraph.

(c) INTRAMURAL PROGRAMS.—

(1) CONSULTATION.—In carrying out the duties under section 302, the Secretary, acting through the Under Secretary for Science and Technology, may draw upon the expertise of any laboratory of the Federal Government, whether operated by a contractor or the Government.

(2) LABORATORIES.—The Secretary, acting through the Under Secretary for Science and Technology, may establish a headquarters laboratory for the Department at any laboratory or site and may establish additional laboratory units at other laboratories or sites.

(3) CRITERIA FOR HEADQUARTERS LABORATORY.—If the Secretary chooses to establish a headquarters laboratory pursuant to paragraph (2), then the Secretary shall do the following:

(A) Establish criteria for the selection of the headquarters laboratory in consultation with the National Academy of Sciences, appropriate Federal agencies, and other experts.

(B) Publish the criteria in the Federal Register.

(C) Evaluate all appropriate laboratories or sites against the criteria.

(D) Select a laboratory or site on the basis of the criteria.

(E) Report to the appropriate congressional committees on which laboratory was selected, how the selected laboratory meets the published criteria, and what duties the headquarters laboratory shall perform.

(4) LIMITATION ON OPERATION OF LABORATORIES.—No laboratory shall begin operating as the headquarters laboratory of the Department until at least 30 days after the transmittal of the report required by paragraph (3)(E).

(d) TEST, EVALUATION, AND STANDARDS DIVISION.—

(1) ESTABLISHMENT.—There is established in the Directorate of Science and Technology a Test, Evaluation, and Standards Division.

(2) DIRECTOR.—The Test, Evaluation, and Standards Division shall be headed by a Director of Test, Evaluation, and Standards, who shall be appointed by the Secretary and report to the Under Secretary for Science and Technology.

(3) RESPONSIBILITIES, AUTHORITIES, AND FUNCTIONS.—The Director of Test, Evaluation, and Standards—

(A) through the Under Secretary for Science and Technology, serve as an adviser to the Secretary and the Under Secretary of Management on all test and evaluation or standards activities in the Department; and

(B) shall—

(i) establish and update as necessary test and evaluation policies for the Department, including policies to ensure that operational testing is done at facilities that already have relevant and appropriate safety and material certifications to the extent such facilities are available;

(ii) oversee and ensure that adequate test and evaluation activities are planned and conducted by or on behalf of components and offices of the Department with respect to major acquisition programs of the Department, as designated by the Secretary, based on risk, acquisition level, novelty, complexity, and size of any such acquisition program, or as otherwise established in statute;

(iii) review major acquisition program test reports and test data to assess the adequacy of test and evalua-

tion activities conducted by or on behalf of components and offices of the Department, including test and evaluation activities planned or conducted pursuant to clause (ii); and

(iv) review available test and evaluation infrastructure to determine whether the Department has adequate resources to carry out its testing and evaluation responsibilities, as established under this title.

(4) LIMITATION.—The Test, Evaluation, and Standards Division is not required to carry out operational testing of major acquisition programs.

(5) EVALUATION OF DEPARTMENT OF DEFENSE TECHNOLOGIES.—The Director of Test, Evaluation, and Standards may evaluate technologies currently in use or being developed by the Department of Defense to assess whether such technologies can be leveraged to address homeland security capability gaps.

SEC. 309. UTILIZATION OF DEPARTMENT OF ENERGY NATIONAL LABORATORIES AND SITES IN SUPPORT OF HOMELAND SECURITY ACTIVITIES.

(a) AUTHORITY TO UTILIZE NATIONAL LABORATORIES AND SITES.—

(1) IN GENERAL.—In carrying out the missions of the Department, the Secretary may utilize the Department of Energy national laboratories and sites through any 1 or more of the following methods, as the Secretary considers appropriate:

(A) A joint sponsorship arrangement referred to in subsection (b).

(B) A direct contract between the Department and the applicable Department of Energy laboratory or site, subject to subsection (c).

(C) Any "work for others" basis made available by that laboratory or site.

(D) Any other method provided by law.

(2) ACCEPTANCE AND PERFORMANCE BY LABS AND SITES.—Notwithstanding any other law governing the administration, mission, use, or operations of any of the Department of Energy national laboratories and sites, such laboratories and sites are authorized to accept and perform work for the Secretary, consistent with resources provided, and perform such work on an equal basis to other missions at the laboratory and not on a noninterference basis with other missions of such laboratory or site.

(3) TREATMENT OF CERTAIN FUNDS.—Notwithstanding any other provision of law, any funds provided to a Department of Energy national laboratory by the Department may not be treated as an assisted acquisition.

(b) JOINT SPONSORSHIP ARRANGEMENTS.—

(1) LABORATORIES.—The Department may be a joint sponsor, under a multiple agency sponsorship arrangement with the Department of Energy, of 1 or more Department of Energy national laboratories in the performance of work.

