AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 4257

OFFERED BY MR. ISSA OF CALIFORNIA

Strike all after the enacting clause and insert the following:

1	SECTION 1. SHORT TITLE.
2	This Act may be cited as the "Federal Information
3	Security Amendments Act of 2012".
4	SEC. 2. 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-

vide effective Governmentwide management and

18

oversight of the related information security risks,
including coordination of information security efforts
throughout the civilian, national security, and law
enforcement communities assets;
"(3) provide for development and maintenance
of minimum controls required to protect Federal in-
formation and information systems;
"(4) provide a mechanism for improved over-
sight of Federal agency information security pro-
grams and systems through a focus on automated
and continuous monitoring of agency information
systems and regular threat assessments;
"(5) acknowledge that commercially developed
information security products offer advanced, dy-
namic, robust, and effective information security so-
lutions, reflecting market solutions for the protection
of critical information systems important to the na-
tional defense and economic security of the Nation
that are designed, built, and operated by the private
sector; and
"(6) recognize that the selection of specific
technical hardware and software information secu-
rity solutions should be left to individual agencies
from among commercially developed products.

1 **"§ 3552. Definitions**

2	"(a) Section 3502 Definitions.—Except as pro-
3	vided under subsection (b), the definitions under section
4	3502 shall apply to this subchapter.
5	"(b) Additional Definitions.—In this subchapter:
6	"(1) ADEQUATE SECURITY.—The term 'ade-
7	quate security' means security commensurate with
8	the risk and magnitude of the harm resulting from
9	the unauthorized access to or loss, misuse, destruc-
10	tion, or modification of information.
11	"(2) Automated and continuous moni-
12	TORING.—The term 'automated and continuous
13	monitoring' means monitoring, with minimal human
14	involvement, through an uninterrupted, ongoing real
15	time, or near real-time process used to determine if
16	the complete set of planned, required, and deployed
17	security controls within an information system con-
18	tinue to be effective over time with rapidly changing
19	information technology and threat development.
20	"(3) Incident.—The term 'incident' means an
21	occurrence that actually or potentially jeopardizes
22	the confidentiality, integrity, or availability of an in-
23	formation system, or the information the system
24	processes, stores, or transmits or that constitutes a
25	violation or imminent threat of violation of security

1	policies, security procedures, or acceptable use poli-
2	cies.
3	"(4) Information Security.—The term 'in-
4	formation security' means protecting information
5	and information systems from unauthorized access,
6	use, disclosure, disruption, modification, or destruc-
7	tion in order to provide—
8	"(A) integrity, which means guarding
9	against improper information modification or
10	destruction, and includes ensuring information
11	nonrepudiation and authenticity;
12	"(B) confidentiality, which means pre-
13	serving authorized restrictions on access and
14	disclosure, including means for protecting per-
15	sonal privacy and proprietary information; and
16	"(C) availability, which means ensuring
17	timely and reliable access to and use of infor-
18	mation.
19	"(5) Information system.—The term 'infor-
20	mation system' means a discrete set of information
21	resources organized for the collection, processing,
22	maintenance, use, sharing, dissemination, or disposi-
23	tion of information and includes—
24	"(A) computers and computer networks;
25	"(B) ancillary equipment;

1	"(C) software, firmware, and related proce-
2	dures;
3	"(D) services, including support services;
4	and
5	"(E) related resources.
6	"(6) Information technology.—The term
7	'information technology' has the meaning given that
8	term in section 11101 of title 40.
9	"(7) National Security System.—
10	"(A) Definition.—The term 'national se-
11	curity system' means any information system
12	(including any telecommunications system) used
13	or operated by an agency or by a contractor of
14	an agency, or other organization on behalf of an
15	agency—
16	"(i) the function, operation, or use of
17	which—
18	"(I) involves intelligence activi-
19	ties;
20	"(II) involves cryptologic activi-
21	ties related to national security;
22	"(III) involves command and
23	control of military forces;

