

111TH CONGRESS
1ST SESSION

S. _____

To amend chapter 35 of title 44, United States Code, to recognize the interconnected nature of the Internet and agency networks, improve situational awareness of Government cyberspace, enhance information security of the Federal Government, unify policies, procedures, and guidelines for securing information systems and national security systems, establish security standards for Government purchased products and services, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. CARPER introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To amend chapter 35 of title 44, United States Code, to recognize the interconnected nature of the Internet and agency networks, improve situational awareness of Government cyberspace, enhance information security of the Federal Government, unify policies, procedures, and guidelines for securing information systems and national security systems, establish security standards for Government purchased products and services, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “United States Informa-
3 tion and Communications Enhancement Act of 2009” or
4 the “U.S. ICE Act of 2009”.

5 **SEC. 2. FINDINGS.**

6 The Congress finds the following:

7 (1) The development of an interconnected glob-
8 al information infrastructure has significantly en-
9 hanced the productivity, prosperity, and collabora-
10 tion of people, business, and governments worldwide.

11 (2) The information infrastructure of the
12 United States is a strategic national resource vital
13 to our democracy, economy, and security as a Na-
14 tion.

15 (3) The Federal Government must increasingly
16 rely on a trusted and resilient information infra-
17 structure to effectively and efficiently communicate
18 and deliver services to citizens, enhance economic
19 prosperity, defend the Nation from attack, and re-
20 cover from natural disasters.

21 (4) The Federal Information Security Manage-
22 ment Act of 2002 (Public Law 107–296; 116 Stat.
23 2135) recognized the growing importance of secur-
24 ing information and information systems maintained
25 and owned by agencies or on behalf of an agency.

1 (5) Since 2002 the Federal Government has ex-
2 perienced multiple high-profile breaches that re-
3 sulted in the theft of sensitive information amount-
4 ing to more than the entire print collection con-
5 tained in the Library of Congress, including person-
6 ally identifiable information of United States citi-
7 zens, advanced scientific research and development,
8 and prenegotiated United States diplomatic posi-
9 tions.

10 (6) On March 12, 2008 witnesses testified be-
11 fore a hearing held by the Subcommittee on Federal
12 Financial Management, Government Information,
13 Federal Services, and International Security of the
14 Committee on Homeland Security and Governmental
15 Affairs of the Senate that—

16 (A) implementation of the Federal Infor-
17 mation Security Management Act of 2002
18 (Public Law 107–296; 116 Stat. 2135) wastes
19 agency resources on compliance instead of secu-
20 rity;

21 (B) agencies do not fully understand what
22 information they hold, who has access to that
23 information, and whether the information had
24 been compromised; and

1 (C) agencies lack effective coordination
2 mitigating and responding to cyber-related inci-
3 dents.

4 (7) The Federal Information Security Manage-
5 ment Act of 2002 (Public Law 107–296; 116 Stat.
6 2135) needs to be amended to increase the coordina-
7 tion of agency activities to enhance situational
8 awareness throughout the Federal Government using
9 more effective enterprise-wide automated moni-
10 toring, detection, and response capabilities.

11 **SEC. 3. COORDINATION OF FEDERAL INFORMATION POL-**
12 **ICY.**

13 Chapter 35 of title 44, United States Code, is amend-
14 ed by striking subchapters II and III and inserting the
15 following:

16 “SUBCHAPTER II—INFORMATION SECURITY
17 “§ 3551. **Definitions**

18 “(a) Except as provided under subsection (b), the
19 definitions under section 3502 shall apply to this sub-
20 chapter.

21 “(b) In this subchapter:

22 “(1) The term ‘adequate security’ means secu-
23 rity commensurate with the risk and magnitude of
24 harm resulting from the loss, misuse, or unauthor-
25 ized access to, or modification, of information.

1 “(2) The term ‘Director’ means the Director of
2 the National Office for Cyberspace.

3 “(3) The term ‘incident’ means an occurrence
4 that actually or potentially jeopardizes the confiden-
5 tiality, integrity, or availability of an information
6 system or the information the system processes,
7 stores, or transmits or that constitutes a violation or
8 imminent threat of violation of security policies, se-
9 curity procedures, or acceptable use policies.

10 “(4) The term ‘information infrastructure’
11 means the underlying framework that information
12 systems and assets rely on in processing, transmit-
13 ting, receiving, or storing information electronically.