(2) SITES.—The Department may be a joint sponsor of a Department of Energy site in the performance of work as if such site were a federally funded research and development center

and the work were performed under a multiple agency sponsorship arrangement with the Department.

(3) PRIMARY SPONSOR.—The Department of Energy shall be the primary sponsor under a multiple agency sponsorship arrangement referred to in paragraph (1) or (2).

(4) LEAD AGENT.—The Secretary of Energy shall act as the lead agent in coordinating the formation and performance of a joint sponsorship arrangement under this subsection between the Department and a Department of Energy national laboratory or site.

(5) FEDERAL ACQUISITION REGULATION.—Any work performed by a Department of Energy national laboratory or site under a joint sponsorship arrangement under this subsection shall comply with the policy on the use of federally funded research and development centers under the Federal Acquisition Regulations.

(6) FUNDING.—The Department shall provide funds for work at the Department of Energy national laboratories or sites, as the case may be, under a joint sponsorship arrangement under this subsection under the same terms and conditions as apply to the primary sponsor of such national laboratory under section 303(b)(1)(C) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 253(b)(1)(C)) or of such site to the extent such section applies to such site as a federally funded research and development center by reason of this subsection.

(c) SEPARATE CONTRACTING.—To the extent that programs or activities transferred by this Act from the Department of Energy to the Department of Homeland Security are being carried out through direct contracts with the operator of a national laboratory or site of the Department of Energy, the Secretary of Homeland Security and the Secretary of Energy shall ensure that direct contracts for such programs and activities between the Department of Homeland Security and such operator are separate from the direct contracts of the Department of Energy with such operator.

(d) AUTHORITY WITH RESPECT TO COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS AND LICENSING AGREEMENTS.—In connection with any utilization of the Department of Energy national laboratories and sites under this section, the Secretary may permit the director of any such national laboratory or site to enter into cooperative research and development agreements or to negotiate licensing agreements with any person, any agency or instrumentality, of the United States, any unit of State or local government, and any other entity under the authority granted by section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a). Technology may be transferred to a non-Federal party to such an agreement consistent with the provisions of sections 11 and 12 of that Act (15 U.S.C. 3710, 3710a).

(e) REIMBURSEMENT OF COSTS.—In the case of an activity carried out by the operator of a Department of Energy national laboratory or site in connection with any utilization of such laboratory or site under this section, the Department of Homeland Security shall reimburse the Department of Energy for costs of such activity through a method under which the Secretary of Energy waives any requirement for the Department of Homeland Security to pay ad-

ministrative charges or personnel costs of the Department of Energy or its contractors in excess of the amount that the Secretary of Energy pays for an activity carried out by such contractor and paid for by the Department of Energy.

(f) LABORATORY DIRECTED RESEARCH AND DEVELOPMENT BY THE DEPARTMENT OF ENERGY.—No funds authorized to be appropriated or otherwise made available to the Department in any fiscal year may be obligated or expended for laboratory directed research and development activities carried out by the Department of Energy unless such activities support the missions of the Department of Homeland Security.

(g) OFFICE FOR NATIONAL LABORATORIES.—There is established within the Directorate of Science and Technology an Office for National Laboratories, which shall be responsible for the coordination and utilization of the Department of Energy national laboratories and sites under this section in a manner to create a networked laboratory system for the purpose of supporting the missions of the Department.

(h) DEPARTMENT OF ENERGY COORDINATION ON HOMELAND SECURITY RELATED RESEARCH.—The Secretary of Energy shall ensure that any research, development, test, and evaluation activities conducted within the Department of Energy that are directly or indirectly related to homeland security are fully coordinated with the Secretary to minimize duplication of effort and maximize the effective application of Federal budget resources.

SEC. 310. TRANSFER OF PLUM ISLAND ANIMAL DISEASE CENTER, DEPARTMENT OF AGRICULTURE.

(a) IN GENERAL.—In accordance with title XV, the Secretary of Agriculture shall transfer to the Secretary of Homeland Security the Plum Island Animal Disease Center of the Department of Agriculture, including the assets and liabilities of the Center.

(b) CONTINUED DEPARTMENT OF AGRICULTURE ACCESS.—On completion of the transfer of the Plum Island Animal Disease Center under subsection (a), the Secretary of Homeland Security and the Secretary of Agriculture shall enter into an agreement to ensure that the Department of Agriculture is able to carry out research, diagnostic, and other activities of the Department of Agriculture at the Center.

(c) DIRECTION OF ACTIVITIES.—The Secretary of Agriculture shall continue to direct the research, diagnostic, and other activities of the Department of Agriculture at the Center described in subsection (b).

