AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 4900

OFFERED BY MR. TOWNS OF NEW YORK AND MR. ISSA OF CALIFORNIA

Strike all after the enacting clause and insert the following:

1 SECTION 1. SHORT TITLE.

- 2 (a) Short Title.—This Act may be cited as the
- 3 "Federal Information Security Amendments Act of
- 4 2010".
- 5 (b) Table of Contents for
- 6 this Act is as follows:
 - Sec. 1. Short title.

TITLE I—FEDERAL INFORMATION SECURITY AMENDMENTS

- Sec. 101. Coordination of Federal Information Policy.
- Sec. 102. Information security acquisition requirements.
- Sec. 103. Technical and conforming amendments.
- Sec. 104. Effective date.

TITLE II—FEDERAL CHIEF TECHNOLOGY OFFICER

Sec. 201. Office of the Chief Technology Officer.

1	TITLE I—FEDERAL INFORMA-
2	TION SECURITY AMEND-
3	MENTS
4	SEC. 101. COORDINATION OF FEDERAL INFORMATION POL-
5	ICY.
6	Chapter 35 of title 44, United States Code, is amend-
7	ed by striking subchapters II and III and inserting the
8	following:
9	"SUBCHAPTER II—INFORMATION SECURITY
10	"§ 3551. Purposes
11	"The purposes of this subchapter are to—
12	"(1) provide a comprehensive framework for en-
13	suring the effectiveness of information security con-
14	trols over information resources that support Fed-
15	eral operations and assets;
16	"(2) recognize the highly networked nature of
17	the current Federal computing environment and pro-
18	vide effective Governmentwide management and
19	oversight of the related information security risks,
20	including coordination of information security efforts
21	throughout the civilian, national security, and law
22	enforcement communities;
23	"(3) provide for development and maintenance
24	of minimum controls required to protect Federal in-
25	formation and information infrastructure;

1	"(4) provide a mechanism for improved over-
2	sight of Federal agency information security pro-
3	grams;
4	"(5) acknowledge that commercially developed
5	information security products offer advanced, dy-
6	namic, robust, and effective information security so-
7	lutions, reflecting market solutions for the protection
8	of critical information infrastructures important to
9	the national defense and economic security of the
10	Nation that are designed, built, and operated by the
11	private sector; and
12	"(6) recognize that the selection of specific
13	technical hardware and software information secu-
14	rity solutions should be left to individual agencies
15	from among commercially developed products.
16	"§ 3552. Definitions
17	"(a) Section 3502 Definitions.—Except as pro-
18	vided under subsection (b), the definitions under section
19	3502 shall apply to this subchapter.
20	"(b) Additional Definitions.—In this subchapter:
21	"(1) The term 'adequate security' means secu-
22	rity that complies with the regulations promulgated
23	under section 3554 and the standards promulgated
24	under section 3558.

1	"(2) The term 'incident' means an occurrence
2	that actually or potentially jeopardizes the confiden-
3	tiality, integrity, or availability of an information
4	system, information infrastructure, or the informa-
5	tion the system processes, stores, or transmits or
6	that constitutes a violation or imminent threat of
7	violation of security policies, security procedures, or
8	acceptable use policies.
9	"(3) The term 'information infrastructure'
10	means the underlying framework that information
11	systems and assets rely on in processing, storing, or
12	transmitting information electronically.
13	"(4) The term 'information security' means
14	protecting information and information infrastruc-
15	ture from unauthorized access, use, disclosure, dis-
16	ruption, modification, or destruction in order to pro-
17	vide—
18	"(A) integrity, which means guarding
19	against improper information modification or
20	destruction, and includes ensuring information
21	nonrepudiation and authenticity;
22	"(B) confidentiality, which means pre-
23	serving authorized restrictions on access and
24	disclosure, including means for protecting per-
25	sonal privacy and proprietary information;

1	"(C) availability, which means ensuring
2	timely and reliable access to and use of infor-
3	mation; and
4	"(D) authentication, which means using
5	digital credentials to assure the identity of
6	users and validate access of such users.
7	"(5) The term 'information technology' has the
8	meaning given that term in section 11101 of title
9	40.
10	"(6)(A) The term 'national security system'
11	means any information infrastructure (including any
12	telecommunications system) used or operated by an
13	agency or by a contractor of an agency, or other or-
14	ganization on behalf of an agency—
15	"(i) the function, operation, or use of
16	which—
17	"(I) involves intelligence activities;
18	"(II) involves cryptologic activities re-
19	lated to national security;
20	"(III) involves command and control
21	of military forces;
22	"(IV) involves equipment that is an
23	integral part of a weapon or weapons sys-
24	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	"§ 3553. National Office for Cyberspace
15	"(a) Establishment.—There is established within
16	the Executive Office of the President an office to be known
17	as the National Office for Cyberspace.
18	"(b) Director.—
19	"(1) IN GENERAL.—There shall be at the head
20	of the Office a Director, who shall be appointed by
21	the President by and with the advice and consent of
22	the Senate. The Director of the National Office for
23	Cyberspace shall administer all functions under this
24	subchapter and collaborate to the extent practicable
25	with the heads of appropriate agencies, the private

1	sector, and international partners. The Office shall
2	serve as the principal office for coordinating issues
3	relating to achieving an assured, reliable, secure,
4	and survivable information infrastructure and re-
5	lated capabilities for the Federal Government.
6	"(2) Basic pay.—The Director shall be paid at
7	the rate of basic pay for level III of the Executive
8	Schedule.
9	"(c) Staff.—The Director may appoint and fix the
10	pay of additional personnel as the Director considers ap-
11	propriate.
12	"§ 3554. Federal Cybersecurity Practice Board
13	"(a) Establishment.—Within the National Office
14	for Cyberspace, there shall be established a board to be
15	known as the 'Federal Cybersecurity Practice Board' (in
16	this section referred to as the 'Board').
17	"(b) Members.—The Board shall be chaired by the
18	Director of the National Office for Cyberspace and consist
19	of not more than 10 members, with at least one represent-
20	ative from—
21	"(1) the Office of Management and Budget;
22	"(2) civilian agencies;
23	"(3) the Department of Defense;
24	"(4) the Federal law enforcement community;
25	"(5) the Federal Chief Technology Office; and