14 “(5) The term ‘information security’ means
15 protecting information and information systems
16 from unauthorized access, use, disclosure, disrupt-
17 tion, modification, or destruction in order to pro-
18 vide—

19 “(A) integrity, which means guarding
20 against improper information modification or
21 destruction, and includes ensuring information
22 nonrepudiation and authenticity;

23 “(B) confidentiality, which means pre-
24 serving authorized restrictions on access and

1 disclosure, including means for protecting per-
2 sonal privacy and proprietary information; and

3 “(C) availability, which means ensuring
4 timely and reliable access to and use of infor-
5 mation.

6 “(6) The term ‘information technology’ has the
7 meaning given that term in section 11101 of title
8 40.

9 “(7)(A) The term ‘national security system’
10 means any information system (including any tele-
11 communications system) used or operated by an
12 agency or by a contractor of an agency, or other or-
13 ganization on behalf of an agency—

14 “(i) the function, operation, or use of
15 which—

16 “(I) involves intelligence activities;

17 “(II) involves cryptologic activities re-
18 lated to national security;

19 “(III) involves command and control
20 of military forces;

21 “(IV) involves equipment that is an
22 integral part of a weapon or weapons sys-
23 tem; or

1 “(V) subject to subparagraph (B), is
2 critical to the direct fulfillment of military
3 or intelligence missions; or

4 “(ii) is protected at all times by procedures
5 established for information that have been spe-
6 cifically authorized under criteria established by
7 an Executive order or an Act of Congress to be
8 kept classified in the interest of national de-
9 fense or foreign policy.

10 “(B) Subparagraph (A)(i)(V) does not include a
11 system that is to be used for routine administrative
12 and business applications (including payroll, finance,
13 logistics, and personnel management applications).

14 **“§ 3552. National Office for Cyberspace**

15 “(a) There is established within the Executive Office
16 of the President an office to be known as the National
17 Office for Cyberspace.

18 “(b) There shall be at the head of the Office a Direc-
19 tor who shall be appointed by the President, by and with
20 the advice and consent of the Senate. The Director of the
21 National Office for Cyberspace shall administer all func-
22 tions under this subchapter and collaborate to the extent
23 practicable with the heads of the appropriate agencies, the
24 private sector, and international partners. The Office shall
25 serve as the principal office for coordinating issues relat-

1 ing to achieving an assured, reliable, secure, and surviv-
2 able global information and communications infrastruc-
3 ture and related capabilities.

4 **“§ 3553. Authority and functions of the National Of-
5 fice for Cyberspace**

6 “(a) In coordination with a public-private partner-
7 ship, the Director shall develop and implement a com-
8 prehensive national cyberspace strategy to ensure a trust-
9 ed and resilient communications and information infra-
10 structures that—

11 “(1) enhances economic prosperity and facili-
12 tates market leadership for the United States infor-
13 mation and communications industry;

14 “(2) deters, prevents, detects, defends against,
15 responds to, and remediates interruptions and dam-
16 age to United States information and communica-
17 tions infrastructure;

18 “(3) ensures United States capabilities to oper-
19 ate in cyberspace in support of national goals; and

20 “(4) protects privacy rights and preserving civil
21 liberties of United States persons.

22 “(b) With respect to responsibilities with the Federal
23 Government, the National Office for Cyberspace shall—

24 “(1) provide recommendations to agencies on
25 measures that shall be required to be implemented

1 to mitigate vulnerabilities, attacks, and exploitations
2 discovered as a result of activities required pursuant
3 to this section;

4 “(2) oversee the implementation of policies,
5 principles, standards, and guidelines on information
6 security, including through ensuring timely agency
7 adoption of and compliance with standards promul-
8 gated under section 3556;

9 “(3) require agencies, consistent with the stand-
10 ards promulgated under such section 3556 and the
11 requirements of this subchapter, to identify and pro-
12 vide information security protections commensurate
13 with the risk and magnitude of the harm resulting
14 from the unauthorized access, use, disclosure, dis-
15 ruption, modification, or destruction of—

16 “(A) information collected or maintained
17 by or on behalf of an agency; or

18 “(B) information systems used or operated
19 by an agency or by a contractor of an agency
20 or other organization on behalf of an agency;

21 “(4) coordinate and ensure that the develop-
22 ment of standards and guidelines under section 20
23 of the National Institute of Standards and Tech-
24 nology Act (15 U.S.C. 278g-3) are, to the maximum
25 extent practicable, complementary and unified with

1 standards and guidelines developed for national se-
2 curity systems;

3 “(5) oversee agency compliance with the re-
4 quirements of this subchapter, including coordi-
5 nating with the Office of Management and Budget
6 to use any authorized action under section 11303 of
7 title 40, to enforce accountability for compliance
8 with such requirements;

9 “(6) review at least annually, and approving or
10 disapproving, agency information security programs
11 required under section 3554(b); and

12 “(7) coordinate information security policies
13 and procedures with related information resources
14 management policies and procedures.