(d) NOTIFICATION.—

(1) IN GENERAL.—At least 180 days before any change in the biosafety level at the Plum Island Animal Disease Center, the President shall notify Congress of the change and describe the reasons for the change.

(2) LIMITATION.—No change described in paragraph (1) may be made earlier than 180 days after the completion of the transition period (as defined in section 1501).

(e) SUCCESSOR FACILITY.—Any successor facility to the Plum Island Animal Disease Center, including the National Bio and Agro-Defense Facility (NBAF) under construction as of the date of the enactment of this subsection, which is intended to the replace the Plum Island Animal Disease Center shall be subject to the require-

ments of this section in the same manner and to the same extent as the Plum Island Animal Disease Center under this section.

SEC. 311. HOMELAND SECURITY SCIENCE AND TECHNOLOGY ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—There is established within the Department a Homeland Security Science and Technology Advisory Committee (in this section referred to as the "Advisory Committee"). The Advisory Committee shall make recommendations with respect to the activities of the Under Secretary for Science and Technology, including identifying research areas of potential importance to the security of the Nation.

(b) MEMBERSHIP.—

(1) APPOINTMENT.—The Advisory Committee shall consist of [20 members] *not fewer than 15 members and not more than 30 members* appointed by the Under Secretary for Science and Technology, which shall include emergency first-responders or representatives of *academia, national labs, private industry, and* organizations or associations of emergency first-responders. The Advisory Committee shall also include representatives of citizen groups, including economically disadvantaged communities. The individuals appointed as members of the Advisory Committee—

(A) shall be eminent in fields such as emergency response, research, engineering, new product development, business, and management consulting;

(B) shall be selected solely on the basis of established records of distinguished service;

(C) shall not be employees of the Federal Government; and

(D) shall be so selected as to provide representation of a cross-section of the research, development, demonstration, and deployment activities supported by the Under Secretary for Science and Technology.

(2) SUBCOMMITTEES.—The Advisory Committee may establish subcommittees that focus on research and development challenges, as appropriate.

[(2)] *(3)* NATIONAL RESEARCH COUNCIL.—The Under Secretary for Science and Technology may enter into an arrangement for the National Research Council to select members of the Advisory Committee, but only if the panel used by the National Research Council reflects the representation described in paragraph (1).

(c) TERMS OF OFFICE.—

(1) IN GENERAL.—Except as otherwise provided in this subsection, the term of office of each member of the Advisory Committee shall be 3 years *on a rotating basis*.

[(2) ORIGINAL APPOINTMENTS.—The original members of the Advisory Committee shall be appointed to three classes. One class of six shall have a term of 1 year, one class of seven a term of 2 years, and one class of seven a term of 3 years.]

[(3)] *(2)* VACANCIES.—A member appointed to fill a vacancy occurring before the expiration of the term for which the member's predecessor was appointed shall [be appointed] *serve* for the remainder of such term.

(d) ELIGIBILITY.—A person who has completed two consecutive full terms of service on the Advisory Committee shall thereafter be ineligible for appointment during the 1-year period following the expiration of the second such term.

(e) MEETINGS.—The Advisory Committee shall meet at least quarterly at the call of the Chair or whenever one-third of the members so request in writing. Each member shall be given appropriate notice of [the call of] each meeting, whenever possible not less than 15 days before the meeting.

(f) QUORUM.—A majority of the members of the Advisory Committee not having a conflict of interest in the matter being considered by the Advisory Committee shall constitute a quorum.

(g) CONFLICT OF INTEREST RULES.—The Advisory Committee shall establish rules for determining when 1 of its members has a conflict of interest in a matter being considered by the Advisory Committee.

(h) REPORTS.—

(1) ANNUAL REPORT.—The Advisory Committee shall [render] *submit* an annual report to the Under Secretary for Science and Technology for transmittal to [Congress] *the appropriate congressional committees* on or before January 31 of each year. Such report shall describe the activities and recommendations of the Advisory Committee*, and incorporate the findings and recommendations of the Advisory Committee subcommittees,* during the previous year.

(2) ADDITIONAL REPORTS.—The Advisory Committee may [render] *submit* to the Under Secretary for transmittal to [Congress] *the appropriate congressional committees* such additional reports on specific policy matters as it considers appropriate.

(i) FEDERAL ADVISORY COMMITTEE ACT EXEMPTION.—Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee*, except that the Advisory Committee shall file a charter with Congress every two years in accordance with subsection (b)(2) of such section 14*.

(j) TERMINATION.—The Department of Homeland Security Science and Technology Advisory Committee shall terminate on December 31, [2008] *2020*.

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SEC. 313. TECHNOLOGY CLEARINGHOUSE TO ENCOURAGE AND SUPPORT INNOVATIVE SOLUTIONS TO ENHANCE HOMELAND SECURITY.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary, acting through the Under Secretary for Science and Technology, shall establish and promote a program to encourage technological innovation in facilitating the mission of the Department (as described in section 101).