1	"(IV) involves equipment that is
2	an integral part of a weapon or weap-
3	ons system; or
4	"(V) subject to subparagraph
5	(B), is critical to the direct fulfillment
6	of military or intelligence missions; or
7	"(ii) is protected at all times by proce-
8	dures established for information that have
9	been specifically authorized under criteria
10	established by an Executive order or an
11	Act of Congress to be kept classified in the
12	interest of national defense or foreign pol-
13	iey.
14	"(B) EXCEPTION.—Subparagraph
15	(A)(i)(V) does not include a system that is to
16	be used for routine administrative and business
17	applications (including payroll, finance, logis-
18	tics, and personnel management applications).
19	"(8) Threat assessment.—The term 'threat
20	assessment' means the formal description and eval-
21	uation of threat to an information system.
22	" \S 3553. Authority and functions of the Director
23	"(a) In General.—The Director shall oversee agen-
24	cy information security policies and practices, including—

1	(1) developing and overseeing the implementa-
2	tion of policies, principles, standards, and guidelines
3	on information security, including through ensuring
4	timely agency adoption of and compliance with
5	standards promulgated under section 11331 of title
6	40;
7	"(2) requiring agencies, consistent with the
8	standards promulgated under such section 11331
9	and the requirements of this subchapter, to identify
10	and provide information security protections com-
11	mensurate with the risk and magnitude of the harm
12	resulting from the unauthorized access, use, disclo-
13	sure, disruption, modification, or destruction of—
14	"(A) information collected or maintained
15	by or on behalf of an agency; or
16	"(B) information systems used or operated
17	by an agency or by a contractor of an agency
18	or other organization on behalf of an agency;
19	"(3) coordinating the development of standards
20	and guidelines under section 20 of the National In-
21	stitute of Standards and Technology Act (15 U.S.C.
22	278g-3) with agencies and offices operating or exer-
23	cising control of national security systems (including
24	the National Security Agency) to assure, to the max-
25	imum extent feasible, that such standards and

1	guidelines are complementary with standards and
2	guidelines developed for national security systems;
3	"(4) overseeing agency compliance with the re-
4	quirements of this subchapter, including through
5	any authorized action under section 11303 of title
6	40, to enforce accountability for compliance with
7	such requirements;
8	"(5) reviewing at least annually, and approving
9	or disapproving, agency information security pro-
10	grams required under section 3554(b);
11	"(6) coordinating information security policies
12	and procedures with related information resources
13	management policies and procedures;
14	"(7) overseeing the operation of the Federal in-
15	formation security incident center required under
16	section 3555; and
17	"(8) reporting to Congress no later than March
18	1 of each year on agency compliance with the re-
19	quirements of this subchapter, including—
20	"(A) an assessment of the development,
21	promulgation, and adoption of, and compliance
22	with, standards developed under section 20 of
23	the National Institute of Standards and Tech-
24	nology Act (15 U.S.C. 278g-3) and promul-
25	gated under section 11331 of title 40;

1	"(B) significant deficiencies in agency in-
2	formation security practices;
3	"(C) planned remedial action to address
4	such deficiencies; and
5	"(D) a summary of, and the views of the
6	Director on, the report prepared by the Na-
7	tional Institute of Standards and Technology
8	under section 20(d)(10) of the National Insti-
9	tute of Standards and Technology Act (15
10	U.S.C. 278g-3).
11	"(b) NATIONAL SECURITY SYSTEMS.—Except for the
12	authorities described in paragraphs (4) and (8) of sub-
13	section (a), the authorities of the Director under this sec-
14	tion shall not apply to national security systems.
15	"(c) Department of Defense and Central In-
16	TELLIGENCE AGENCY SYSTEMS.—(1) The authorities of
17	the Director described in paragraphs (1) and (2) of sub-
18	section (a) shall be delegated to the Secretary of Defense
19	in the case of systems described in paragraph (2) and to
20	the Director of Central Intelligence in the case of systems
21	described in paragraph (3).
22	"(2) The systems described in this paragraph
23	are systems that are operated by the Department of
24	Defense, a contractor of the Department of Defense,
25	or another entity on behalf of the Department of