15 “(c)(1) After consultation with the appropriate agen-
16 cies, the Director shall oversee the effective implementa-
17 tion of governmentwide operational evaluations on a fre-
18 quent and recurring basis to evaluate whether agencies ef-
19 fectively—

20 “(A) monitor, detect, analyze, protect, report,
21 and respond against known vulnerabilities, attacks,
22 and exploitations;

23 “(B) report to and collaborate with the appro-
24 priate public and private security operation centers
25 and law enforcement agencies; and

1 “(C) mitigate the risk posed by previous suc-
2 cessful exploitations in a timely fashion and in order
3 to prevent future vulnerabilities, attacks, and exploi-
4 tations.

5 “(2) Not later than 30 days after receiving an oper-
6 ational evaluation under this subsection, the Director shall
7 ensure agencies evaluated under subsection (b) develop a
8 plan for addressing recommendations and mitigating
9 vulnerabilities contained in the security reports identified
10 under subsection (b), including a timeline and budget for
11 implementing such plan.

12 “(d) Not later than March 1 of each year, the Direc-
13 tor shall submit a report to Congress on the overall infor-
14 mation security posture of the communications and infor-
15 mation infrastructure of the United States, including—

16 “(1) the evaluations conducted under subsection
17 (b) for the United States Government;

18 “(2) a detailed assessment of the overall resil-
19 iency of the communications and information infra-
20 structure effectiveness of the United States and the
21 United States Government including the ability to
22 monitor, detect, mitigate, and respond to an inci-
23 dent;

24 “(3) a detailed assessment the information se-
25 curity effectiveness of each agency, including the

1 ability to monitor, detect, mitigate, collaborate, and
2 respond to an incident;

3 “(4) a detailed assessment of operational eval-
4 uations performed during the preceding fiscal year,
5 the results of such evaluations, and any actions that
6 remain to be taken under plans included in correc-
7 tive action reports under subsection (b);

8 “(5) a detailed assessment of the development,
9 promulgation, and adoption of, and compliance with,
10 standards developed under section 20 of the Na-
11 tional Institute of Standards and Technology Act
12 (15 U.S.C. 278g-3) and promulgated under section
13 3554, and recommendations for enhancement;

14 “(6) a detailed assessment of significant defi-
15 ciencies in the information security and reporting
16 practices of the Federal Government as applicable to
17 each agency;

18 “(7) planned remedial action to address defi-
19 ciencies described under paragraph (6), including an
20 associated budget and recommendations for relevant
21 executive and legislative branch actions;

22 “(8) a summary of the results of the inde-
23 pendent evaluations under section 3555; and

1 “(9) a detailed assessment of the effectiveness
2 of reporting to the National Cyber Investigative
3 Joint Task Force under section 3554.

4 “(e) Evaluations and any other descriptions of infor-
5 mation systems under the authority and control of the Di-
6 rector of National Intelligence or of National Foreign In-
7 telligence Programs systems under the authority and con-
8 trol of the Secretary of Defense shall be made available
9 to Congress only through the appropriate oversight com-
10 mittees of Congress, in accordance with applicable laws.

11 “(f)(1) In collaboration with the private sector and
12 in coordination with the Director of the Office of Manage-
13 ment and Budget, the National Institute of Standards and
14 Technology, and the General Service Administration, the
15 Director shall develop and implement policy, guidance,
16 and regulations that cost effectively enhance the security
17 of the Federal Government, including policy, guidance,
18 and regulations that—

19 “(A) to the extent practicable, standardize
20 security requirements (also known as ‘lock-
21 down configurations’) of commercial off-the-
22 shelf products and services (including cloud
23 products and services) purchased by the Fed-
24 eral Government;

1 “(B) to the extent practicable, precertify
2 products and services with known levels of secu-
3 rity standards and configurations;

4 “(C) incentivize agencies to purchase
5 standard products and services through the
6 General Service Administration in order to re-
7 duce the vulnerabilities and costs associated
8 with custom products and services; and

9 “(D) enable purchasing decisions to rea-
10 sonably and appropriately account for signifi-
11 cant supply chain security risks associated with
12 any particular product or service.

13 “(2) Not later than 180 days after the date of enact-
14 ment of the United States Information and Communica-
15 tions Enhancement Act of 2009, and annually thereafter,
16 the Director shall submit a report to Congress that in-
17 cludes—

18 “(A) a description of the cost savings and secu-
19 rity enhancements that can be achieved by using the
20 purchasing power of the Federal Government; and

21 “(B) recommendations for legislative or execu-
22 tive branch actions necessary to achieve such cost
23 savings.