(b) ELEMENTS OF PROGRAM.—The program described in subsection (a) shall include the following components:

(1) The establishment of a centralized Federal clearinghouse for information relating to technologies that would further the mission of the Department for dissemination, as appropriate, to Federal, State, and local government and private sector entities for additional review, purchase, or use.

(2) The issuance of announcements seeking unique and innovative technologies to advance the mission of the Department.

(3) The establishment of a technical assistance team to assist in screening, as appropriate, proposals submitted to the Secretary (except as provided in subsection (c)(2)) to assess the feasibility, scientific and technical merits, and estimated cost of such proposals, as appropriate.

(4) The provision of guidance, recommendations, and technical assistance, as appropriate, to assist Federal, State, and local government and private sector efforts to evaluate and implement the use of technologies described in paragraph (1) or (2).

(5) The provision of information for persons seeking guidance on how to pursue proposals to develop or deploy technologies that would enhance homeland security, including information relating to Federal funding, regulation, or acquisition.

(c) APPLICATION OF PROGRAM.—The Secretary, acting through the Under Secretary for Science and Technology, shall use the program established under subsection (a) to—

(1) enhance the cooperation between components and offices of the Department on projects that have similar goals, timelines, or outcomes;

(2) ensure the coordination of technologies to eliminate unnecessary duplication of research and development;

(3) ensure technologies are accessible for component and office use on a Department website; and

(4) carry out any additional purpose the Secretary determines necessary.

[(c)] *(d)* MISCELLANEOUS PROVISIONS.—

(1) IN GENERAL.—Nothing in this section shall be construed as authorizing the Secretary or the technical assistance team established under subsection (b)(3) to set standards for technology to be used by the Department, any other executive agency, any State or local government entity, or any private sector entity.

(2) CERTAIN PROPOSALS.—The technical assistance team established under subsection (b)(3) shall not consider or evaluate proposals submitted in response to a solicitation for offers for a pending procurement or for a specific agency requirement.

(3) COORDINATION.—In carrying out this section, the Secretary shall coordinate with the Technical Support Working Group (organized under the April 1982 National Security Decision Directive Numbered 30).

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SEC. 318. IDENTIFICATION AND PRIORITIZATION OF RESEARCH AND DEVELOPMENT.

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this section, the Under Secretary for Science and Technology shall establish a process to define, identify, prioritize, fund, and task the basic and applied homeland security research and development activities of the Directorate of Science and Technology to meet the needs of the components and offices of the Department, the first responder community, and the Homeland Security Enterprise (as such term is defined in section 322).

(b) PROCESS.—The process established under subsection (a) shall—

(1) be responsive to near-, mid-, and long-term needs, including unanticipated needs to address emerging threats;

(2) utilize gap analysis and risk assessment tools where available and applicable;

(3) include protocols to assess—

(A) off-the-shelf technology to determine if an identified homeland security capability gap can be addressed through the acquisition process instead of commencing research and development of technology to address such capability gap; and

(B) communication and collaboration for research and development activities pursued by other executive agencies, to determine if technology can be leveraged to identify and address homeland security capability gaps and avoid unnecessary duplication of efforts;

(4) provide for documented and validated research and development requirements;

(5) strengthen first responder participation to identify and prioritize homeland security technological gaps, including by—

(A) soliciting feedback from appropriate national associations and advisory groups representing the first responder community and first responders within the components and offices of the Department; and

(B) establishing and promoting a publicly accessible portal to allow the first responder community to help the Directorate of Science and Technology develop homeland security research and development goals;

(6) institute a mechanism to publicize the Department's homeland security technology priorities for the purpose of informing Federal, State, and local governments, first responders, and the private sector;

(7) establish considerations to be used by the Directorate in selecting appropriate research entities, including the national laboratories, federally funded research and development centers, university-based centers, and the private sector, to carry out research and development requirements;

(8) incorporate feedback derived as a result of the mechanism established in section 323, ensuring the Directorate is utilizing regular communication with components and offices of the Department; and

(9) include any other criteria or measures the Under Secretary for Science and Technology considers necessary for the identification and prioritization of research requirements.

SEC. 319. DEVELOPMENT OF DIRECTORATE STRATEGY AND RESEARCH AND DEVELOPMENT PLAN.