1	"(6) such additional military and civilian agen-
2	cies as the Director considers appropriate.
3	"(c) Responsibilities.—
4	"(1) Development of policies and proce-
5	DURES.—Subject to the authority, direction, and
6	control of the Director of the National Office for
7	Cyberspace, the Board shall be responsible for devel-
8	oping and periodically updating information security
9	policies and procedures relating to the matters de-
10	scribed in paragraph (2). In developing such policies
11	and procedures, the Board shall require that all
12	matters addressed in the policies and procedures are
13	consistent, to the maximum extent practicable and
14	in accordance with applicable law, among the civil-
15	ian, military, intelligence, and law enforcement com-
16	munities.
17	"(2) Specific matters covered in policies
18	AND PROCEDURES.—
19	"(A) MINIMUM SECURITY CONTROLS.—
20	The Board shall be responsible for developing
21	and periodically updating information security
22	policies and procedures relating to minimum se-
23	curity controls for information technology, in
24	order to—

1	"(i) provide Governmentwide protec-
2	tion of Government-networked computers
3	against common attacks; and
4	"(ii) provide agencywide protection
5	against threats, vulnerabilities, and other
6	risks to the information infrastructure
7	within individual agencies.
8	"(B) Measures of effectiveness.—
9	The Board shall be responsible for developing
10	and periodically updating information security
11	policies and procedures relating to measure-
12	ments needed to assess the effectiveness of the
13	minimum security controls referred to in sub-
14	paragraph (A). Such measurements shall in-
15	clude a risk scoring system to evaluate risk to
16	information security both Governmentwide and
17	within contractors of the Federal Government.
18	"(C) PRODUCTS AND SERVICES.—The
19	Board shall be responsible for developing and
20	periodically updating information security poli-
21	cies, procedures, and minimum security stand-
22	ards relating to criteria for products and serv-
23	ices to be used in agency information systems
24	and information infrastructure that will meet
25	the minimum security controls referred to in

1	subparagraph (A). In carrying out this subpara-
2	graph, the Board shall act in consultation with
3	the Office of Management and Budget and the
4	General Services Administration.
5	"(D) Remedies.—The Board shall be re-
6	sponsible for developing and periodically updat-
7	ing information security policies and procedures
8	relating to methods for providing remedies for
9	security deficiencies identified in agency infor-
10	mation infrastructure.
11	"(3) Additional considerations.—The
12	Board shall also consider—
13	"(A) opportunities to engage with the
14	international community to set policies, prin-
15	ciples, training, standards, or guidelines for in-
16	formation security;
17	"(B) opportunities to work with agencies
18	and industry partners to increase information
19	sharing and policy coordination efforts in order
20	to reduce vulnerabilities in the national infor-
21	mation infrastructure; and
22	"(C) options necessary to encourage and
23	maintain accountability of any agency, or senior
24	agency official, for efforts to secure the infor-
25	mation infrastructure of such agency.

1	"(4) Relationship to other standards.—
2	The policies and procedures developed under para-
3	graph (1) are supplemental to the standards promul-
4	gated by the Director of the National Office for
5	Cyberspace under section 3558.
6	"(5) Recommendations for regulations.—
7	The Board shall be responsible for making rec-
8	ommendations to the Director of the National Office
9	for Cyberspace on regulations to carry out the poli-
10	cies and procedures developed by the Board under
11	paragraph (1).
12	"(d) Regulations.—The Director of the National
13	Office for Cyberspace, in consultation with the Director
14	of the Office of Management and the Administrator of
15	General Services, shall promulgate and periodically update
16	regulations to carry out the policies and procedures devel-
17	oped by the Board under subsection (e).
18	"(e) Annual Report.—The Director of the Na-
19	tional Office for Cyberspace shall provide to Congress a
20	report containing a summary of agency progress in imple-
21	menting the regulations promulgated under this section as
22	part of the annual report to Congress required under sec-
23	tion $3555(a)(8)$.
24	"(f) No Disclosure by Board Required.—The
25	Board is not required to disclose under section 552 of title

1	5 information submitted by agencies to the Board regard-
2	ing threats, vulnerabilities, and risks.
3	"§ 3555. Authority and functions of the Director of
4	the National Office for Cyberspace
5	"(a) In General.—The Director of the National Of-
6	fice for Cyberspace shall oversee agency information secu-
7	rity policies and practices, including—
8	"(1) developing and overseeing the implementa-
9	tion of policies, principles, standards, and guidelines
10	on information security, including through ensuring
11	timely agency adoption of and compliance with
12	standards promulgated under section 3558;
13	"(2) requiring agencies, consistent with the
14	standards promulgated under section 3558 and
15	other requirements of this subchapter, to identify
16	and provide information security protections com-
17	mensurate with the risk and magnitude of the harm
18	resulting from the unauthorized access, use, disclo-
19	sure, disruption, modification, or destruction of—
20	"(A) information collected or maintained
21	by or on behalf of an agency; or
22	"(B) information infrastructure used or
23	operated by an agency or by a contractor of an
24	agency or other organization on behalf of an
25	agency;

1	"(3) coordinating the development of standards
2	and guidelines under section 20 of the National In-
3	stitute of Standards and Technology Act (15 U.S.C.
4	278g-3) with agencies and offices operating or exer-
5	cising control of national security systems (including
6	the National Security Agency) to assure, to the max-
7	imum extent feasible, that such standards and
8	guidelines are complementary with standards and
9	guidelines developed for national security systems;
10	"(4) overseeing agency compliance with the re-
11	quirements of this subchapter, including through
12	any authorized action under section 11303 of title
13	40, to enforce accountability for compliance with
14	such requirements;
15	"(5) reviewing at least annually, and approving
16	or disapproving, agency information security pro-
17	grams required under section 3556(b);
18	"(6) coordinating information security policies
19	and procedures with related information resources
20	management policies and procedures;
21	"(7) overseeing the operation of the Federal in-
22	formation security incident center required under
23	section 3559; and

