"(b) PERFORMANCE PLAN FOR REDUCTION OF RE-SOURCES REQUIRED FOR DATA SERVERS AND CENTERS.—

"(1) COMPONENT PLANS.-

"(A) IN GENERAL.—Not later than January 15, 2012, the Secretaries of the military departments and the heads of the Defense Agencies shall each submit to the Chief Information Officer of the Department a plan for the department or agency concerned to achieve the following:

"(i) A reduction in the square feet of floor space devoted to information systems technologies, attendant support technologies, and operations within data centers.

"(ii) A reduction in the use of all utilities necessary to power and cool information systems technologies and data centers.

"(iii) An increase in multi-organizational utilization of data centers, information systems technologies, and associated resources.

"(iv) A reduction in the investment for capital infrastructure or equipment required to support data centers as measured in cost per megawatt of data storage.

"(v) A reduction in the number of commercial and government developed applications running on data servers and within data centers.

"(vi) A reduction in the number of government and vendor provided full-time equivalent personnel, and in the cost of labor, associated with the operation of data servers and data centers.

"(B) SPECIFICATION OF REQUIRED ELEMENTS.—The Chief Information Officer of the Department shall specify the particular performance standards and measures and implementation elements to be included in the plans submitted under this paragraph, including specific goals and schedules for achieving the matters specified in subparagraph (A).

(2) Defense-wide plan.

"(A) IN GENERAL.—Not later than April 1, 2012, the Chief Information Officer of the Department shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a performance plan for a reduction in the resources required for data centers and information systems technologies Department-wide. The plan shall be based upon and incorporate appropriate elements of the plans submitted under paragraph (1).

"(B) ELEMENTS.—The performance plan required under this paragraph shall include the following:

"(i) A Department-wide performance plan for achieving the matters specified in paragraph (1)(A), including performance standards and measures for data centers and information systems technologies, goals and schedules for achieving such matters, and an estimate of cost savings anticipated through implementation of the plan. "(ii) A Department-wide strategy for each of

the following: "(I) Desktop, laptop, and mobile device

virtualization.

"(II) Transitioning to cloud computing.

"(III) Migration of Defense data and government-provided services from Department-owned and operated data centers to cloud computing services generally available within the private sector that provide a better capability at a lower cost with the same or greater degree of security.

"(IV) Utilization of private sector-managed security services for data centers and cloud computing services.

"(V) A finite set of metrics to accurately and transparently report on data center infrastructure (space, power and cooling): age, cost, capacity, usage, energy efficiency and utilization, accompanied with the aggregate data for each data center site in use by the Department in excess of 100 kilowatts of information technology power demand. "(VI) Transitioning to just-in-time delivery of Department-owned data center infrastructure (space, power and cooling) through use of modular data center technology and integrated data center infrastructure management software.

"(3) RESPONSIBILITY.—The Chief Information Officer of the Department shall discharge the responsibility for establishing performance standards and measures for data centers and information systems technologies for purposes of this subsection. Such responsibility may not be delegated.

"(c) EXCEPTIONS.— "(1) INTELLIGENCE COMPONENTS.—The Chief Information Officer of the Department and the Chief Information Officer of the Intelligence Community may jointly exempt from the applicability of this section such intelligence components of the Department of Defense (and the programs and activities thereof) that are funded through the National Intelligence Program (NIP) as the Chief Information Officers consider appropriate.

"(2) RESEARCH, DEVELOPMENT, TEST, AND EVALUA-TION PROGRAMS.—The Chief Information Officer of the Department may exempt from the applicability of this section research, development, test, and evaluation programs that use authorization of appropriations for the High Performance Computing Modernization Program (Program Element 0603461A) if the Chief Information Officer determines that the exemption is in the best interest of national security. "(d) REPORTS ON COST SAVINGS.—

"(1) IN GENERAL.—Not later than March 1 of each fiscal year, and ending in fiscal year 2016, the Chief Information Officer of the Department shall submit to the appropriate committees of Congress a report on the cost savings, cost reductions, cost avoidances, and performance gains achieved, and anticipated to be achieved, as of the date of such report as a result of activities undertaken under this section.

"(2) APPROPRIATE COMMITTEES OF CONGRESS DE-FINED.—In this subsection, the term 'appropriate committees of Congress' means—

"(A) the Committee on Armed Services, the Committee on Appropriations, and the Select Committee on Intelligence of the Senate; and

"(B) the Committee on Armed Services, the Committee on Appropriations, and the Permanent Select Committee on Intelligence of the House of Representatives."

# §2224. Defense Information Assurance Program

(a) DEFENSE INFORMATION ASSURANCE PRO-GRAM.—The Secretary of Defense shall carry out a program, to be known as the "Defense Information Assurance Program", to protect and defend Department of Defense information, information systems, and information networks that are critical to the Department and the armed forces during day-to-day operations and operations in times of crisis.

(b) OBJECTIVES OF THE PROGRAM.—The objectives of the program shall be to provide continuously for the availability, integrity, authentication, confidentiality, nonrepudiation, and rapid restitution of information and information systems that are essential elements of the Defense Information Infrastructure.