(a) STRATEGY.—

(1) IN GENERAL.—Not later than one year after the date of the enactment of this section, the Under Secretary for Science and Technology shall develop and submit to the appropriate congressional committees a strategy to guide the activities of the Directorate of Science and Technology. Such strategy shall be updated at least once every five years and shall identify priorities and objectives for the development of science and tech-

nology solutions and capabilities addressing homeland security operational needs. Such strategy shall include the coordination of such priorities and activities within the Department. Such strategy shall take into account the priorities and needs of stakeholders in the Homeland Security Enterprise (as such term is defined in section 322). In developing such strategy, efforts shall be made to support collaboration and avoid unnecessary duplication across the Federal Government. Such strategy shall be risk-based and aligned with other strategic guidance provided by—

(A) the National Strategy for Homeland Security;

(B) the Quadrennial Homeland Security Review; and

(C) any other relevant strategic planning documents, as determined by the Under Secretary.

(2) CONTENTS.—The strategy required under paragraph (1) shall be prepared in accordance with applicable Federal requirements and guidelines, and shall include the following:

(A) An identification of the long-term strategic goals, objectives, and metrics of the Directorate.

(B) A technology transition strategy for the programs of the Directorate.

(C) Short- and long-term strategic goals, and objectives for increasing the number of designations and certificates issued under subtitle G of title VIII, including cybersecurity technologies that could significantly reduce, or mitigate the effects of, cybersecurity risks (as such term is defined in subsection (a)(1) of the second section 226, relating to the national cybersecurity and communications integration center), without compromising the quality of the evaluation of applications for such designations and certificates.

(b) FIVE-YEAR RESEARCH AND DEVELOPMENT PLAN.—

(1) IN GENERAL.—The Under Secretary for Science and Technology shall develop, and update at least once every five years, a five-year research and development plan for the activities of the Directorate of Science and Technology. The Under Secretary shall develop the first such plan by the date that is not later than one year after the date of the enactment of this section.

(2) CONTENTS.—Each five-year research and development plan developed and revised under subsection (a) shall—

(A) define the Directorate of Science and Technology's research, development, testing, and evaluation activities, priorities, performance metrics, and key milestones and deliverables for, as the case may be, the five-fiscal-year period from 2016 through 2020, and for each five-fiscal-year period thereafter;

(B) describe, for the activities of the strategy developed under subsection (a), the planned annual funding levels for the period covered by each such five-year research and development plan;

(C) indicate joint investments with other Federal partners where applicable, and enhanced coordination with organizations as specified in paragraph (19) of section 302, as appropriate;

(D) analyze how the research programs of the Directorate support achievement of the strategic goals and objectives identified in the strategy required under subsection (a);

(E) describe how the activities and programs of the Directorate meet the requirements or homeland security capability gaps identified by customers within and outside of the Department, including the first responder community; and

(F) describe the policies of the Directorate regarding the management, organization, and personnel of the Directorate.

(3) SCOPE.—The Under Secretary for Science and Technology shall ensure that each five-year research and development plan developed and revised under subsection (a)—

(A) reflects input from a wide range of stakeholders; and

(B) takes into account how research and development by other Federal, State, private sector, and nonprofit institutions contributes to the achievement of the priorities identified in each plan, and avoids unnecessary duplication with such efforts.

(4) REPORTS.—At the time the President submits each annual budget request under section 1105(a) of title 31, United States Code, the Under Secretary for Science and Technology shall submit to the appropriate congressional committees a report on the status and results to date of implementation of the current five-year research and development plan, including—

(A) a summary of the research and development activities for the previous fiscal year in each topic area, including such activities to address homeland security risks, including threats, vulnerabilities, and consequences, and a summary of the coordination activities undertaken by the Directorate of Science and Technology for components and offices of the Department, together with the results of the process specified in paragraph (15) of section 302;

(B) clear links between the Directorate's budget and each topic area or program, including those topic areas or programs to address homeland security risks, including threats, vulnerabilities, and consequences, specifying which topic areas or programs fall under which budget lines, and clear links between Directorate coordination work and priorities and annual expenditures for such work and priorities, including joint investments with other Federal partners, where applicable;

(C) an assessment of progress of the research and development activities based on the performance metrics and milestones set forth in such plan; and

(D) any changes to such plan.

SEC. 320. MONITORING OF PROGRESS.

(a) IN GENERAL.—The Under Secretary for Science and Technology shall establish and utilize a system to track the progress of the research, development, testing, and evaluation activities undertaken by the Directorate of Science and Technology, and shall provide to the appropriate congressional committees and customers of such activities, at a minimum on a biannual basis, regular updates on such progress.

(b) REQUIREMENTS.—In order to provide the progress updates required under subsection (a), the Under Secretary for Science and Technology shall develop a system that—

(1) monitors progress toward project milestones identified by the Under Secretary;

(2) maps progress toward deliverables identified in each five-year research and development plan required under section 319(b);

(3) generates up-to-date reports to customers that transparently disclose the status and progress of research, development, testing, and evaluation efforts of the Directorate of Science and Technology; and

(4) allows the Under Secretary to report the number of products and services developed by the Directorate that have been transitioned into acquisition programs and resulted in successfully fielded technologies.