24 **“§ 3554. Agency responsibilities**

25 “(a) The head of each agency shall—

1 “(1) be responsible for—

2 “(A) providing information security protec-
3 tions commensurate with the risk and mag-
4 nitude of the harm resulting from unauthorized
5 access, use, disclosure, disruption, modification,
6 or destruction of—

7 “(i) information collected or main-
8 tained by or on behalf of the agency; and

9 “(ii) information systems used or op-
10 erated by an agency or by a contractor of
11 an agency or other organization on behalf
12 of an agency;

13 “(B) complying with the requirements of
14 this subchapter and related policies, procedures,
15 standards, and guidelines, including—

16 “(i) information security standards
17 promulgated under section 3556;

18 “(ii) information security standards
19 and guidelines for national security sys-
20 tems issued in accordance with law and as
21 directed by the President; and

22 “(iii) ensuring the standards imple-
23 mented for information systems and na-
24 tional security systems under the agency

1 head are complementary and uniform, to
2 the extent practicable; and

3 “(C) ensuring that information security
4 management processes are integrated with
5 agency strategic and operational planning pro-
6 cesses;

7 “(2) ensure that senior agency officials provide
8 information security for the information and infor-
9 mation systems that support the operations and as-
10 sets under their control, including through—

11 “(A) assessing the risk and magnitude of
12 the harm that could result from the unauthor-
13 ized access, use, disclosure, disruption, modi-
14 fication, or destruction of such information or
15 information systems;

16 “(B) determining the levels of information
17 security appropriate to protect such information
18 and information systems in accordance with
19 standards promulgated under section 3556, for
20 information security classifications and related
21 requirements;

22 “(C) implementing policies and procedures
23 to cost effectively reduce risks to an acceptable
24 level; and

1 “(D) continuously testing and evaluating
2 information security controls and techniques to
3 ensure that they are effectively implemented;

4 “(3) delegate to an agency official designated as
5 the Chief Information Security Officer the authority
6 to ensure and enforce compliance with the require-
7 ments imposed on the agency under this subchapter,
8 including—

9 “(A) overseeing the establishment and
10 maintenance of a security operations capability
11 that on an automated and continuous basis
12 can—

13 “(i) detect, report, respond to, con-
14 tain, and mitigate incidents that impair
15 adequate security of the information and
16 information infrastructure, in accordance
17 with policy provided by the Director, in
18 consultation with the Chief Information
19 Officers Council, and guidance from the
20 National Institute of Standards and Tech-
21 nology;

22 “(ii) collaborate with the National Of-
23 fice for Cyberspace and appropriate public
24 and private sector security operations cen-
25 ters to address incidents that impact the

1 security of information and information in-
2 frastructure that extend beyond the control
3 of the agency; and

4 “(iii) not later than 24 hours after
5 discovery of any incident described under
6 subparagraph (A), unless otherwise di-
7 rected by policy of the National Office for
8 Cyberspace, provide notice to the appro-
9 priate security operations center, the Na-
10 tional Cyber Investigative Joint Task
11 Force, and inspector general;

12 “(B) collaborating with the Administrator
13 for E–Government and the Chief Information
14 Officer to establish, maintain, and update an
15 enterprise network, system, storage, and secu-
16 rity architecture framework documentation to
17 be submitted quarterly to the National Office
18 for Cyberspace and the appropriate security op-
19 erations center, that includes—

20 “(i) documentation of how technical,
21 managerial, and operational security con-
22 trols are implemented throughout the
23 agency’s information infrastructure; and

24 “(ii) documentation of how the con-
25 trols described under subparagraph (A)

1 maintain the appropriate level of confiden-
2 tiality, integrity, and availability of infor-
3 mation and information systems based
4 on—

5 “(I) the policy of the Director;

6 “(II) the National Institute of
7 Standards and Technology guidance;
8 and

9 “(III) the Chief Information Offi-
10 cers Council recommended ap-
11 proaches;

12 “(C) developing, maintaining, and over-
13 seeing an agency wide information security pro-
14 gram as required by subsection (b);

15 “(D) developing, maintaining, and over-
16 seeing information security policies, procedures,
17 and control techniques to address all applicable
18 requirements, including those issued under sec-
19 tions 3553 and 3556;

20 “(E) training and overseeing personnel
21 with significant responsibilities for information
22 security with respect to such responsibilities;
23 and

1 “(F) assisting senior agency officials con-
2 cerning their responsibilities under paragraph
3 (2);

4 “(4) ensure that the agency has trained and
5 cleared personnel sufficient to assist the agency in
6 complying with the requirements of this subchapter
7 and related policies, procedures, standards, and
8 guidelines;

9 “(5) ensure that the agency Chief Information
10 Security Officer, in coordination with other senior
11 agency officials, reports biannually to the agency
12 head on the effectiveness of the agency information
13 security program, including progress of remedial ac-
14 tions; and

15 “(6) ensure that the Chief Information Security
16 Officer possesses necessary qualifications, including
17 education, professional certifications, training, expe-
18 rience, and the security clearance required to admin-
19 ister the functions described under this subchapter;
20 and has information security duties as the primary
21 duty of that official.