1	Defense that processes any information the unau-
2	thorized access, use, disclosure, disruption, modifica-
3	tion, or destruction of which would have a debili-
4	tating impact on the mission of the Department of
5	Defense.
6	"(3) The systems described in this paragraph
7	are systems that are operated by the Central Intel-
8	ligence Agency, a contractor of the Central Intel-
9	ligence Agency, or another entity on behalf of the
10	Central Intelligence Agency that processes any infor-
11	mation the unauthorized access, use, disclosure, dis-
12	ruption, modification, or destruction of which would
13	have a debilitating impact on the mission of the Cen-
14	tral Intelligence Agency.
15	"§ 3554. Agency responsibilities
16	"(a) In General.—The head of each agency shall—
17	"(1) be responsible for—
18	
10	"(A) providing information security protec-
19	"(A) providing information security protections commensurate with the risk and mag-
19	tions commensurate with the risk and mag-
19 20	tions commensurate with the risk and mag- nitude of the harm resulting from unauthorized
19 20 21	tions commensurate with the risk and mag- nitude of the harm resulting from unauthorized access, use, disclosure, disruption, modification,

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1	"(ii) information systems used or op-
2	erated by an agency or by a contractor of
3	an agency or other organization on behalf
4	of an agency;
5	"(B) complying with the requirements of
6	this subchapter and related policies, procedures,
7	standards, and guidelines, including—
8	"(i) information security standards
9	and guidelines promulgated under section
10	11331 of title 40 and section 20 of the Na-
11	tional Institute of Standards and Tech-
12	nology Act (15 U.S.C. 278g-3);
13	"(ii) information security standards
14	and guidelines for national security sys-
15	tems issued in accordance with law and as
16	directed by the President; and
17	"(iii) ensuring the standards imple-
18	mented for information systems and na-
19	tional security systems of the agency are
20	complementary and uniform, to the extent
21	practicable;
22	"(C) ensuring that information security
23	management processes are integrated with
24	agency strategic and operational planning and

1	budget processes, including policies, procedures,
2	and practices described in subsection (c)(2);
3	"(D) as appropriate, maintaining secure
4	facilities that have the capability of accessing,
5	sending, receiving, and storing classified infor-
6	mation;
7	"(E) maintaining a sufficient number of
8	personnel with security clearances, at the ap-
9	propriate levels, to access, send, receive and
10	analyze classified information to carry out the
11	responsibilities of this subchapter; and
12	"(F) ensuring that information security
13	performance indicators and measures are in-
14	cluded in the annual performance evaluations of
15	all managers, senior managers, senior executive
16	service personnel, and political appointees;
17	"(2) ensure that senior agency officials provide
18	information security for the information and infor-
19	mation systems that support the operations and as-
20	sets under their control, including through—
21	"(A) assessing the risk and magnitude of
22	the harm that could result from the unauthor-
23	ized access, use, disclosure, disruption, modi-
24	fication, or destruction of such information or
25	information system;

1	"(B) determining the levels of information
2	security appropriate to protect such information
3	and information systems in accordance with
4	policies, principles, standards, and guidelines
5	promulgated under section 11331 of title 40
6	and section 20 of the National Institute of
7	Standards and Technology Act (15 U.S.C.
8	278g-3) for information security classifications
9	and related requirements;
10	"(C) implementing policies and procedures
11	to cost effectively reduce risks to an acceptable
12	level;
13	"(D) with a frequency sufficient to support
14	risk-based security decisions, testing and evalu-
15	ating information security controls and tech-
16	niques to ensure that such controls and tech-
17	niques are effectively implemented and oper-
18	ated; and
19	"(E) with a frequency sufficient to support
20	risk-based security decisions, conducting threat
21	assessments by monitoring information systems,
22	identifying potential system vulnerabilities, and
23	reporting security incidents in accordance with
24	paragraph $(3)(A)(v)$;