(c) PROGRAM STRATEGY.—In carrying out the program, the Secretary shall develop a program strategy that encompasses those actions necessary to assure the readiness, reliability, continuity, and integrity of Defense information systems, networks, and infrastructure, including through compliance with subchapter II of chapter 35 of title 44, including through compliance with subchapter III of chapter 35 of title 44. The program strategy shall include the following: (1) A vulnerability and threat assessment of elements of the defense and supporting nondefense information infrastructures that are essential to the operations of the Department and the armed forces.

(2) Development of essential information assurances technologies and programs.

(3) Organization of the Department, the armed forces, and supporting activities to defend against information warfare.

(4) Joint activities of the Department with other departments and agencies of the Government, State and local agencies, and elements of the national information infrastructure.

(5) The conduct of exercises, war games, simulations, experiments, and other activities designed to prepare the Department to respond to information warfare threats.

(6) Development of proposed legislation that the Secretary considers necessary for implementing the program or for otherwise responding to the information warfare threat.

(d) COORDINATION.—In carrying out the program, the Secretary shall coordinate, as appropriate, with the head of any relevant Federal agency and with representatives of those national critical information infrastructure systems that are essential to the operations of the Department and the armed forces on information assurance measures necessary to the protection of these systems.

[(e) Repealed. Pub. L. 108-136, div. A, title X, \$1031(a)(12), Nov. 24, 2003, 117 Stat. 1597.]

(f) INFORMATION ASSURANCE TEST BED.—The Secretary shall develop an information assurance test bed within the Department of Defense to provide—

(1) an integrated organization structure to plan and facilitate the conduct of simulations, war games, exercises, experiments, and other activities to prepare and inform the Department regarding information warfare threats; and

(2) organization and planning means for the conduct by the Department of the integrated or joint exercises and experiments with elements of the national information systems infrastructure and other non-Department of Defense organizations that are responsible for the oversight and management of critical information systems and infrastructures on which the Department, the armed forces, and supporting activities depend for the conduct of daily operations and operations during crisis.

(Added Pub. L. 106–65, div. A, title X, §1043(a), Oct. 5, 1999, 113 Stat. 760; amended Pub. L. 106–398, §1 [[div. A], title X, §1063], Oct. 30, 2000, 114 Stat. 1654, 1654A–274; Pub. L. 107–296, title X, §1001(c)(1)(B), Nov. 25, 2002, 116 Stat. 2267; Pub. L. 107–347, title III, §301(c)(1)(B), Dec. 17, 2002, 116 Stat. 2955; Pub. L. 108–136, div. A, title X, §1031(a)(12), Nov. 24, 2003, 117 Stat. 1597; Pub. L. 108–375, div. A, title X, §1084(d)(17), Oct. 28, 2004, 118 Stat. 2062.)

#### Amendments

2004—Subsec. (c). Pub. L. 108–375 substituted "subchapter II" for "subtitle II" in introductory provisions. 2003—Subsec. (e). Pub. L. 108–136 struck out subsec. (e) which directed the Secretary of Defense to annually submit to Congress a report on the Defense Information Assurance Program. 2002—Subsec. (b). Pub. L. 107–296, 1001(c)(1)(B)(i), and Pub. L. 107–347, 301(c)(1)(B)(i), amended subsec. (b) identically, substituting "Objectives of the Program" for "Objectives and Minimum Requirements" in heading and striking out par. (1) designation before "The objectives".

Subsec. (b)(2). Pub. L. 107–347, 301(c)(1)(B)(ii), struck out par. (2) which read as follows: "The program shall at a minimum meet the requirements of sections 3534 and 3535 of title 44."

Pub. L. 107-296, \$1001(c)(1)(B)(ii), which directed the striking out of "(2) the program shall at a minimum meet the requirements of section 3534 and 3535 of title 44, United States Code." could not be executed. See above par.

Subsec. (c). Pub. L. 107-347, \$301(c)(1)(B)(iii), inserted ", including through compliance with subchapter III of chapter 35 of title 44" after "infrastructure" in introductory provisions.

Pub. L. 107-296, §1001(c)(1)(B)(iii), inserted ", including through compliance with subtitle II of chapter 35 of title 44" after "infrastructure" in introductory provisions.

2000—Subsec. (b). Pub. L. 106–398, §1 [[div. A], title X, §1063(a)], substituted "OBJECTIVES AND MINIMUM RE-QUIREMENTS" for "OBJECTIVES OF THE PROGRAM" in heading, designated existing provisions as par. (1), and added par. (2).

Subsec. (e)(7). Pub. L. 106-398, §1 [[div. A], title X, §1063(b)], added par. (7).

### EFFECTIVE DATE OF 2002 AMENDMENT

Amendment by Pub. L. 107-296 effective 60 days after Nov. 25, 2002, see section 4 of Pub. L. 107-296, set out as an Effective Date note under section 101 of Title 6, Domestic Security.