1	"(8) reporting to Congress no later than March
2	1 of each year on agency compliance with the re-
3	quirements of this subchapter, including—
4	"(A) a summary of the findings of audits
5	required by section 3557;
6	"(B) an assessment of the development,
7	promulgation, and adoption of, and compliance
8	with, standards developed under section 20 of
9	the National Institute of Standards and Tech-
10	nology Act (15 U.S.C. 278g-3) and promul-
11	gated under section 3558;
12	"(C) significant deficiencies in agency in-
13	formation security practices;
14	"(D) planned remedial action to address
15	such deficiencies; and
16	"(E) a summary of, and the views of the
17	Director of the National Office for Cyberspace
18	on, the report prepared by the National Insti-
19	tute of Standards and Technology under section
20	20(d)(10) of the National Institute of Stand-
21	ards and Technology Act (15 U.S.C. 278g–3).
22	"(b) NATIONAL SECURITY SYSTEMS.—Except for the
23	authorities described in paragraphs (4) and (8) of sub-
24	section (a), the authorities of the Director of the National

- 1 Office for Cyberspace under this section shall not apply
- 2 to national security systems.
- 3 "(c) Department of Defense and Central In-
- 4 TELLIGENCE AGENCY SYSTEMS.—(1) The authorities of
- 5 the Director of the National Office for Cyberspace de-
- 6 scribed in paragraphs (1) and (2) of subsection (a) shall
- 7 be delegated to the Secretary of Defense in the case of
- 8 systems described in paragraph (2) and to the Director
- 9 of Central Intelligence in the case of systems described
- 10 in paragraph (3).
- 11 "(2) The systems described in this paragraph are sys-
- 12 tems that are operated by the Department of Defense, a
- 13 contractor of the Department of Defense, or another enti-
- 14 ty on behalf of the Department of Defense that processes
- 15 any information the unauthorized access, use, disclosure,
- 16 disruption, modification, or destruction of which would
- 17 have a debilitating impact on the mission of the Depart-
- 18 ment of Defense.
- 19 "(3) The systems described in this paragraph are sys-
- 20 tems that are operated by the Central Intelligence Agency,
- 21 a contractor of the Central Intelligence Agency, or another
- 22 entity on behalf of the Central Intelligence Agency that
- 23 processes any information the unauthorized access, use,
- 24 disclosure, disruption, modification, or destruction of

1	which would have a debilitating impact on the mission of
2	the Central Intelligence Agency.
3	"§ 3556. Agency responsibilities
4	"(a) In General.—The head of each agency shall—
5	"(1) be responsible for—
6	"(A) providing information security protec-
7	tions commensurate with the risk and mag-
8	nitude of the harm resulting from unauthorized
9	access, use, disclosure, disruption, modification,
10	or destruction of—
11	"(i) information collected or main-
12	tained by or on behalf of the agency; and
13	"(ii) information infrastructure used
14	or operated by an agency or by a con-
15	tractor of an agency or other organization
16	on behalf of an agency;
17	"(B) complying with the requirements of
18	this subchapter and related policies, procedures,
19	standards, and guidelines, including—
20	"(i) the regulations promulgated
21	under section 3554 and the information se-
22	curity standards promulgated under sec-
23	tion 3558;
24	"(ii) information security standards
25	and guidelines for national security sys-

1	tems issued in accordance with law and as
2	directed by the President; and
3	"(iii) ensuring the standards imple-
4	mented for information infrastructure and
5	national security systems under the agency
6	head are complementary and uniform, to
7	the extent practicable; and
8	"(C) ensuring that information security
9	management processes are integrated with
10	agency strategic and operational planning proc-
11	esses;
12	"(2) ensure that senior agency officials provide
13	information security for the information and infor-
14	mation infrastructure that support the operations
15	and assets under their control, including through—
16	"(A) assessing the risk and magnitude of
17	the harm that could result from the unauthor-
18	ized access, use, disclosure, disruption, modi-
19	fication, or destruction of such information or
20	information infrastructure;
21	"(B) determining the levels of information
22	security appropriate to protect such information
23	and information infrastructure in accordance
24	with regulations promulgated under section
25	3554 and standards promulgated under section

1	3558, for information security classifications
2	and related requirements;
3	"(C) implementing policies and procedures
4	to cost effectively reduce risks to an acceptable
5	level; and
6	"(D) continuously testing and evaluating
7	information security controls and techniques to
8	ensure that they are effectively implemented;
9	"(3) delegate to an agency official, designated
10	as the 'Chief Information Security Officer', under
11	the authority of the agency Chief Information Offi-
12	cer the responsibility to oversee agency information
13	security and the authority to ensure and enforce
14	compliance with the requirements imposed on the
15	agency under this subchapter, including—
16	"(A) overseeing the establishment and
17	maintenance of a security operations capability
18	on an automated and continuous basis that
19	can—
20	"(i) assess the state of compliance of
21	all networks and systems with prescribed
22	controls issued pursuant to section 3558
23	and report immediately any variance there-
24	from and, where appropriate and with the
25	approval of the agency Chief Information

1	Officer, shut down systems that are found
2	to be non-compliant;
3	"(ii) detect, report, respond to, con-
4	tain, and mitigate incidents that impair
5	adequate security of the information and
6	information infrastructure, in accordance
7	with policy provided by the Director of the
8	National Office for Cyberspace, in con-
9	sultation with the Chief Information Offi-
10	cers Council, and guidance from the Na-
11	tional Institute of Standards and Tech-
12	nology;
13	"(iii) collaborate with the National
14	Office for Cyberspace and appropriate pub-
15	lic and private sector security operations
16	centers to address incidents that impact
17	the security of information and informa-
18	tion infrastructure that extend beyond the
19	control of the agency; and
20	"(iv) not later than 24 hours after
21	discovery of any incident described under
22	subparagraph (A)(ii), unless otherwise di-
23	rected by policy of the National Office for
24	Cyberspace, provide notice to the appro-
25	priate security operations center, the Na-

1	tional Cyber Investigative Joint Task
2	Force, and the Inspector General of the
3	agency;
4	"(B) developing, maintaining, and over-
5	seeing an agency wide information security pro-
6	gram as required by subsection (b);
7	"(C) developing, maintaining, and over-
8	seeing information security policies, procedures,
9	and control techniques to address all applicable
10	requirements, including those issued under sec-
11	tions 3555 and 3558;
12	"(D) training and overseeing personnel
13	with significant responsibilities for information
14	security with respect to such responsibilities;
15	and
16	"(E) assisting senior agency officials con-
17	cerning their responsibilities under paragraph
18	(2);
19	"(4) ensure that the agency has trained and
20	cleared personnel sufficient to assist the agency in
21	complying with the requirements of this subchapter
22	and related policies, procedures, standards, and
23	guidelines;
24	"(5) ensure that the Chief Information Security
25	Officer, in coordination with other senior agency of-