1	"(3) delegate to the Chief Information Officer
2	or equivalent (or a senior agency official who reports
3	to the Chief Information Officer or equivalent), who
4	is designated as the 'Chief Information Security Of-
5	ficer', the authority and primary responsibility to de-
6	velop, implement, and oversee an agencywide infor-
7	mation security program to ensure and enforce com-
8	pliance with the requirements imposed on the agency
9	under this subchapter, including—
10	"(A) overseeing the establishment and
11	maintenance of a security operations capability
12	that through automated and continuous moni-
13	toring, when possible, can—
14	"(i) detect, report, respond to, con-
15	tain, and mitigate incidents that impair in-
16	formation security and agency information
17	systems, in accordance with policy provided
18	by the Director;
19	"(ii) commensurate with the risk to
20	information security, monitor and mitigate
21	the vulnerabilities of every information sys-
22	tem within the agency;
23	"(iii) continually evaluate risks posed
24	to information collected or maintained by
25	or on behalf of the agency and information

1	systems and hold senior agency officials
2	accountable for ensuring information secu-
3	rity;
4	"(iv) collaborate with the Director and
5	appropriate public and private sector secu-
6	rity operations centers to detect, report, re-
7	spond to, contain, and mitigate incidents
8	that impact the security of information
9	and information systems that extend be-
10	yond the control of the agency; and
11	"(v) report any incident described
12	under clauses (i) and (ii) to the Federal in-
13	formation security incident center, to other
14	appropriate security operations centers,
15	and to the Inspector General of the agen-
16	cy, to the extent practicable, within 24
17	hours after discovery of the incident, but
18	no later than 48 hours after such dis-
19	covery;
20	"(B) developing, maintaining, and over-
21	seeing an agencywide information security pro-
22	gram as required by subsection (b);
23	"(C) developing, maintaining, and over-
24	seeing information security policies, procedures,
25	and control techniques to address all applicable

1	requirements, including those issued under sec-
2	tion 11331 of title 40;
3	"(D) training and overseeing personnel
4	with significant responsibilities for information
5	security with respect to such responsibilities;
6	and
7	"(E) assisting senior agency officials con-
8	cerning their responsibilities under paragraph
9	(2);
10	"(4) ensure that the agency has a sufficient
11	number of trained and cleared personnel to assist
12	the agency in complying with the requirements of
13	this subchapter, other applicable laws, and related
14	policies, procedures, standards, and guidelines;
15	"(5) ensure that the Chief Information Security
16	Officer, in consultation with other senior agency offi-
17	cials, reports periodically, but not less than annually,
18	to the agency head on—
19	"(A) the effectiveness of the agency infor-
20	mation security program;
21	"(B) information derived from automated
22	and continuous monitoring, when possible, and
23	threat assessments; and
24	"(C) the progress of remedial actions;

1	"(6) ensure that the Chief Information Security
2	Officer possesses the necessary qualifications, includ-
3	ing education, training, experience, and the security
4	clearance required to administer the functions de-
5	scribed under this subchapter; and has information
6	security duties as the primary duty of that official;
7	and
8	"(7) ensure that components of that agency es-
9	tablish and maintain an automated reporting mecha-
10	nism that allows the Chief Information Security Of-
11	ficer with responsibility for the entire agency, and all
12	components thereof, to implement, monitor, and hold
13	senior agency officers accountable for the implemen-
14	tation of appropriate security policies, procedures,
15	and controls of agency components.
16	"(b) Agency Program.—Each agency shall develop,
17	document, and implement an agencywide information se-
18	curity program, approved by the Director and consistent
19	with components across and within agencies, to provide
20	information security for the information and information
21	systems that support the operations and assets of the
22	agency, including those provided or managed by another
23	agency, contractor, or other source, that includes—
24	"(1) automated and continuous monitoring,
25	when possible, of the risk and magnitude of the