# EFFECTIVE DATE OF 2000 AMENDMENT

Amendment by Pub. L. 106-398 effective 30 days after Oct. 30, 2000, see section 1 [[div. A], title X, §1065] of Pub. L. 106-398, Oct. 30, 2000, 114 Stat. 1654, formerly set out as an Effective Date note under former section 3531 of Title 44, Public Printing and Documents.

Acquisition Authority of the Commander of United States Cyber Command

Pub. L. 114-92, div. A, title VIII, §807, Nov. 25, 2015, 129 Stat. 886, provided that:

"(a) AUTHORITY.-

"(1) IN GENERAL.—The Commander of the United States Cyber Command shall be responsible for, and shall have the authority to conduct, the following acquisition activities:

"(A) Development and acquisition of cyber operations-peculiar equipment and capabilities.

"(B) Acquisition and sustainment of cyber capability-peculiar equipment, capabilities, and services.

"(2) ACQUISITION FUNCTIONS.—Subject to the authority, direction, and control of the Secretary of Defense, the Commander shall have authority to exercise the functions of the head of an agency under chapter 137 of title 10, United States Code.

(b) COMMAND ACQUISITION EXECUTIVE.—

"(1) IN GENERAL.—The staff of the Commander shall include a command acquisition executive, who shall be responsible for the overall supervision of acquisition matters for the United States Cyber Command. The command acquisition executive shall have the authority—

"(A) to negotiate memoranda of agreement with the military departments and Department of Defense components to carry out the acquisition of equipment, capabilities, and services described in subsection (a)(1) on behalf of the Command;

"(B) to supervise the acquisition of equipment, capabilities, and services described in subsection (a)(1);

(a)(1); "(C) to represent the Command in discussions with the military departments regarding acquisition programs for which the Command is a customer; and

"(D) to work with the military departments to ensure that the Command is appropriately represented in any joint working group or integrated product team regarding acquisition programs for which the Command is a customer.

"(2) DELIVERY OF ACQUISITION SOLUTIONS.-The command acquisition executive of the United States Cyber Command shall be-

'(A) responsible to the Commander for rapidly delivering acquisition solutions to meet validated cyber operations-peculiar requirements;

'(B) subordinate to the defense acquisition execu-

tive in matters of acquisition; "(C) subject to the same oversight as the service acquisition executives; and

(D) included on the distribution list for acquisition directives and instructions of the Department of Defense.

"(c) ACQUISITION PERSONNEL.-

"(1) IN GENERAL.-The Secretary of Defense shall provide the United States Cyber Command with the personnel or funding equivalent to ten full-time equivalent personnel to support the Commander in fulfilling the acquisition responsibilities provided for under this section with experience in-

"(A) program acquisition; "(B) the Joint Capabilities Integration and Development System Process;

'(C) program management;

"(D) system engineering; and

"(E) costing.

"(2) EXISTING PERSONNEL.—The personnel provided under this subsection shall be provided from among the existing personnel of the Department of Defense.

"(d) BUDGET.-In addition to the activities of a combatant command for which funding may be requested under section 166 of title 10, United States Code, the budget proposal of the United States Cyber Command shall include requests for funding for-

(1) development and acquisition of cyber operations-peculiar equipment; and

"(2) acquisition and sustainment of other capabilities or services that are peculiar to cyber operations activities.

'(e) Cyber Operations Procurement Fund.-In exercising the authority granted in subsection (a), the Commander may not obligate or expend more than \$75,000,000 out of the funds made available in each fiscal year from 2016 through 2021 to support acquisition activities provided for under this section.

"(f) RULE OF CONSTRUCTION REGARDING INTELLIGENCE AND SPECIAL ACTIVITIES.—Nothing in this section shall be construed to constitute authority to conduct any activity which, if carried out as an intelligence activity by the Department of Defense, would require a notice to the Select Committee on Intelligence of the Senate and the Permanent Select Committee on Intelligence of the House of Representatives under title V of the National Security Act of 1947 (50 U.S.C. 3091 et seq.).

"(g) IMPLEMENTATION PLAN REQUIRED.—The authority granted in subsection (a) shall become effective 30 days after the date on which the Secretary of Defense provides to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a plan for implementation of those authorities under subsection (a). The plan shall include the following:

(1) A Department of Defense definition of-

"(A) cyber operations-peculiar equipment and ca-

pabilities; and '(B) cyber capability-peculiar equipment, capa-

bilities, and services. (2) Summaries of the components to be negotiated in the memorandum of agreements with the military departments and other Department of Defense components to carry out the development, acquisition, and sustainment of equipment, capabilities, and serv-

ices described in subparagraphs (A) and (B) of sub-

section (a)(1).

"(3) Memorandum of agreement negotiation and approval timelines. "(4) Plan for oversight of the command acquisition executive established in subsection (b).

"(5) Assessment of the acquisition workforce needs of the United States Cyber Command to support the authority in subsection (a) until 2021.

"(6) Other matters as appropriate.

"(h) ANNUAL END-OF-YEAR ASSESSMENT.-Each year, the Cyber Investment Management Board shall review and assess the acquisition activities of the United States Cyber Command, including contracting and acquisition documentation, for the previous fiscal year, and provide any recommendations or feedback to the acquisition executive of Cyber Command.