1	ficials, reports biannually to the agency head on the
2	effectiveness of the agency information security pro-
3	gram, including progress of remedial actions; and
4	"(6) ensure that the Chief Information Security
5	Officer possesses necessary qualifications, including
6	education, professional certifications, training, expe-
7	rience, and the security clearance required to admin-
8	ister the functions described under this subchapter;
9	and has information security duties as the primary
10	duty of that official.
11	"(b) Agency Program.—Each agency shall develop,
12	document, and implement an agencywide information se-
13	curity program, approved by the Director of the National
14	Office for Cyberspace under section 3555(a)(5), to provide
15	information security for the information and information
16	infrastructure that support the operations and assets of
17	the agency, including those provided or managed by an-
18	other agency, contractor, or other source, that includes—
19	"(1) continuous automated technical monitoring
20	of information infrastructure used or operated by an
21	agency or by a contractor of an agency or other or-
22	ganization on behalf of an agency to assure conform-
23	ance with regulations promulgated under section
24	3554 and standards promulgated under section
25	3558;

1	"(2) testing of the effectiveness of security con-
2	trols that are commensurate with risk (as defined by
3	the National Institute of Standards and Technology
4	and the National Office for Cyberspace) for agency
5	information infrastructure;
6	"(3) policies and procedures that—
7	"(A) mitigate and remediate, to the extent
8	practicable, information security vulnerabilities
9	based on the risk posed to the agency;
10	"(B) cost effectively reduce information se-
11	curity risks to an acceptable level;
12	"(C) ensure that information security is
13	addressed throughout the life cycle of each
14	agency information system and information in-
15	frastructure;
16	"(D) ensure compliance with—
17	"(i) the requirements of this sub-
18	chapter;
19	"(ii) policies and procedures as may
20	be prescribed by the Director of the Na-
21	tional Office for Cyberspace, and informa-
22	tion security standards promulgated under
23	section 3558;
24	"(iii) minimally acceptable system
25	configuration requirements, as determined

1	by the Director of the National Office for
2	Cyberspace; and
3	"(iv) any other applicable require-
4	ments, including—
5	"(I) standards and guidelines for
6	national security systems issued in ac-
7	cordance with law and as directed by
8	the President;
9	"(II) the policy of the Director of
10	the National Office for Cyberspace;
11	"(III) the National Institute of
12	Standards and Technology guidance;
13	and
14	"(IV) the Chief Information Offi-
15	cers Council recommended ap-
16	proaches;
17	"(E) develop, maintain, and oversee infor-
18	mation security policies, procedures, and control
19	techniques to address all applicable require-
20	ments, including those issued under sections
21	3555 and 3558; and
22	"(F) ensure the oversight and training of
23	personnel with significant responsibilities for in-
24	formation security with respect to such respon-
25	sibilities;

1	"(4) ensuring that the agency has trained and
2	cleared personnel sufficient to assist the agency in
3	complying with the requirements of this subchapter
4	and related policies, procedures, standards, and
5	guidelines;
6	"(5) to the extent practicable, automated and
7	continuous technical monitoring for testing, and
8	evaluation of the effectiveness and compliance of in-
9	formation security policies, procedures, and prac-
10	tices, including—
11	"(A) management, operational, and tech-
12	nical controls of every information infrastruc-
13	ture identified in the inventory required under
14	section 3505(b); and
15	"(B) management, operational, and tech-
16	nical controls relied on for an evaluation under
17	section 3556;
18	"(6) a process for planning, implementing, eval-
19	uating, and documenting remedial action to address
20	any deficiencies in the information security policies,
21	procedures, and practices of the agency;
22	"(7) to the extent practicable, continuous auto-
23	mated technical monitoring for detecting, reporting,
24	and responding to security incidents, consistent with

1	standards and guidelines issued by the Director of
2	the National Office for Cyberspace, including—
3	"(A) mitigating risks associated with such
4	incidents before substantial damage is done;
5	"(B) notifying and consulting with the ap-
6	propriate security operations response center;
7	and
8	"(C) notifying and consulting with, as ap-
9	propriate—
10	"(i) law enforcement agencies and rel-
11	evant Offices of Inspectors General;
12	"(ii) the National Office for Cyber-
13	space; and
14	"(iii) any other agency or office, in ac-
15	cordance with law or as directed by the
16	President; and
17	"(8) plans and procedures to ensure continuity
18	of operations for information infrastructure that
19	support the operations and assets of the agency.
20	"(c) Agency Reporting.—Each agency shall—
21	"(1) submit an annual report on the adequacy
22	and effectiveness of information security policies,
23	procedures, and practices, and compliance with the
24	requirements of this subchapter, including compli-
25	ance with each requirement of subsection (b) to—

1	"(A) the National Office for Cyberspace;
2	"(B) the Committee on Homeland Security
3	and Governmental Affairs of the Senate;
4	"(C) the Committee on Oversight and Gov-
5	ernment Reform of the House of Representa-
6	tives;
7	"(D) other appropriate authorization and
8	appropriations committees of Congress; and
9	"(E) the Comptroller General;
10	"(2) address the adequacy and effectiveness of
11	information security policies, procedures, and prac-
12	tices in plans and reports relating to—
13	"(A) annual agency budgets;
14	"(B) information resources management of
15	this subchapter;
16	"(C) information technology management
17	under this chapter;
18	"(D) program performance under sections
19	1105 and 1115 through 1119 of title 31, and
20	sections 2801 and 2805 of title 39;
21	"(E) financial management under chapter
22	9 of title 31, and the Chief Financial Officers
23	Act of 1990 (31 U.S.C. 501 note; Public Law
24	101–576) (and the amendments made by that
25	Act);

1	"(F) financial management systems under
2	the Federal Financial Management Improve-
3	ment Act (31 U.S.C. 3512 note); and
4	"(G) internal accounting and administra-
5	tive controls under section 3512 of title 31; and
6	"(3) report any significant deficiency in a pol-
7	icy, procedure, or practice identified under para-
8	graph (1) or (2)—
9	"(A) as a material weakness in reporting
10	under section 3512 of title 31; and
11	"(B) if relating to financial management
12	systems, as an instance of a lack of substantial
13	compliance under the Federal Financial Man-
14	agement Improvement Act (31 U.S.C. 3512
15	note).
16	"(d) Performance Plan.—(1) In addition to the
17	requirements of subsection (c), each agency, in consulta-
18	tion with the National Office for Cyberspace, shall include
19	as part of the performance plan required under section
20	1115 of title 31 a description of the resources, including
21	budget, staffing, and training, that are necessary to imple-
22	ment the program required under subsection (b).
23	"(2) The description under paragraph (1) shall be
24	based on the risk assessments required under subsection
25	(a)(2).