1	harm that could result from the disruption or unau-
2	thorized access, use, disclosure, modification, or de-
3	struction of information and information systems
4	that support the operations and assets of the agen-
5	$\mathrm{cy};$
6	"(2) consistent with guidance developed under
7	section 11331 of title 40, vulnerability assessments
8	and penetration tests commensurate with the risk
9	posed to agency information systems;
10	"(3) policies and procedures that—
11	"(A) cost effectively reduce information se-
12	curity risks to an acceptable level;
13	"(B) ensure compliance with—
14	"(i) the requirements of this sub-
15	chapter;
16	"(ii) policies and procedures as may
17	be prescribed by the Director, and infor-
18	mation security standards promulgated
19	pursuant to section 11331 of title 40;
20	"(iii) minimally acceptable system
21	configuration requirements, as determined
22	by the Director; and
23	"(iv) any other applicable require-
24	ments, including—

1	"(I) standards and guidelines for
2	national security systems issued in ac-
3	cordance with law and as directed by
4	the President; and
5	"(II) the National Institute of
6	Standards and Technology standards
7	and guidance;
8	"(C) develop, maintain, and oversee infor-
9	mation security policies, procedures, and control
10	techniques to address all applicable require-
11	ments, including those promulgated pursuant
12	section 11331 of title 40; and
13	"(D) ensure the oversight and training of
14	personnel with significant responsibilities for in-
15	formation security with respect to such respon-
16	sibilities;
17	"(4) with a frequency sufficient to support risk-
18	based security decisions, automated and continuous
19	monitoring, when possible, for testing and evaluation
20	of the effectiveness and compliance of information
21	security policies, procedures, and practices, includ-
22	ing—
23	"(A) controls of every information system
24	identified in the inventory required under sec-
25	tion 3505(e); and

1	"(B) controls relied on for an evaluation
2	under this section;
3	"(5) a process for planning, implementing, eval-
4	uating, and documenting remedial action to address
5	any deficiencies in the information security policies,
6	procedures, and practices of the agency;
7	"(6) with a frequency sufficient to support risk-
8	based security decisions, automated and continuous
9	monitoring, when possible, for detecting, reporting,
10	and responding to security incidents, consistent with
11	standards and guidelines issued by the National In-
12	stitute of Standards and Technology, including—
13	"(A) mitigating risks associated with such
14	incidents before substantial damage is done;
15	"(B) notifying and consulting with the
16	Federal information security incident center
17	and other appropriate security operations re-
18	sponse centers; and
19	"(C) notifying and consulting with, as ap-
20	propriate—
21	"(i) law enforcement agencies and rel-
22	evant Offices of Inspectors General; and
23	"(ii) any other agency, office, or enti-
24	ty, in accordance with law or as directed
25	by the President; and

1	"(7) plans and procedures to ensure continuity
2	of operations for information systems that support
3	the operations and assets of the agency.
4	"(c) Agency Reporting.—Each agency shall—
5	"(1) submit an annual report on the adequacy
6	and effectiveness of information security policies,
7	procedures, and practices, and compliance with the
8	requirements of this subchapter, including compli-
9	ance with each requirement of subsection (b) to—
10	"(A) the Director;
11	"(B) the Committee on Homeland Security
12	and Governmental Affairs of the Senate;
13	"(C) the Committee on Oversight and Gov-
14	ernment Reform of the House of Representa-
15	tives;
16	"(D) other appropriate authorization and
17	appropriations committees of Congress; and
18	"(E) the Comptroller General;
19	"(2) address the adequacy and effectiveness of
20	information security policies, procedures, and prac-
21	tices in plans and reports relating to—
22	"(A) annual agency budgets;
23	"(B) information resources management of
24	this subchapter;

1	"(C) information technology management
2	under this chapter;
3	"(D) program performance under sections
4	1105 and 1115 through 1119 of title 31, and
5	sections 2801 and 2805 of title 39;
6	"(E) financial management under chapter
7	9 of title 31, and the Chief Financial Officers
8	Act of 1990 (31 U.S.C. 501 note; Public Law
9	101-576);
10	"(F) financial management systems under
11	the Federal Financial Management Improve-
12	ment Act of 1996 (31 U.S.C. 3512 note); and
13	"(G) internal accounting and administra-
14	tive controls under section 3512 of title 31; 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 of 1996 (31 U.S.C.
24	3512 note).