(i) SUNSET.-

(1) IN GENERAL.—The authority under this section shall terminate on September 30, 2021.

(2) LIMITATION ON DURATION OF ACQUISITIONS.-The authority under this section does not include major defense acquisition programs, major automated information system programs, or acquisitions of foundational infrastructure or software architectures the duration of which is expected to last more than five years.

NOTIFICATION OF FOREIGN THREATS TO INFORMATION TECHNOLOGY SYSTEMS IMPACTING NATIONAL SECURITY

Pub. L. 113-291, div. A, title X, §1078, Dec. 19, 2014, 128 Stat. 3520, provided that:

(a) NOTIFICATION REQUIRED.

"(1) IN GENERAL.—Not later than 30 days after the Secretary of Defense determines, through the use of open source information or the use of existing authorities (including section 806 of the National Defense Authorization Act for Fiscal Year 2011 (Public Law 111-383; 124 Stat. 4260; 10 U.S.C. 2304 note)), that there is evidence of a national security threat described in paragraph (2), the Secretary shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a notification of such threat.

"(2) NATIONAL SECURITY THREAT.—A national security threat described in this paragraph is a threat to an information technology or telecommunications component or network by an agent of a foreign power in which the compromise of such technology, component, or network poses a significant risk to the programs and operations of the Department of Defense, as determined by the Secretary of Defense.

"(3) FORM.—A notification under this subsection shall be submitted in classified form.

(b) ACTION PLAN REQUIRED.—In the event that a notification is submitted pursuant to subsection (a), the Secretary shall work with the head of any department or agency affected by the national security threat to develop a plan of action for responding to the concerns leading to the notification.

(c) AGENT OF A FOREIGN POWER.-In this section, the term 'agent of a foreign power' has the meaning given such term in section 101(b) of the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801(b)).

# Authorities, Capabilities, and Oversight of the UNITED STATES CYBER COMMAND

Pub. L. 113-66, div. A, title IX, §932, Dec. 26, 2013, 127 Stat. 829, provided that:

(a) PROVISION OF CERTAIN OPERATIONAL CAPABILI-TIES.—The Secretary of Defense shall take such actions as the Secretary considers appropriate to provide the United States Cyber Command operational military units with infrastructure and equipment enabling access to the Internet and other types of networks to permit the United States Cyber Command to conduct the peacetime and wartime missions of the Command.

(b) CYBER RANGES.

"(1) IN GENERAL.—The Secretary shall review existing cyber ranges and adapt one or more such ranges, as necessary, to support training and exercises of cyber units that are assigned to execute offensive military cyber operations.

(2) ELEMENTS.-Each range adapted under paragraph (1) shall have the capability to support offensive military operations against targets that-

"(A) have not been previously identified and prepared for attack; and

"(B) must be compromised or neutralized immediately without regard to whether the adversary can detect or attribute the attack.

"(c) PRINCIPAL ADVISOR ON MILITARY CYBER FORCE MATTERS.

"(1) DESIGNATION.-The Secretary shall designate, from among the personnel of the Office of the Under Secretary of Defense for Policy, a Principal Cyber Advisor to act as the principal advisor to the Secretary on military cyber forces and activities. The Secretary may only designate an official under this paragraph if such official was appointed to the position in which such official serves by and with the advice and consent of the Senate.

"(2) RESPONSIBILITIES.—The Principal Cyber Advisor shall be responsible for the following:

"(A) Overall supervision of cyber activities related to offensive missions, defense of the United States, and defense of Department of Defense networks, including oversight of policy and operational considerations, resources, personnel, and acquisition and technology.

"(B) Such other matters relating to offensive military cyber forces as the Secretary shall specify for purposes of this subsection.

"(3) CROSS-FUNCTIONAL TEAM.—The Principal Cyber Advisor shall-

"(A) integrate the cyber expertise and perspectives of appropriate organizations within the Office of the Secretary of Defense, Joint Staff, military departments, Defense Agencies, and combatant commands, by establishing and maintaining a fulltime cross-functional team of subject matter experts from those organizations; and

"(B) select team members, and designate a team leader, from among those personnel nominated by the heads of such organizations.

"(d) TRAINING OF CYBER PERSONNEL.-The Secretary shall establish and maintain training capabilities and facilities in the Armed Forces and, as the Secretary considers appropriate, at the United States Cyber Command, to support the needs of the Armed Forces and the United States Cyber Command for personnel who are assigned offensive and defensive cyber missions in the Department of Defense.'

JOINT FEDERATED CENTERS FOR TRUSTED DEFENSE SYSTEMS FOR THE DEPARTMENT OF DEFENSE

Pub. L. 113-66, div. A, title IX, §937, Dec. 26, 2013, 127 Stat. 834, as amended by Pub. L. 114-92, div. A, title II, §231, Nov. 25, 2015, 129 Stat. 778, provided that:

(a) FEDERATION REQUIRED.-

"(1) IN GENERAL.—The Secretary of Defense shall provide for the establishment of a joint federation of capabilities to support the trusted defense system needs of the Department of Defense (in this section referred to as the 'federation').