1	"(e) Public Notice and Comment.—Each agency
2	shall provide the public with timely notice and opportuni-
3	ties for comment on proposed information security policies
4	and procedures to the extent that such policies and proce-
5	dures affect communication with the public.
6	"§ 3557. Annual independent audit
7	"(a) In General.—(1) Each year each agency shall
8	have performed an independent audit of the information
9	security program and practices of that agency to deter-
10	mine the effectiveness of such program and practices.
11	"(2) Each audit under this section shall include—
12	"(A) testing of the effectiveness of the informa-
13	tion infrastructure of the agency for automated, con-
14	tinuous monitoring of the state of compliance of its
15	information infrastructure with regulations promul-
16	gated under section 3554 and standards promul-
17	gated under section 3558 in a representative subset
18	of—
19	"(i) the information infrastructure used or
20	operated by the agency; and
21	"(ii) the information infrastructure used,
22	operated, or supported on behalf of the agency
23	by a contractor of the agency, a subcontractor
24	(at any tier) of such contractor, or any other
25	entity;

1	"(B) an assessment (made on the basis of the
2	results of the testing) of compliance with—
3	"(i) the requirements of this subchapter;
4	and
5	"(ii) related information security policies,
6	procedures, standards, and guidelines;
7	"(C) separate assessments, as appropriate, re-
8	garding information security relating to national se-
9	curity systems; and
10	"(D) a conclusion regarding whether the infor-
11	mation security controls of the agency are effective,
12	including an identification of any significant defi-
13	ciencies in such controls.
14	"(3) Each audit under this section shall be performed
15	in accordance with applicable generally accepted Govern-
16	ment auditing standards.
17	"(b) Independent Auditor.—Subject to sub-
18	section (c)—
19	"(1) for each agency with an Inspector General
20	appointed under the Inspector General Act of 1978
21	or any other law, the annual audit required by this
22	section shall be performed by the Inspector General
23	or by an independent external auditor, as deter-
24	mined by the Inspector General of the agency; and

1	"(2) for each agency to which paragraph (1)
2	does not apply, the head of the agency shall engage
3	an independent external auditor to perform the
4	audit.
5	"(c) National Security Systems.—For each
6	agency operating or exercising control of a national secu-
7	rity system, that portion of the audit required by this sec-
8	tion directly relating to a national security system shall
9	be performed—
10	"(1) only by an entity designated head; and
11	"(2) in such a manner as to ensure appropriate
12	protection for information associated with any infor-
13	mation security vulnerability in such system com-
14	mensurate with the risk and in accordance with all
15	applicable laws.
16	"(d) Existing Audits.—The audit required by this
17	section may be based in whole or in part on another audit
18	relating to programs or practices of the applicable agency.
19	"(e) Agency Reporting.—(1) Each year, not later
20	than such date established by the Director of the National
21	Office for Cyberspace, the head of each agency shall sub-
22	mit to the Director the results of the audit required under
23	this section.
24	"(2) To the extent an audit required under this sec-
25	tion directly relates to a national security system, the re-

- 1 sults of the audit submitted to the Director of the Na-
- 2 tional Office for Cyberspace shall contain only a summary
- 3 and assessment of that portion of the audit directly relat-
- 4 ing to a national security system.
- 5 "(f) Protection of Information.—Agencies and
- 6 auditors shall take appropriate steps to ensure the protec-
- 7 tion of information which, if disclosed, may adversely af-
- 8 fect information security. Such protections shall be com-
- 9 mensurate with the risk and comply with all applicable
- 10 laws and regulations.
- 11 "(g) National Office for Cyberspace Reports
- 12 TO CONGRESS.—(1) The Director of the National Office
- 13 for Cyberspace shall summarize the results of the audits
- 14 conducted under this section in the annual report to Con-
- 15 gress required under section 3555(a)(8).
- 16 "(2) The Director's report to Congress under this
- 17 subsection shall summarize information regarding infor-
- 18 mation security relating to national security systems in
- 19 such a manner as to ensure appropriate protection for in-
- 20 formation associated with any information security vulner-
- 21 ability in such system commensurate with the risk and in
- 22 accordance with all applicable laws.
- 23 "(3) Audits and any other descriptions of information
- 24 infrastructure under the authority and control of the Di-
- 25 rector of Central Intelligence or of National Foreign Intel-

1	ligence Programs systems under the authority and control
2	of the Secretary of Defense shall be made available to Con-
3	gress only through the appropriate oversight committees
4	of Congress, in accordance with applicable laws.
5	"(h) Comptroller General.—The Comptroller
6	General shall periodically evaluate and report to Congress
7	on—
8	"(1) the adequacy and effectiveness of agency
9	information security policies and practices; and
10	"(2) implementation of the requirements of this
11	subchapter.
12	"(i) Contractor Audits.—Each year each con-
13	tractor that operates, uses, or supports an information
14	system or information infrastructure on behalf of an agen-
15	cy and each subcontractor of such contractor—
16	"(1) shall conduct an audit using an inde-
17	pendent external auditor in accordance with sub-
18	section (a), including an assessment of compliance
19	with the applicable requirements of this subchapter;
20	and
21	"(2) shall submit the results of such audit to
22	such agency not later than such date established by
23	the Agency.