22 “(b) Each agency shall develop, document, and imple-
23 ment an agencywide information security program, ap-
24 proved by the Director under section 3553(a)(5), to pro-
25 vide information security for the information and informa-

1 tion systems that support the operations and assets of the
2 agency, including those provided or managed by another
3 agency, contractor, or other source, that includes—

4 “(1) periodic assessments—

5 “(A) of the risk and magnitude of the
6 harm that could result from the unauthorized
7 access, use, disclosure, disruption, modification,
8 or destruction of information and information
9 systems that support the operations and assets
10 of the agency; and

11 “(B) that recommend a prioritized descrip-
12 tion of which data and applications should be
13 removed or migrated to more secure networks
14 or standards;

15 “(2) penetration tests commensurate with risk
16 (as defined by the National Institute of Standards
17 and Technology and the National Office for Cyber-
18 space) for agency information systems; and

19 “(3) information security vulnerabilities are
20 mitigated based on the risk posed to the agency;

21 “(4) policies and procedures that—

22 “(A) are based on the risk assessments re-
23 quired by paragraph (1);

24 “(B) cost effectively reduce information se-
25 curity risks to an acceptable level;

1 “(C) ensure that information security is
2 addressed throughout the life cycle of each
3 agency information system; and

4 “(D) ensure compliance with—

5 “(i) the requirements of this sub-
6 chapter;

7 “(ii) policies and procedures as may
8 be prescribed by the Director, and infor-
9 mation security standards promulgated
10 under section 3556;

11 “(iii) minimally acceptable system
12 configuration requirements, as determined
13 by the Director; and

14 “(iv) any other applicable require-
15 ments, including standards and guidelines
16 for national security systems issued in ac-
17 cordance with law and as directed by the
18 President;

19 “(5) subordinate plans for providing adequate
20 information security for networks, facilities, and sys-
21 tems or groups of information systems, as appro-
22 priate;

23 “(6) role-based security awareness training to
24 inform personnel with access to the agency network,
25 including contractors and other users of information

1 systems that support the operations and assets of
2 the agency, of—

3 “(A) information security risks associated
4 with their activities; and

5 “(B) their responsibilities in complying
6 with agency policies and procedures designed to
7 reduce these risks;

8 “(7) to the extent practicable, automated and
9 continuous technical monitoring for testing, and
10 evaluation of the effectiveness and compliance of in-
11 formation security policies, procedures, and prac-
12 tices, including—

13 “(A) management, operational, and tech-
14 nical controls of every information system iden-
15 tified in the inventory required under section
16 3505(b); and

17 “(B) management, operational, and tech-
18 nical controls relied on for an evaluation under
19 section 3555;

20 “(8) a process for planning, implementing, eval-
21 uating, and documenting remedial action to address
22 any deficiencies in the information security policies,
23 procedures, and practices of the agency;

24 “(9) to the extent practicable, continuous tech-
25 nical monitoring for detecting, reporting, and re-

1 sponding to security incidents, consistent with stand-
2 ards and guidelines issued by the Director, includ-
3 ing—

4 “(A) mitigating risks associated with such
5 incidents before substantial damage is done;

6 “(B) notifying and consulting with the ap-
7 propriate security operations response center;
8 and

9 “(C) notifying and consulting with, as ap-
10 propriate—

11 “(i) law enforcement agencies and rel-
12 evant Offices of Inspectors General;

13 “(ii) the National Office for Cyber-
14 space; and

15 “(iii) any other agency or office, in ac-
16 cordance with law or as directed by the
17 President; and

18 “(10) plans and procedures to ensure continuity
19 of operations for information systems that support
20 the operations and assets of the agency.

21 “(c) Each agency shall—

22 “(1) submit an annual report on the adequacy
23 and effectiveness of information security policies,
24 procedures, and practices, and compliance with the

1 requirements of this subchapter, including compli-
2 ance with each requirement of subsection (b) to—

3 “(A) the National Office for Cyberspace;

4 “(B) the Committee on Homeland Security
5 and Governmental Affairs of the Senate;

6 “(C) the Committee on Commerce,
7 Science, and Transportation of the Senate;

8 “(D) the Committee on Government Over-
9 sight and Reform of the House of Representa-
10 tives;

11 “(E) other appropriate authorization and
12 appropriations committees of Congress; and

13 “(F) the Comptroller General.