(2) PURPOSE.—The purpose of the federation shall be to serve as a joint, Department-wide federation of capabilities to support the trusted defense system needs of the Department to ensure security in the software and hardware developed, acquired, maintained, and used by the Department, pursuant to the trusted defense systems strategy of the Department and supporting policies related to software assurance and supply chain risk management.

(b) DISCHARGE OF ESTABLISHMENT.—In providing for the establishment of the federation, the Secretary shall consider whether the purpose of the federation can be met by existing centers in the Department. If the Department determines that there are capabilities gaps that cannot be satisfied by existing centers, the Department shall devise a strategy for creating and providing resources for such capabilities to fill such gaps.

"(c) CHARTER.-Not later than 180 days after the date of the enactment of this Act [Dec. 26, 2013], the Secretary shall issue a charter for the federation. The charter shall-

"(1) be established pursuant to the trusted defense systems strategy of the Department and supporting policies related to software assurance and supply chain risk management; and

(2) set forth— ((A) the role of the federation in supporting program offices in implementing the trusted defense systems strategy of the Department;

"(B) the software and hardware assurance expertise and capabilities of the federation, including policies, standards, requirements, best practices, contracting, training, and testing;

'(C) the requirements for the discharge by the federation of a program of research and development to improve automated software code vulnerability analysis and testing tools;

"(D) the requirements for the federation to procure, manage, and distribute enterprise licenses for automated software vulnerability analysis tools; and

"(E) the requirements for the discharge by the federation of a program of research and development to improve hardware vulnerability, testing, and protection tools.

"(d) REPORT.-The Secretary shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives], at the time of the submittal to Congress of the budget of the President for fiscal year 2016 pursuant to section 1105 of title 31. United States Code, a report on the funding and management of the federation. The report shall set forth such recommendations as the Secretary considers appropriate regarding the optimal placement of the federation within the organizational structure of the Department. including responsibility for the funding and management of the federation.

IMPROVEMENTS IN ASSURANCE OF COMPUTER SOFTWARE PROCURED BY THE DEPARTMENT OF DEFENSE

Pub. L. 112-239, div. A, title IX, §933, Jan. 2, 2013, 126

Stat. 1884, provided that: "(a) BASELINE SOFTWARE ASSURANCE POLICY.—The Under Secretary of Defense for Acquisition, Technology, and Logistics, in coordination with the Chief Information Officer of the Department of Defense, shall develop and implement a baseline software assurance policy for the entire lifecycle of covered systems. Such policy shall be included as part of the strategy for "(b) POLICY ELEMENTS.—The baseline software assur-

ance policy under subsection (a) shall-(1) require use of appropriate automated vulner-

ability analysis tools in computer software code during the entire lifecycle of a covered system, including during development, operational testing, operations and sustainment phases, and retirement;

(2) require covered systems to identify and prioritize security vulnerabilities and, based on risk, determine appropriate remediation strategies for such security vulnerabilities;

(3) ensure such remediation strategies are translated into contract requirements and evaluated during source selection;

"(4) promote best practices and standards to achieve software security, assurance, and quality; and

"(5) support competition and allow flexibility and compatibility with current or emerging software methodologies.

(c) VERIFICATION OF EFFECTIVE IMPLEMENTATION.-The Under Secretary of Defense for Acquisition, Technology, and Logistics, in coordination with the Chief Information Officer of the Department of Defense, shall"(1) collect data on implementation of the policy developed under subsection (a) and measure the effectiveness of such policy, including the particular elements required under subsection (b); and

"(2) identify and promote best practices, tools, and standards for developing and validating assured software for the Department of Defense.

"(d) BRIEFING ON ADDITIONAL MEANS OF IMPROVING SOFTWARE ASSURANCE.—Not later than one year after the date of the enactment of this Act [Jan. 2, 2013], the Under Secretary for Acquisition, Technology, and Logistics shall, in coordination with the Chief Information Officer of the Department of Defense, provide to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a briefing on the following:

ing: "(1) A research and development strategy to advance capabilities in software assurance and vulnerability detection.

"(2) The state-of-the-art of software assurance analysis and test.

"(3) How the Department might hold contractors liable for software defects or vulnerabilities.

(e) DEFINITIONS.—In this section:

"(1) COVERED SYSTEM.—The term 'covered system' means any Department of Defense critical information, business, or weapons system that is—

"(A) a major system, as that term is defined in section 2302(5) of title 10, United States Code;

"(B) a national security system, as that term is defined in [former] section 3542(b)(2) of title 44, United States Code [see now 44 U.S.C. 3552(b)(6)]; or

``(C) a Department of Defense information system categorized as Mission Assurance Category I in Department of Defense Directive 8500.01E that is funded by the Department of Defense.

"(2) SOFTWARE ASSURANCE.—The term 'software assurance' means the level of confidence that software functions as intended and is free of vulnerabilities, either intentionally or unintentionally designed or inserted as part of the software, throughout the life cycle."