1	" \S 3558. Responsibilities for Federal information sys-
2	tems standards
3	"(a) Requirement To Prescribe Standards.—
4	"(1) In general.—
5	"(A) Requirement.—Except as provided
6	under paragraph (2), the Secretary of Com-
7	merce shall, on the basis of proposed standards
8	developed by the National Institute of Stand-
9	ards and Technology pursuant to paragraphs
10	(2) and (3) of section 20(a) of the National In-
11	stitute of Standards and Technology Act (15
12	U.S.C. 278g-3(a)) and in consultation with the
13	Secretary of Homeland Security, promulgate in-
14	formation security standards pertaining to Fed-
15	eral information systems.
16	"(B) Required Standards.—Standards
17	promulgated under subparagraph (A) shall in-
18	clude—
19	"(i) standards that provide minimum
20	information security requirements as deter-
21	mined under section 20(b) of the National
22	Institute of Standards and Technology Act
23	(15 U.S.C. 278g–3(b)); and
24	"(ii) such standards that are other-
25	wise necessary to improve the efficiency of

1	operation or security of Federal informa-
2	tion systems.
3	"(C) REQUIRED STANDARDS BINDING.—
4	Information security standards described under
5	subparagraph (B) shall be compulsory and
6	binding.
7	"(2) Standards and guidelines for Na-
8	TIONAL SECURITY SYSTEMS.—Standards and guide-
9	lines for national security systems, as defined under
10	section 3552(b), shall be developed, promulgated, en-
11	forced, and overseen as otherwise authorized by law
12	and as directed by the President.
13	"(b) Application of More Stringent Stand-
14	ARDS.—The head of an agency may employ standards for
15	the cost-effective information security for all operations
16	and assets within or under the supervision of that agency
17	that are more stringent than the standards promulgated
18	by the Secretary of Commerce under this section, if such
19	standards—
20	"(1) contain, at a minimum, the provisions of
21	those applicable standards made compulsory and
22	binding by the Secretary; and
23	"(2) are otherwise consistent with policies and
24	guidelines issued under section 3555.

1	"(c) Requirements Regarding Decisions by the
2	Secretary.—
3	"(1) DEADLINE.—The decision regarding the
4	promulgation of any standard by the Secretary of
5	Commerce under subsection (b) shall occur not later
6	than 6 months after the submission of the proposed
7	standard to the Secretary by the National Institute
8	of Standards and Technology, as provided under sec-
9	tion 20 of the National Institute of Standards and
10	Technology Act (15 U.S.C. 278g-3).
11	"(2) Notice and comment.—A decision by
12	the Secretary of Commerce to significantly modify,
13	or not promulgate, a proposed standard submitted to
14	the Secretary by the National Institute of Standards
15	and Technology, as provided under section 20 of the
16	National Institute of Standards and Technology Act
17	(15 U.S.C. 278g–3), shall be made after the public
18	is given an opportunity to comment on the Sec-
19	retary's proposed decision.
20	" \S 3559. Federal information security incident center
21	"(a) In General.—The Director of the National Of-
22	fice for Cyberspace shall ensure the operation of a central
23	Federal information security incident center to—
24	"(1) provide timely technical assistance to oper-
25	ators of agency information systems and information

1	infrastructure regarding security incidents, including
2	guidance on detecting and handling information se-
3	curity incidents;
4	"(2) compile and analyze information about in-
5	cidents that threaten information security;
6	"(3) inform operators of agency information
7	systems and information infrastructure about cur-
8	rent and potential information security threats, and
9	vulnerabilities; and
10	"(4) consult with the National Institute of
11	Standards and Technology, agencies or offices oper-
12	ating or exercising control of national security sys-
13	tems (including the National Security Agency), and
14	such other agencies or offices in accordance with law
15	and as directed by the President regarding informa-
16	tion security incidents and related matters.
17	"(b) National Security Systems.—Each agency
18	operating or exercising control of a national security sys-
19	tem shall share information about information security in-
20	cidents, threats, and vulnerabilities with the Federal infor-
21	mation security incident center to the extent consistent
22	with standards and guidelines for national security sys-
23	tems, issued in accordance with law and as directed by
24	the President.

1	"(c) REVIEW AND APPROVAL.—In coordination with
2	the Administrator for Electronic Government and Infor-
3	mation Technology, the Director of the National Office for
4	Cyberspace shall review and approve the policies, proce-
5	dures, and guidance established in this subchapter to en-
6	sure that the incident center has the capability to effec-
7	tively and efficiently detect, correlate, respond to, contain,
8	mitigate, and remediate incidents that impair the ade-
9	quate security of the information systems and information
10	infrastructure of more than one agency. To the extent
11	practicable, the capability shall be continuous and tech-
12	nically automated.
13	"§ 3560. National security systems
14	"The head of each agency operating or exercising
15	control of a national security system shall be responsible
16	for ensuring that the agency—
17	"(1) provides information security protections
18	commensurate with the risk and magnitude of the
19	harm resulting from the unauthorized access, use,
20	disclosure, disruption, modification, or destruction of
21	the information contained in such system;
22	"(2) implements information security policies
23	and practices as required by standards and guide-
24	lines for national security systems, issued in accord-
25	ance with law and as directed by the President; and

1	"(3) complies with the requirements of this sub-
2	chapter.".
3	SEC. 102. INFORMATION SECURITY ACQUISITION REQUIRE-
4	MENTS.
5	(a) In General.—Chapter 113 of title 40, United
6	States Code, is amended by adding at the end of sub-
7	chapter II the following new section:
8	"§ 11319. Information security acquisition require-
9	ments.
10	"(a) Prohibition.—Notwithstanding any other pro-
11	vision of law, beginning one year after the date of the en-
12	actment of the Federal Information Security Amendments
13	Act of 2010, no agency may enter into a contract, an order
14	under a contract, or an interagency agreement for—
15	"(1) the collection, use, management, storage,
16	or dissemination of information on behalf of the
17	agency;
18	"(2) the use or operation of an information sys-
19	tem or information infrastructure on behalf of the
20	agency; or
21	"(3) information technology;
22	unless such contract, order, or agreement includes require-
23	ments to provide effective information security that sup-
24	ports the operations and assets under the control of the
25	agency, in compliance with the policies, standards, and