(c) EVALUATION METHODS.—

(1) EXTERNAL INPUT, CONSULTATION, AND REVIEW.—The Under Secretary for Science and Technology shall implement procedures to engage outside experts to assist in the evaluation of the progress of research, development, testing, and evaluation activities of the Directorate of Science and Technology, including through—

(A) consultation with experts, including scientists and practitioners, to gather independent expert peer opinion and advice on a project or on specific issues or analyses conducted by the Directorate; and

(B) periodic, independent, external review to assess the quality and relevance of the Directorate's programs and projects.

(2) COMPONENT FEEDBACK.—The Under Secretary for Science and Technology shall establish a formal process to collect feedback from customers of the Directorate of Science and Technology on the performance of the Directorate that includes—

(A) appropriate methodologies through which the Directorate can assess the quality and usefulness of technology and services delivered by the Directorate;

(B) development of metrics for measuring the usefulness of any technology or service provided by the Directorate; and

(C) standards for high-quality customer service.

SEC. 321. HOMELAND SECURITY SCIENCE AND TECHNOLOGY FELLOWS PROGRAM.

(a) ESTABLISHMENT.—The Secretary, acting through the Under Secretary for Science and Technology and the Under Secretary for Management, shall establish a fellows program, to be known as the Homeland Security Science and Technology Fellows Program (in this section referred to as the "Program"), under which the Under Secretary for Science and Technology, in coordination with the Office of University Programs of the Department, shall facilitate the placement of fellows in relevant scientific or technological fields for up to two years in components and offices of the Department with a need for scientific and technological expertise.

(b) UTILIZATION OF FELLOWS.—

(1) IN GENERAL.—Under the Program, the Department may employ fellows—

(A) for the use of the Directorate of Science and Technology; or

(B) for the use of a component or office of the Department outside the Directorate, under a memorandum of agreement with the head of such a component or office under which such component or office will reimburse the Directorate for the costs of such employment.

(2) RESPONSIBILITIES.—Under an agreement referred to in subparagraph (B) of paragraph (1)—

(A) the Under Secretary for Science and Technology and the Under Secretary for Management shall—

(i) solicit and accept applications from individuals who are currently enrolled in or who are graduates of postgraduate programs in scientific and engineering fields related to the promotion of securing the homeland or critical infrastructure sectors;

(ii) screen applicants and interview them as appropriate to ensure that such applicants possess the appropriate level of scientific and engineering expertise and qualifications;

(iii) provide a list of qualified applicants to the heads of components and offices of the Department seeking to utilize qualified fellows;

(iv) subject to the availability of appropriations, pay financial compensation to such fellows;

(v) coordinate with the Chief Security Officer to facilitate and expedite provision of security and suitability clearances to such fellows, as appropriate; and

(vi) otherwise administer all aspects of the employment of such fellows with the Department; and

(B) the head of the component or office of the Department utilizing a fellow shall—

(i) select such fellow from the list of qualified applicants provided by the Under Secretary;

(ii) reimburse the Under Secretary for the costs of employing such fellow, including administrative costs; and

(iii) be responsible for the day-to-day management of such fellow.

(c) APPLICATIONS FROM NONPROFIT ORGANIZATIONS.—The Under Secretary for Science and Technology may accept an application under subsection (b)(2)(A) that is submitted by a nonprofit organization on behalf of individuals whom such nonprofit organization has determined may be qualified applicants under the Program.

SEC. 322. CYBERSECURITY RESEARCH AND DEVELOPMENT.

(a) IN GENERAL.—The Under Secretary for Science and Technology shall support research, development, testing, evaluation, and transition of cybersecurity technology, including fundamental research to improve the sharing of information, analytics, and methodologies related to cybersecurity risks and incidents, consistent with current law.

(b) ACTIVITIES.—The research and development supported under subsection (a) shall serve the components of the Department and shall—

(1) advance the development and accelerate the deployment of more secure information systems;

(2) improve and create technologies for detecting attacks or intrusions, including real-time continuous diagnostics and real-time analytic technologies;

(3) improve and create mitigation and recovery methodologies, including techniques and policies for real-time containment of attacks, and development of resilient networks and information systems;

(4) support, in coordination with private sector, the review of source code that underpins critical infrastructure information systems;

(5) develop and support infrastructure and tools to support cybersecurity research and development efforts, including modeling, testbeds, and data sets for assessment of new cybersecurity technologies;

(6) assist the development and support of technologies to reduce vulnerabilities in industrial control systems; and

(7) develop and support cyber forensics and attack attribution.