REPORTS TO DEPARTMENT OF DEFENSE ON PENETRA-TIONS OF NETWORKS AND INFORMATION SYSTEMS OF CERTAIN CONTRACTORS

Pub. L. 112–239, div. A, title IX, §941, Jan. 2, 2013, 126 Stat. 1889, which authorized the Secretary of Defense to establish criteria and reporting procedures applicable to penetration of cleared defense contractors' networks or information systems, was transferred to chapter 19 of this title, redesignated as section 393, and amended by Pub. L. 114–92, div. A, title XVI, §1641(a), Nov. 25, 2015, 129 Stat. 1114.

### INSIDER THREAT DETECTION

Pub. L. 112-81, div. A, title IX, §922, Dec. 31, 2011, 125 Stat. 1537, as amended by Pub. L. 114-92, div. A, title X, §1073(e), Nov. 25, 2015, 129 Stat. 996, provided that:

"(a) PROGRAM REQUIRED.—The Secretary of Defense shall establish a program for information sharing protection and insider threat mitigation for the information systems of the Department of Defense to detect unauthorized access to, use of, or transmission of classified or controlled unclassified information.

"(b) ELEMENTS.—The program established under subsection (a) shall include the following:

"(1) Technology solutions for deployment within the Department of Defense that allow for centralized monitoring and detection of unauthorized activities, including—

"(A) monitoring the use of external ports and read and write capability controls;

"(B) disabling the removable media ports of computers physically or electronically;

"(C) electronic auditing and reporting of unusual and unauthorized user activities;

"(D) using data-loss prevention and data-rights management technology to prevent the unauthor-

ized export of information from a network or to
render such information unusable in the event of
the unauthorized export of such information;

"(E) a roles-based access certification system;

"(F) cross-domain guards for transfers of information between different networks; and

"(G) patch management for software and security updates.

"(2) Policies and procedures to support such program, including special consideration for policies and procedures related to international and interagency partners and activities in support of ongoing operations in areas of hostilities.

"(3) A governance structure and process that integrates information security and sharing technologies with the policies and procedures referred to in paragraph (2). Such structure and process shall include—

"(A) coordination with the existing security clearance and suitability review process;

"(B) coordination of existing anomaly detection techniques, including those used in counterintelligence investigation or personnel screening activities; and

"(C) updating and expediting of the classification review and marking process.

"(4) A continuing analysis of—

"(A) gaps in security measures under the program; and

"(B) technology, policies, and processes needed to increase the capability of the program beyond the initially established full operating capability to address such gaps.

"(5) A baseline analysis framework that includes measures of performance and effectiveness.

"(6) A plan for how to ensure related security measures are put in place for other departments or agen-

cies with access to Department of Defense networks. ('7) A plan for enforcement to ensure that the program is being applied and implemented on a uniform and consistent basis.

"(c) OPERATING CAPABILITY.—The Secretary shall ensure the program established under subsection (a)—

"(1) achieves initial operating capability not later than October 1, 2012; and

"(2) achieves full operating capability not later than October 1, 2013.

"(d) REPORT.—Not later than 90 days after the date of the enactment of this Act [Dec. 31, 2011], the Secretary shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a report that includes—

"(1) the implementation plan for the program established under subsection (a);

"(2) the resources required to implement the program;

"(3) specific efforts to ensure that implementation does not negatively impact activities in support of ongoing operations in areas of hostilities;

"(4) a definition of the capabilities that will be achieved at initial operating capability and full operating capability, respectively; and

"(5) a description of any other issues related to such implementation that the Secretary considers appropriate.

"(e) BRIEFING REQUIREMENT.—The Secretary shall provide briefings to the Committees on Armed Services of the House of Representatives and the Senate as follows:

lows: "(1) Not later than 90 days after the date of the enactment of this Act [Dec. 31, 2011], a briefing describing the governance structure referred to in subsection (b)(3).

"(2) Not later than 120 days after the date of the enactment of this Act, a briefing detailing the inventory and status of technology solutions deployment referred to in subsection (b)(1), including an identification of the total number of host platforms planned for such deployment, the current number of host platforms that provide appropriate security, and the funding and timeline for remaining deployment. "(3) Not later than 180 days after the date of the enactment of this Act, a briefing detailing the policies and procedures referred to in subsection (b)(2), including an assessment of the effectiveness of such policies and procedures and an assessment of the potential impact of such policies and procedures on information sharing within the Department of Defense and with interagency and international partners."

#### STRATEGY TO ACQUIRE CAPABILITIES TO DETECT PREVIOUSLY UNKNOWN CYBER ATTACKS

Pub. L. 112-81, div. A, title IX, §953, Dec. 31, 2011, 125 Stat. 1550, provided that:

"(a) IN GENERAL.—The Secretary of Defense shall develop and implement a plan to augment the cybersecurity strategy of the Department of Defense through the acquisition of advanced capabilities to discover and isolate penetrations and attacks that were previously unknown and for which signatures have not been developed for incorporation into computer intrusion detection and prevention systems and anti-virus software systems.