1	guidance developed under subsection (b), and otherwise
2	ensures compliance with this section.
3	"(b) Coordination of Secure Acquisition Poli-
4	CIES.—
5	"(1) In general.—The Director, in consulta-
6	tion with the Director of the National Institute of
7	Standards and Technology, the Director of the Na-
8	tional Office for Cyberspace, and the Administrator
9	of General Services, shall oversee the development
10	and implementation of policies, standards, and guid-
11	ance, including through revisions to the Federal Ac-
12	quisition Regulation and the Department of Defense
13	supplement to the Federal Acquisition Regulation, to
14	cost effectively enhance agency information security,
15	including—
16	"(A) minimum information security re-
17	quirements for agency procurement of informa-
18	tion technology products and services; and
19	"(B) approaches for evaluating and miti-
20	gating significant supply chain security risks
21	associated with products or services to be ac-
22	quired by agencies.
23	"(2) Report.—Not later than two years after
24	the date of the enactment of the Federal Informa-

1	tion Security Amendments Act of 2010, the Director
2	shall submit to Congress a report describing—
3	"(A) actions taken to improve the informa-
4	tion security associated with the procurement of
5	products and services by the Federal Govern-
6	ment; and
7	"(B) plans for overseeing and coordinating
8	efforts of agencies to use best practice ap-
9	proaches for cost-effectively purchasing more
10	secure products and services.
11	"(c) Vulnerability Assessments of Major Sys-
12	TEMS.—
13	"(1) Requirement for initial vulner-
14	ABILITY ASSESSMENTS.—The Director shall require
15	each agency to conduct an initial vulnerability as-
16	sessment for any major system and its significant
17	items of supply prior to the development of the sys-
18	tem. The initial vulnerability assessment of a major
19	system and its significant items of supply shall in-
20	clude use of an analysis-based approach to—
21	"(A) identify vulnerabilities;
22	"(B) define exploitation potential;
23	"(C) examine the system's potential effec-
24	tiveness;
25	"(D) determine overall vulnerability; and

1	"(E) make recommendations for risk re-
2	duction.
3	"(2) Subsequent vulnerability assess-
4	MENTS.—
5	"(A) The Director shall require a subse-
6	quent vulnerability assessment of each major
7	system and its significant items of supply with-
8	in a program if the Director determines that
9	circumstances warrant the issuance of an addi-
10	tional vulnerability assessment.
11	"(B) Upon the request of a congressional
12	committee, the Director may require a subse-
13	quent vulnerability assessment of a particular
14	major system and its significant items of supply
15	within the program.
16	"(C) Any subsequent vulnerability assess-
17	ment of a major system and its significant
18	items of supply shall include use of an analysis-
19	based approach and, if applicable, a testing-
20	based approach, to monitor the exploitation po-
21	tential of such system and reexamine the fac-
22	tors described in subparagraphs (A) through
23	(E) of paragraph (1).
24	"(3) Congressional oversight.—The Direc-
25	tor shall provide to the appropriate congressional

1	committees a copy of each vulnerability assessment
2	conducted under paragraph (1) or (2) not later than
3	10 days after the date of the completion of such as-
4	sessment.
5	"(d) Definitions.—In this section:
6	"(1) Item of supply.—The term 'item of sup-
7	ply'—
8	"(A) means any individual part, compo-
9	nent, subassembly, assembly, or subsystem inte-
10	gral to a major system, and other property
11	which may be replaced during the service life of
12	the major system, including a spare part or re-
13	plenishment part; and
14	"(B) does not include packaging or label-
15	ing associated with shipment or identification of
16	an item.
17	"(2) Vulnerability assessment.—The term
18	'vulnerability assessment' means the process of iden-
19	tifying and quantifying vulnerabilities in a major
20	system and its significant items of supply.
21	"(3) Major system.—The term 'major system'
22	has the meaning given that term in section 4 of the
23	Office of Federal Procurement Policy Act (41 U.S.C.
24	403).''.

1 SEC. 103. TECHNICAL AND CONFORMING AMENDMENTS.

- 2 (a) Table of Sections in Title 44.—The table
- 3 of sections for chapter 35 of title 44, United States Code,
- 4 is amended by striking the matter relating to subchapters
- 5 II and III and inserting the following:

"SUBCHAPTER II—INFORMATION SECURITY

- "3551. Purposes.
- "3552. Definitions.
- "3553. National Office for Cyberspace.
- "3554. Federal Cybersecurity Practice Board.
- "3555. Authority and functions of the Director of the National Office for Cyberspace.
- "3556. Agency responsibilities.
- "3557. Annual independent audit.
- "3558. Responsibilities for Federal information systems standards.
- "3559. Federal information security incident center.
- "3560. National security systems.".
- 6 (b) Table of Sections in Title 40.—The table
- 7 of sections for chapter 113 of title 40, United States Code,
- 8 is amended by inserting after the item relating to section
- 9 11318 the following new item:

"Sec. 11319. Information security acquisition requirements.".

- 10 (c) Other References.—
- 11 (1) Section 1001(c)(1)(A) of the Homeland Se-
- 12 curity Act of 2002 (6 U.S.C. 511(c)(1)(A)) is
- amended by striking "section 3532(3)" and insert-
- ing "section 3552(b)".
- 15 (2) Section 2222(j)(6) of title 10, United States
- 16 Code, is amended by striking "section 3542(b)(2))"
- and inserting "section 3552(b)".

1	(3) Section 2223(c)(3) of title 10, United
2	States Code, is amended, by striking "section
3	3542(b)(2))" and inserting "section 3552(b)".
4	(4) Section 2315 of title 10, United States
5	Code, is amended by striking "section 3542(b)(2))"
6	and inserting "section 3552(b)".
7	(5) Section 20 of the National Institute of
8	Standards and Technology Act (15 U.S.C. 278g–3)
9	is amended—
10	(A) in subsections $(a)(2)$ and $(e)(5)$, by
11	striking "section 3532(b)(2)" and inserting
12	"section 3552(b)";
13	(B) in subsection (e)(2), by striking "sec-
14	tion 3532(1)" and inserting "section 3552(b)";
15	and
16	(C) in subsections $(e)(3)$ and $(d)(1)$, by
17	striking "section 11331 of title 40" and insert-
18	ing "section 3558 of title 44".
19	(6) Section 8(d)(1) of the Cyber Security Re-
20	search and Development Act (15 U.S.C. 7406(d)(1))
21	is amended by striking "section 3534(b)" and in-
22	serting "section 3556(b)".
23	(d) Repeal.—
24	(1) Subchapter III of chapter 113 of title 40,
25	United States Code, is repealed.