(c) COORDINATION.—In carrying out this section, the Under Secretary for Science and Technology shall coordinate activities with—

(1) the Under Secretary appointed pursuant to section 103(a)(1)(H);

(2) the heads of other relevant Federal departments and agencies, including the National Science Foundation, the Defense Advanced Research Projects Agency, the Information Assurance Directorate of the National Security Agency, the National Institute of Standards and Technology, the Department of Commerce, the Networking and Information Technology Research and Development Program Office, Sector Specific Agencies for critical infrastructure, and other appropriate working groups established by the President to identify unmet needs and cooperatively support activities, as appropriate; and

(3) industry and academia.

(d) TRANSITION TO PRACTICE.—The Under Secretary for Science and Technology shall support projects through the full life cycle of such projects, including research, development, testing, evaluation, pilots, and transitions. The Under Secretary shall identify mature technologies that address existing imminent cybersecurity gaps in public or private information systems and networks of information systems, identify and support necessary improvements identified during pilot programs and testing and evaluation activities, and introduce new cybersecurity technologies throughout the Homeland Security Enterprise through partnerships and commercialization. The Under Secretary shall target federally funded cybersecurity research that demonstrates a high probability of successful transition to the commercial market within two years and that is expected to have notable impact on the cybersecurity of the information systems or networks of information systems of the United States.

(e) DEFINITIONS.—In this section:

(1) CYBERSECURITY RISK.—The term "cybersecurity risk" has the meaning given such term in the second section 226, relating to the national cybersecurity and communications integration center.

(2) HOMELAND SECURITY ENTERPRISE.—The term "Homeland Security Enterprise" means relevant governmental and non-governmental entities involved in homeland security, including Federal, State, local, and tribal government officials, private sector representatives, academics, and other policy experts.

(3) INCIDENT.—The term "incident" has the meaning given such term in the second section 226, relating to the national cybersecurity and communications integration center.

(4) INFORMATION SYSTEM.—The term "information system" has the meaning given that term in section 3502(8) of title 44, United States Code.

SEC. 323. INTEGRATED PRODUCT TEAMS.

(a) IN GENERAL.—The Secretary shall establish integrated product teams to serve as a central mechanism for the Department to identify, coordinate, and align research and development efforts with departmental missions. Each team shall be managed by the Under Secretary for Science and Technology and the relevant senior leadership of operational components, and shall be responsible for the following:

(1) Identifying and prioritizing homeland security capability gaps within a specific mission area and technological solutions to address such gaps.

(2) Identifying ongoing departmental research and development activities and component acquisitions of technologies that are outside of departmental research and development activities to address a specific mission area.

(3) Assessing the appropriateness of a technology to address a specific mission area.

(4) Identifying unnecessary redundancy in departmental research and development activities within a specific mission area.

(5) Informing the Secretary and the annual budget process regarding whether certain technological solutions are able to address homeland security capability gaps within a specific mission area.

(b) CONGRESSIONAL OVERSIGHT.—Not later than two years after the date of enactment of this section, the Secretary shall provide to the appropriate congressional committees information on the impact and effectiveness of the mechanism described in subsection (a) on research and development efforts, component relationships, and how the process has informed the research and development budget and enhanced decision making, including acquisition decision making, at the Department. The Secretary shall seek feedback from the Under Secretary for Science and Technology, Under Secretary for Management, and the senior leadership of operational components regarding the impact and effectiveness of such mechanism and include such feedback in the information provided under this subsection.

SEC. 324. HOMELAND SECURITY-STEM SUMMER INTERNSHIP PROGRAM.

(a) IN GENERAL.—The Under Secretary for Science and Technology shall establish a Homeland Security-STEM internship program (in this section referred to as the "program") to carry out the objectives of this subtitle.

(b) PROGRAM.—The program shall provide students with exposure to Department mission-relevant research areas to encourage such students to pursue STEM careers in homeland security related fields. Internships offered under the program shall be for up to ten weeks during the summer.

(c) ELIGIBILITY.—The Under Secretary for Science and Technology shall develop criteria for participation in the program, including the following:

(1) At the time of application, an intern shall—

(A) have successfully completed not less than one academic year of study at an institution of higher education in a STEM field;

(B) be enrolled in a course of study in a STEM field at an institution of higher education; and

(C) plan to continue such course of study or pursue an additional course of study in a STEM field at an institution of higher education in the academic year following the internship.

(2) An intern shall be pursuing career goals aligned with the Department's mission, goals, and objectives.

(3) Any other criteria the Under Secretary determines appropriate.

(d) COOPERATION.—The program shall be administered in cooperation with the university-based centers for homeland security under section 308. Interns in the program shall be provided hands-on research experience and enrichment activities focused on Department research areas.

(e) ACADEMIC REQUIREMENTS; OPERATION.—The Under Secretary for Science and Technology shall determine the academic requirements, other selection criteria, and standards for successful completion of each internship period in the program. The Under Secretary shall be responsible for the design, implementation, and operation of the program.