(b) CAPABILITIES.-

"(1) NATURE OF CAPABILITIES.—The capabilities to be acquired under the plan required by subsection (a) shall—

"(A) be adequate to enable well-trained analysts to discover the sophisticated attacks conducted by nation-state adversaries that are categorized as 'advanced persistent threats':

(B) be appropriate for—

"(i) endpoints or hosts;

"(ii) network-level gateways operated by the Defense Information Systems Agency where the Department of Defense network connects to the public Internet; and

"(iii) global networks owned and operated by private sector Tier 1 Internet Service Providers;

"(C) at the endpoints or hosts, add new discovery capabilities to the Host-Based Security System of the Department, including capabilities such as—

"(i) automatic blocking of unauthorized software programs and accepting approved and vetted programs; "(ii) constant monitoring of all key computer

"(ii) constant monitoring of all key computer attributes, settings, and operations (such as registry keys, operations running in memory, security settings, memory tables, event logs, and files): and

"(iii) automatic baselining and remediation of altered computer settings and files;

"(D) at the network-level gateways and internal network peering points, include the sustainment and enhancement of a system that is based on fullpacket capture, session reconstruction, extended storage, and advanced analytic tools, by—

"(1) increasing the number and skill level of the analysts assigned to query stored data, whether by contracting for security services, hiring and training Government personnel, or both; and

"(ii) increasing the capacity of the system to handle the rates for data flow through the gateways and the storage requirements specified by the United States Cyber Command; and

"(E) include the behavior-based threat detection capabilities of Tier 1 Internet Service Providers and other companies that operate on the global Internet.

"(2) SOURCE OF CAPABILITIES.—The capabilities to be acquired shall, to the maximum extent practicable, be acquired from commercial sources. In making decisions on the procurement of such capabilities from among competing commercial and Government providers, the Secretary shall take into consideration the needs of other departments and agencies of the Federal Government, State and local governments, and critical infrastructure owned and operated by the private sector for unclassified, affordable, and sustainable commercial solutions.

"(c) INTEGRATION AND MANAGEMENT OF DISCOVERY CA-PABILITIES.—The plan required by subsection (a) shall include mechanisms for improving the standardization, organization, and management of the security information and event management systems that are widely deployed across the Department of Defense to improve the ability of United States Cyber Command to understand and control the status and condition of Department networks, including mechanisms to ensure that the security information and event management systems of the Department receive and correlate data collected and analyses conducted at the host or endpoint, at the network gateways, and by Internet Service Providers in order to discover new attacks reliably and rapidly.

"(d) PROVISION FOR CAPABILITY DEMONSTRATIONS.— The plan required by subsection (a) shall provide for the conduct of demonstrations, pilot projects, and other tests on cyber test ranges and operational networks in order to determine and verify that the capabilities to be acquired pursuant to the plan are effective, practical, and affordable.

"(e) REPORT.—Not later than April 1, 2012, the Secretary shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a report on the plan required by subsection (a). The report shall set forth the plan and include a comprehensive description of the actions being undertaken by the Department to implement the plan."

STRATEGY ON COMPUTER SOFTWARE ASSURANCE

Pub. L. 111-383, div. A, title IX, §932, Jan. 7, 2011, 124 Stat. 4335, provided that:

"(a) STRATEGY REQUIRED.—The Secretary of Defense shall develop and implement, by not later than October 1, 2011, a strategy for assuring the security of software and software-based applications for all covered systems.

"(b) COVERED SYSTEMS.—For purposes of this section, a covered system is any critical information system or weapon system of the Department of Defense, including the following:

"(1) A major system, as that term is defined in section 2302(5) of title 10, United States Code.

"(2) A national security system, as that term is defined in [former] section 3542(b)(2) of title 44, United States Code [see now 44 U.S.C. 3552(b)(6)].

"(3) Any Department of Defense information system categorized as Mission Assurance Category I.

"(4) Any Department of Defense information system categorized as Mission Assurance Category II in accordance with Department of Defense Directive 8500.01E.

"(c) ELEMENTS.—The strategy required by subsection (a) shall include the following:

(1) Policy and regulations on the following:

"(A) Software assurance generally.

"(B) Contract requirements for software assurance for covered systems in development and production.

"(C) Inclusion of software assurance in milestone reviews and milestone approvals.

"(D) Rigorous test and evaluation of software assurance in development, acceptance, and operational tests.

"(E) Certification and accreditation requirements for software assurance for new systems and for updates for legacy systems, including mechanisms to monitor and enforce reciprocity of certification and accreditation processes among the military departments and Defense Agencies.

"(F) Remediation in legacy systems of critical software assurance deficiencies that are defined as critical in accordance with the Application Security Technical Implementation Guide of the Defense Information Systems Agency.

"(2) Allocation of adequate facilities and other resources for test and evaluation and certification and accreditation of software to meet applicable requirements for research and development, systems acquisition, and operations. ``(3) Mechanisms for protection against compromise of information systems through the supply chain or cyber attack by acquiring and improving automated tools for—

"(A) assuring the security of software and software applications during software development;

"(B) detecting vulnerabilities during testing of software; and

"(C) detecting intrusions during real-time monitoring of software applications.