14 “(2) address the adequacy and effectiveness of
15 information security policies, procedures, and prac-
16 tices in plans and reports relating to—

17 “(A) annual agency budgets;

18 “(B) information resources management of
19 this subchapter;

20 “(C) information technology management
21 under this chapter;

22 “(D) program performance under sections
23 1105 and 1115 through 1119 of title 31, and
24 sections 2801 and 2805 of title 39;

1 “(E) financial management under chapter
2 9 of title 31, and the Chief Financial Officers
3 Act of 1990 (31 U.S.C. 501 note; Public Law
4 101–576) (and the amendments made by that
5 Act);

6 “(F) financial management systems under
7 the Federal Financial Management Improve-
8 ment Act (31 U.S.C. 3512 note);

9 “(G) internal accounting and administra-
10 tive controls under section 3512 of title 31; and

11 “(H) performance ratings, salaries, and
12 bonuses provided to the Chief Information Se-
13 curity Officer and supporting personnel taking
14 into account program performance; and

15 “(3) report any significant deficiency in a pol-
16 icy, procedure, or practice identified under para-
17 graph (1) or (2)—

18 “(A) as a material weakness in reporting
19 under section 3512 of title 31; and

20 “(B) if relating to financial management
21 systems, as an instance of a lack of substantial
22 compliance under the Federal Financial Man-
23 agement Improvement Act (31 U.S.C. 3512
24 note).

1 “(d)(1) In addition to the requirements of subsection
2 (c), each agency, in consultation with the National Office
3 for Cyberspace, shall include as part of the performance
4 plan required under section 1115 of title 31 a description
5 of—

6 “(A) the time periods; and

7 “(B) the resources, including budget, staffing,
8 and training, that are necessary to implement the
9 program required under subsection (b).

10 “(2) The description under paragraph (1) shall be
11 based on the risk assessments required under subsection
12 (b)(2)(1) and operational evaluations required under sec-
13 tion 3553(b).

14 “(e) Each agency shall provide the public with timely
15 notice and opportunities for comment on proposed infor-
16 mation security policies and procedures to the extent that
17 such policies and procedures affect communication with
18 the public.

19 **“§ 3555. Annual independent evaluation**

20 “(a)(1) Each year each agency shall have performed
21 an independent evaluation of the information security pro-
22 gram and practices of that agency to determine the effec-
23 tiveness of such program and practices.

24 “(2) Each evaluation under this section shall consist
25 of—

1 “(A) testing of the effectiveness of information
2 security policies, procedures, and practices of a rep-
3 resentative subset of the information systems of the
4 agency; and

5 “(B) an assessment (made on the basis of the
6 results of the testing) of compliance with—

7 “(i) the requirements of this subchapter;
8 and

9 “(ii) related information security policies,
10 procedures, standards, and guidelines.

11 “(b)(1) For each agency with an Inspector General
12 appointed under the Inspector General Act of 1978 (5
13 U.S.C. App.) or any other law, the annual evaluation re-
14 quired by this section shall be performed by the Inspector
15 General or by an independent external auditor, as deter-
16 mined by the Inspector General of the agency.

17 “(2) For each agency to which paragraph (1) does
18 not apply, the head of the agency shall engage an inde-
19 pendent external auditor to perform the evaluation.

20 “(c) The evaluation required by this section may be
21 based in whole or in part on an audit, evaluation, or report
22 relating to programs or practices of the applicable agency.

23 “(d) Each year, not later than such date established
24 by the Director, the head of each agency shall submit to

1 the Director the results of the evaluation required under
2 this section.

3 “(e) Agencies and evaluators shall take appropriate
4 steps to ensure the protection of information which, if dis-
5 closed, may adversely affect information security. Such
6 protections shall be commensurate with the risk and com-
7 ply with all applicable laws and regulations.

8 “(f) The Comptroller General shall—

9 “(1) not later than 180 days after the date of
10 enactment of the United States Communications and
11 Information Enhancement Act of 2009 and after
12 collaboration with the Director and the Inspectors
13 General, develop and deliver standards for inde-
14 pendent evaluations as required under this section
15 that are risk-based and cost effective;

16 “(2) periodically evaluate and report to Con-
17 gress on—

18 “(A) the adequacy and effectiveness of
19 agency information security policies and prac-
20 tices; and

21 “(B) the implementation of the require-
22 ments of this subchapter.