(f) RESEARCH MENTORS.—The Under Secretary for Science and Technology shall ensure that each intern in the program is assigned a research mentor to act as counselor and advisor and provide career-focused advice.

(g) OUTREACH TO CERTAIN UNDER-REPRESENTED STUDENTS.—The Under Secretary for Science and Technology shall conduct outreach to students who are members of groups under-represented in STEM careers to encourage their participation in the program.

(h) INSTITUTION OF HIGHER EDUCATION DEFINED.—In this section, the term "institution of higher education" has the meaning given the term in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002), except that the term does not include institutions described in subparagraph (C) of such section 102(a)(1).

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TITLE VIII—COORDINATION WITH NON-FEDERAL ENTITIES; INSPECTOR GENERAL; UNITED STATES SECRET SERVICE; COAST GUARD; GENERAL PROVISIONS

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Subtitle D—Acquisitions

SEC. 831. RESEARCH AND DEVELOPMENT PROJECTS.

(a) AUTHORITY.—Until September 30, [2015] *2020*, and subject to subsection (d), the Secretary may carry out a pilot program under which the Secretary may exercise the following authorities:

(1) IN GENERAL.—When the Secretary carries out basic, applied, and advanced research and development projects, including the expenditure of funds for such projects, the Secretary may exercise the same authority (subject to the same limitations and conditions) with respect to such research and projects as the Secretary of Defense may exercise under section 2371 of title 10, United States Code (except for subsections (b) and (f)), after making a determination that the use of a contract, grant, or cooperative agreement for such project is not feasible or appropriate. [The annual report required under subsection (b) of this section, as applied to the Secretary by this paragraph, shall be submitted to the President of the Senate and the Speaker of the House of Representatives.]

(2) PROTOTYPE PROJECTS.—The Secretary may, under the authority of paragraph (1), carry out prototype projects in accordance with the requirements and conditions provided for carrying out prototype projects under section 845 of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103–160). In applying the authorities of that section 845, subsection (c) of that section shall apply with respect to prototype projects under this paragraph, and the Secretary shall perform the functions of the Secretary of Defense under subsection (d) thereof.

(3) PRIOR APPROVAL.—In any case in which a component or office of the Department seeks to utilize the authority under this section, such office or component shall first receive prior approval from the Secretary by providing to the Secretary a proposal that includes the rationale for the use of such authority, the funds to be spent on the use of such authority, and the expected outcome for each project that is the subject of the use of such authority. In such a case, the authority for evaluating the proposal may not be delegated by the Secretary to anyone other than the Under Secretary for Management.

(b) PROCUREMENT OF TEMPORARY AND INTERMITTENT SERVICES.—The Secretary may—

(1) procure the temporary or intermittent services of experts or consultants (or organizations thereof) in accordance with section 3109(b) of title 5, United States Code; and

(2) whenever necessary due to an urgent homeland security need, procure temporary (not to exceed 1 year) or intermittent personal services, including the services of experts or consultants (or organizations thereof), without regard to the pay limitations of such section 3109.

(c) ADDITIONAL REQUIREMENTS.—

(1) IN GENERAL.—The authority of the Secretary under this section shall terminate September 30, [2015] *2020*, unless before that date the Secretary—

(A) issues policy guidance detailing the appropriate use of that authority; and

(B) provides training to each employee that is authorized to exercise that authority.

[(2) REPORT.—The Secretary shall provide an annual report to the Committees on Appropriations of the Senate and the House of Representatives, the Committee on Homeland Security and Governmental Affairs of the Senate, and the Committee on Homeland Security of the House of Representatives detailing the projects for which the authority granted by subsection (a) was used, the rationale for its use, the funds spent using that authority, the outcome of each project for which that authority was used, and the results of any audits of such projects.]

(2) REPORT.—The Secretary shall annually submit to the appropriate congressional committees a report detailing the projects for which the authority granted by subsection (a) was used, the rationale for such use, the funds spent using such authority, the extent of cost-sharing for such projects among Federal and non-federal sources, the extent to which use of such authority has addressed a homeland security capability gap identified by the Department, the total amount of payments, if any, that were received by the Federal Government as a result of the use of such authority during the period covered by each such report, the outcome of each project for which such authority was used, and the results of any audits of such projects.

(d) DEFINITION OF NONTRADITIONAL GOVERNMENT CONTRACTOR.—In this section, the term "nontraditional Government contractor" has the same meaning as the term "nontraditional defense contractor" as defined in section 845(e) of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103–160; 10 U.S.C. 2371 note).

(e) TRAINING.—The Secretary shall develop a training program for acquisitions staff in the use of other transaction authority to help ensure the appropriate use of such authority.

(f) OTHER TRANSACTION AUTHORITY DEFINED.—In this section, the term "other transaction authority" means authority under subsection (a).

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