"(4) Mechanisms providing the Department of Defense with the capabilities—

``(A) to monitor systems and applications in order to detect and defeat attempts to penetrate or disable such systems and applications; and

"(B) to ensure that such monitoring capabilities are integrated into the Department of Defense system of cyber defense-in-depth capabilities.

"(5) An update to Committee for National Security Systems Instruction No. 4009, entitled 'National Information Assurance Glossary', to include a standard definition for software security assurance.

"(6) Either—

"(A) mechanisms to ensure that vulnerable Mission Assurance Category III information systems, if penetrated, cannot be used as a foundation for penetration of protected covered systems, and means for assessing the effectiveness of such mechanisms; or

"(B) plans to address critical vulnerabilities in Mission Assurance Category III information systems to prevent their use for intrusions of Mission Assurance Category I systems and Mission Assurance Category II systems.

"(7) A funding mechanism for remediation of critical software assurance vulnerabilities in legacy systems.

"(d) REPORT.—Not later than October 1, 2011, the Secretary of Defense shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a report on the strategy required by subsection (a). The report shall include the following:

"(1) A description of the current status of the strategy required by subsection (a) and of the implementation of the strategy, including a description of the role of the strategy in the risk management by the Department regarding the supply chain and in operational planning for cyber security.

"(2) A description of the risks, if any, that the Department will accept in the strategy due to limitations on funds or other applicable constraints."

### INSTITUTE FOR DEFENSE COMPUTER SECURITY AND INFORMATION PROTECTION

Pub. L. 106-398, \$1 [[div. A], title IX, \$921], Oct. 30, 2000, 114 Stat. 1654, 1654A-233, provided that:

"(a) ESTABLISHMENT.—The Secretary of Defense shall establish an Institute for Defense Computer Security and Information Protection.

"(b) MISSION.—The Secretary shall require the institute—

"(1) to conduct research and technology development that is relevant to foreseeable computer and network security requirements and information assurance requirements of the Department of Defense with a principal focus on areas not being carried out by other organizations in the private or public sector; and

"(2) to facilitate the exchange of information regarding cyberthreats, technology, tools, and other relevant issues.

"(c) CONTRACTOR OPERATION.—The Secretary shall enter into a contract with a not-for-profit entity, or a consortium of not-for-profit entities, to organize and operate the institute. The Secretary shall use competitive procedures for the selection of the contractor to the extent determined necessary by the Secretary.

"(d) FUNDING.—Of the amount authorized to be appropriated by section 301(5) [114 Stat. 1654A-52], \$5,000,000

shall be available for the Institute for Defense Computer Security and Information Protection.

"(e) REPORT.—Not later than April 1, 2001, the Secretary shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] the Secretary's plan for implementing this section."

# § 2224a. Information security: continued applicability of expiring Governmentwide requirements to the Department of Defense

(a) IN GENERAL.—The provisions of subchapter  $II^1$  of chapter 35 of title 44 shall continue to apply through September 30, 2004, with respect to the Department of Defense, notwithstanding the expiration of authority under section  $3536^1$  of such title.

(b) RESPONSIBILITIES.—In administering the provisions of subchapter II<sup>1</sup> of chapter 35 of title 44 with respect to the Department of Defense after the expiration of authority under section  $3536^{1}$  of such title, the Secretary of Defense shall perform the duties set forth in that subchapter for the Director of the Office of Management and Budget.

(Added Pub. L. 107-314, div. A, title X, §1052(b)(1), Dec. 2, 2002, 116 Stat. 2648.)

#### References in Text

Provisions relating to the expiration of authority of subchapter II of chapter 35 of title 44, referred to in text, did not appear in section 3536 of title 44 subsequent to the general revision of subchapter II by Pub. L. 107-296, title X, \$1001(b)(1), Nov. 25, 2002, 116 Stat. 2259. Subchapter II, as revised by Pub. L. 107-296, was repealed and a new subchapter II enacted by Pub. L. 113-283, \$2(a), Dec. 18, 2014, 128 Stat. 3073.

### § 2225. Information technology purchases: tracking and management

(a) COLLECTION OF DATA REQUIRED.—To improve tracking and management of information technology products and services by the Department of Defense, the Secretary of Defense shall provide for the collection of the data described in subsection (b) for each purchase of such products or services made by a military department or Defense Agency in excess of the simplified acquisition threshold, regardless of whether such a purchase is made in the form of a contract, task order, delivery order, military interdepartmental purchase request, or any other form of interagency agreement.

(b) DATA TO BE COLLECTED.—The data required to be collected under subsection (a) includes the following:

(1) The products or services purchased.

(2) Whether the products or services are categorized as commercially available off-theshelf items, other commercial items, nondevelopmental items other than commercial items, other noncommercial items, or services.

(3) The total dollar amount of the purchase.(4) The form of contracting action used to make the purchase.

(5) In the case of a purchase made through an agency other than the Department of Defense—

<sup>&</sup>lt;sup>1</sup>See References in Text note below.