1	(2) The table of sections for chapter 113 of
2	such title is amended by striking the matter relating
3	to subchapter III.
4	(e) Executive Schedule Pay Rate.—Section
5	5314 of title 5, United States Code, is amended by adding
6	at the end the following:
7	"Director of the National Office for Cyber-
8	space.".
9	SEC. 104. EFFECTIVE DATE.
10	(a) In General.—Unless otherwise specified in this
11	section, this title (including the amendments made by this
12	title) shall take effect 30 days after the date of enactment
13	of this Act.
14	(b) National Office for Cyberspace.—Section
15	3553 of title 44, United States Code, as added by section
16	101 of this Act, shall take effect 180 days after the date
17	of enactment of this Act.
18	(e) Federal Cybersecurity Practice Board.—
19	Section 3554 of title 44, United States Code, as added
20	by section 101 of this Act, shall take effect one year after
21	the date of enactment of this Act.
22	TITLE II—FEDERAL CHIEF
23	TECHNOLOGY OFFICER
24	SEC. 201. OFFICE OF THE CHIEF TECHNOLOGY OFFICER.
25	(a) Establishment and Staff.—

1	(1) Establishment.—
2	(A) IN GENERAL.—There is established in
3	the Executive Office of the President an Office
4	of the Federal Chief Technology Officer (in this
5	Act referred to as the "Office").
6	(B) Head of the office.—
7	(i) Federal Chief Technology of-
8	FICER.—The President shall appoint a
9	Federal Chief Technology Officer (in this
10	Act referred to as the "Federal CTO")
11	who shall be the head of the Office.
12	(ii) Compensation.—Section 5314 of
13	title 5, United States Code, is amended by
14	adding at the end the following:
15	"Federal Chief Technology Officer.".
16	(2) Staff of the office.—The President
17	may appoint additional staff members to the Office.
18	(b) Duties of the Office.—The functions of the
19	Federal CTO are the following:
20	(1) Undertake fact-gathering, analysis, and as-
21	sessment of the Federal Government's information
22	technology infrastructures, information technology
23	strategy, and use of information technology, and
24	provide advice on such matters to the President,
25	heads of Federal departments and agencies, and

1 government chief information officers and chief tech-2 nology officers. (2) Lead an interagency effort, working with 3 4 the chief technology and chief information officers of 5 each of the Federal departments and agencies, to de-6 velop and implement a planning process to ensure 7 that they use best-in-class technologies, share best 8 practices, and improve the use of technology in sup-9 port of Federal Government requirements. 10 (3) Advise the President on information tech-11 nology considerations with regard to Federal budg-12 ets and with regard to general coordination of the 13 research and development programs of the Federal 14 Government for information technology-related mat-15 ters. 16 (4) Promote technological innovation in the 17 Federal Government, and encourage and oversee the 18 adoption of robust cross-governmental architectures 19 and standards-based information technologies, in 20 support of effective operational and management 21 policies, practices, and services across Federal de-22 partments and agencies and with the public and ex-23 ternal entities. 24 (5) Establish cooperative public-private sector 25 partnership initiatives to achieve knowledge of tech-

1 nologies available in the marketplace that can be 2 used for improving governmental operations and in-3 formation technology research and development activities. (6) Gather timely and authoritative information 6 concerning significant developments and trends in 7 information technology, and in national priorities, 8 both current and prospective, and analyze and inter-9 pret the information for the purpose of determining 10 whether the developments and trends are likely to 11 affect achievement of the priority goals of the Federal Government. 12 (7) Develop, review, revise, and recommend cri-13 14 teria for determining information technology activi-15 ties warranting Federal support, and recommend Federal policies designed to advance the develop-16 17 ment and maintenance of effective and efficient in-18 formation technology capabilities, including human 19 resources, at all levels of government, academia, and 20 industry, and the effective application of the capa-21 bilities to national needs. 22 (8) Any other functions and activities that the 23 President may assign to the Federal CTO. 24 (c) Policy Planning; Analysis and Advice.—The Office shall serve as a source of analysis and advice for 25

the President and heads of Federal departments and agencies with respect to major policies, plans, and programs of the Federal Government in accordance with the functions described in subsection (b). 5 (d) Coordination of the Office With Other 6 ENTITIES.— 7 (1) Federal cto on domestic policy coun-8 CIL.—The Federal CTO shall be a member of the 9 Domestic Policy Council. 10 (2) Federal Cto on Cyber Security Prac-11 TICE BOARD.—The Federal CTO shall be a member 12 of the Federal Cybersecurity Practice Board. 13 (3) Obtain information from agencies.— 14 The Office may secure, directly from any depart-15 ment or agency of the United States, information 16 necessary to enable the Federal CTO to carry out 17 this Act. On request of the Federal CTO, the head 18 of the department or agency shall furnish the infor-19 mation to the Office, subject to any applicable limi-20 tations of Federal law. (4) Staff of federal agencies.—On re-21 22 quest of the Federal CTO, to assist the Office in 23 carrying out the duties of the Office, the head of any 24 Federal department or agency may detail personnel,

1	services, or facilities of the department or agency to
2	the Office.
3	(e) Annual Report.—
4	(1) Publication and contents.—The Fed-
5	eral CTO shall publish, in the Federal Register and
6	on a public Internet website of the Federal CTO, an
7	annual report that includes the following:
8	(A) Information on programs to promote
9	the development of technological innovations.
10	(B) Recommendations for the adoption of
11	policies to encourage the generation of techno-
12	logical innovations.
13	(C) Information on the activities and ac-
14	complishments of the Office in the year covered
15	by the report.
16	(2) Submission.—The Federal CTO shall sub-
17	mit each report under paragraph (1) to—
18	(A) the President;
19	(B) the Committee on Oversight and Gov-
20	ernment Reform of the House of Representa-
21	tives;
22	(C) the Committee on Science and Tech-
23	nology of the House of Representatives; and

(D) the Committee on Commerce, Science,
 and Transportation of the Senate.