1 **“§ 3556. Responsibilities for Federal information sys-**
2 **tems standards**

3 “(a)(1) The Secretary of Commerce shall, on the
4 basis of standards and guidelines developed by the Na-
5 tional Institute of Standards and Technology under para-
6 graphs (2) and (3) of section 20(a) of the National Insti-
7 tute of Standards and Technology Act (15 U.S.C. 278g-
8 3(a)), prescribe standards and guidelines pertaining to in-
9 formation systems, including national security systems.

10 “(2)(A) Standards prescribed under subsection (a)(1)
11 shall include information security standards that—

12 “(i) to the extent practicable, are unified with
13 standards and guidelines developed for information
14 systems and national security systems to ensure the
15 adequacy and effectiveness of information security
16 and information sharing;

17 “(ii) provide minimum information security re-
18 quirements as determined under section 20(b) of the
19 National Institute of Standards and Technology Act
20 (15 U.S.C. 278g-3(b)); and

21 “(iii) are otherwise necessary to improve the se-
22 curity of information and information systems, in-
23 cluding information stored by third parties on behalf
24 of the Federal Government.

25 “(B) Information security standards described in
26 subparagraph (A) shall be compulsory and binding.

1 “(b) The President may disapprove or modify the
2 standards and guidelines referred to in subsection (a)(1)
3 if the President determines such action to be in the public
4 interest. The President’s authority to disapprove or mod-
5 ify such standards and guidelines may not be delegated.
6 Notice of such disapproval or modification shall be pub-
7 lished promptly in the Federal Register. Upon receiving
8 notice of such disapproval or modification, the Secretary
9 of Commerce shall immediately rescind or modify such
10 standards or guidelines as directed by the President.

11 “(c) To ensure fiscal and policy consistency, the Sec-
12 retary shall exercise the authority conferred by this section
13 subject to direction by the President and in coordination
14 with the Director of the Office of Management and Budget
15 and the National Office for Cyberspace.

16 “(d) The National Office for Cyberspace and the
17 head of an agency may employ standards for the cost ef-
18 fective information security for information systems within
19 or under the supervision of that agency that are more
20 stringent than the standards the Secretary prescribes
21 under this section if the more stringent standards—

22 “(1) contain at least the applicable standards
23 made compulsory and binding by the Secretary; and

24 “(2) are otherwise consistent with policies and
25 guidelines issued under section 3553.

1 “(e) The decision by the Secretary regarding the pro-
2 mulgation of any standard under this section shall occur
3 not later than 6 months after the submission of the pro-
4 posed standard to the Secretary by the National Institute
5 of Standards and Technology, as provided under section
6 20 of the National Institute of Standards and Technology
7 Act (15 U.S.C. 278g-3).”.

8 **SEC. 4. AUTHORITY AND RESPONSIBILITY OF THE UNITED**
9 **STATES COMPUTER EMERGENCY READINESS**
10 **TEAM IN RELATION TO FEDERAL AGENCIES.**

11 (a) DEFINITION.—In this section:

12 (1) The term “agency” has the meaning given
13 under section 3502(1) of title 44, United States
14 Code.

15 (2) The term “US-CERT” means the United
16 States Computer Emergency Readiness Team.

17 (b) PURPOSES.—The purposes of this section are to
18 recognize that US-CERT—

19 (1) is charged with providing response support
20 and defense against cyber attacks for agencies and
21 information sharing and collaboration with State
22 and local government, industry, and international
23 partners;

24 (2) interacts with agencies, industry, the re-
25 search community, State and local governments, and

1 others to disseminate reasoned and actionable cyber
2 security information to the public;

3 (3) provides a way for citizens, businesses, and
4 other institutions to communicate and coordinate di-
5 rectly with the United States Government about
6 cyber security; and

7 (4) has continually enhanced its ability to mon-
8 itor, detect, and respond to information security in-
9 cidents that affect the Federal Government.

10 (c) COORDINATION WITH US-CERT.—The head of
11 each agency shall ensure that the Chief Information Offi-
12 cer, Chief Information Security Officer, and security oper-
13 ations centers under the direction of that agency head
14 shall establish policies, procedures, and guidance to effec-
15 tively coordinate with the Director of US-CERT in a
16 timely fashion to detect, report, respond to, contain, and
17 mitigate incidents that impair adequate security of the in-
18 formation and information infrastructure.

19 (d) REVIEW AND APPROVAL.—In coordination with
20 the Administrator for Electronic Government and Infor-
21 mation Technology, the Director of the National Office for
22 Cyberspace shall review and approve the policies, proce-
23 dures, and guidance established in subparagraph (c) to en-
24 sure that US-CERT has the capability to effectively and
25 efficiently detect, correlate, respond to, contain, and miti-

1 gate incidents that impair the adequate security of the in-
2 formation and information infrastructure of more than 1
3 agency. To the extent practicable, the capability shall be
4 continuous and technically automated.

5 **SEC. 5. AUTHORITY AND RESPONSIBILITY OF DEPART-**
6 **MENTS NOT RELATED TO MILITARY FUNC-**
7 **TIONS.**

8 (a) DEFINITIONS.—In this section:

9 (1) AGENCY.—The term “agency”—

10 (A) means—

11 (i) an Executive department defined
12 under section 101 of title 5, United States
13 Code; and

14 (ii) an Executive agency that has mul-
15 tiple components which have separate and
16 distinct enterprise architectures; and

17 (B) shall not include—

18 (i) the Department of Defense; or

19 (ii) any component of an Executive
20 agency that is performing any national se-
21 curity function, including military intel-
22 ligence.

23 (2) EXECUTIVE AGENCY.—The term “Executive
24 agency” has the meaning given under section 105 of
25 title 5, United States Code.

1 (b) PURPOSE.—The purpose of this section is to rec-
2 ognize that—

3 (1) agencies have developed and maintained
4 separate and distinct enterprise architectures that
5 inhibit the ability of an agency to ensure that com-
6 ponents of that agency have effectively implemented
7 security policies, procedures, and practices;

8 (2) the separate and distinct enterprise archi-
9 tectures have in many instances been at the det-
10 riment of securing the agency information infra-
11 structure (the civilian cyberspace) and exposed that
12 infrastructure to unnecessary risk for an extended
13 period of time; and

14 (3) a more uniform agency enterprise architec-
15 ture will be more efficient and effective for the pur-
16 poses of information sharing and ensuring the ap-
17 propriate confidentiality, integrity, and availability of
18 information and information systems.

19 (c) AGENCY COORDINATION.—

20 (1) IN GENERAL.—Not later than 1 year after
21 the date of enactment of this Act, the head of each
22 agency shall ensure that components of that agency
23 shall establish an automated reporting mechanism
24 that allows the Chief Information Security Officer
25 and security operations center at the total agency

1 level to implement and monitor the implementation
2 of appropriate security policies, procedures, and con-
3 trols of agency components.

4 (2) APPROVAL AND COORDINATION.—The ac-
5 tivities conducted under paragraph (1) shall be—

6 (A) approved by the Director of the Na-
7 tional Office for Cyberspace; and

8 (B) to the extent practicable, in coordina-
9 tion and complementary with activities—

10 (i) described under section 4; and

11 (ii) conducted by the Administrator
12 for E-Government and Information Tech-
13 nology.

14 **SEC. 6. TECHNICAL AND CONFORMING AMENDMENTS.**

15 (a) TABLE OF SECTIONS.—The table of sections for
16 chapter 35 of title 44, United States Code, is amended
17 by striking the matter relating to subchapters II and III
18 and inserting the following:

“SUBCHAPTER II—INFORMATION SECURITY

“Sec. 3551. Definitions.

“Sec. 3552. National Office for Cyberspace.

“Sec. 3553. Authority and functions of the National Office for Cyberspace.

“Sec. 3554. Agency responsibilities.

“Sec. 3555. Annual independent evaluation.

“Sec. 3556. Responsibilities for Federal information systems standards.”.

19 (b) OTHER REFERENCES.—

20 (1) Section 1001(c)(1)(A) of the Homeland Se-
21 curity Act of 2002 (6 U.S.C. 511(c)(1)(A)) is

1 amended by striking “section 3532(3)” and insert-
2 ing “section 3551(b)”.

3 (2) Section 2222(j)(6) of title 10, United States
4 Code, is amended by striking “section 3542(b)(2))”
5 and inserting “section 3551(b)”.

6 (3) Section 2223(c)(3) of title 10, United
7 States Code, is amended, by striking “section
8 3542(b)(2))” and inserting “section 3551(b)”.

9 (4) Section 2315 of title 10, United States
10 Code, is amended by striking “section 3542(b)(2))”
11 and inserting “section 3551(b)”.

12 (5) Section 20(a)(2) of the National Institute of
13 Standards and Technology Act (15 U.S.C. 278g–3)
14 is amended by striking “section 3532(b)(2)” and in-
15 serting “section 3551(b)”.

16 (6) Section 8(d)(1) of the Cyber Security Re-
17 search and Development Act (15 U.S.C. 7406(d)(1))
18 is amended by striking “section 3534(b)” and in-
19 serting “section 3554(b)”.

20 **SEC. 7. EFFECTIVE DATE.**

21 This Act (including the amendments made by this
22 Act) shall take effect 30 days after the date of enactment
23 of this Act.