1	"§ 3555. Federal information security incident center
2	"(a) In General.—The Director shall ensure the
3	operation of a central Federal information security inci-
4	dent center to—
5	"(1) provide timely technical assistance to oper-
6	ators of agency information systems regarding secu-
7	rity incidents, including guidance on detecting and
8	handling information security incidents;
9	"(2) compile and analyze information about in-
10	cidents that threaten information security;
11	"(3) inform operators of agency information
12	systems about current and potential information se-
13	curity threats, and vulnerabilities; and
14	"(4) consult with the National Institute of
15	Standards and Technology, agencies or offices oper-
16	ating or exercising control of national security sys-
17	tems (including the National Security Agency), and
18	such other agencies or offices in accordance with law
19	and as directed by the President regarding informa-
20	tion security incidents and related matters.
21	"(b) National Security Systems.—Each agency
22	operating or exercising control of a national security sys-
23	tem shall share information about information security in-
24	cidents, threats, and vulnerabilities with the Federal infor-
25	mation security incident center to the extent consistent
26	with standards and guidelines for national security sys-

1	tems, issued in accordance with law and as directed by
2	the President.
3	"(c) REVIEW AND APPROVAL.—The Director shall
4	review and approve the policies, procedures, and guidance
5	established in this subchapter to ensure that the incident
6	center has the capability to effectively and efficiently de-
7	tect, correlate, respond to, contain, mitigate, and reme-
8	diate incidents that impair the adequate security of the
9	information systems of more than one agency. To the ex-
10	tent practicable, the capability shall be continuous and
11	technically automated.
12	"§ 3556. National security systems
13	"The head of each agency operating or exercising
14	control of a national security system shall be responsible
15	for ensuring that the agency—
16	"(1) provides information security protections
17	commensurate with the risk and magnitude of the
18	harm resulting from the unauthorized access, use,
19	disclosure, disruption, modification, or destruction of
20	the information contained in such system;
21	"(2) implements information security policies
22	and practices as required by standards and onide
	and practices as required by standards and guide-
23	lines for national security systems, issued in accord-

1	"(3) complies with the requirements of this sub-
2	chapter.".
3	SEC. 3. TECHNICAL AND CONFORMING AMENDMENTS.
4	(a) Table of Sections in Title 44.—The table
5	of sections for chapter 35 of title 44, United States Code
6	is amended by striking the matter relating to subchapters
7	II and III and inserting the following:
	"SUBCHAPTER II—INFORMATION SECURITY
	"3551. Purposes. "3552. Definitions. "3553. Authority and functions of the Director. "3554. Agency responsibilities. "3555. Federal information security incident center. "3556. National security systems.".
8	(b) Other References.—
9	(1) Section 1001(c)(1)(A) of the Homeland Se-
10	curity Act of 2002 (6 U.S.C. 511(c)(1)(A)) is
11	amended by striking "section 3532(3)" and insert-
12	ing "section 3552(b)".
13	(2) Section 2222(j)(6) of title 10, United States
14	Code, is amended by striking "section 3542(b)(2))'
15	and inserting "section 3552(b)".
16	(3) Section 2223(c)(3) of title 10, United
17	States Code, is amended, by striking "section
18	3542(b)(2))" and inserting "section 3552(b)".
19	(4) Section 2315 of title 10, United States
20	Code, is amended by striking "section 3542(b)(2)"
21	and inserting "section 3552(b)".

1	(5) Section 20 of the National Institute of
2	Standards and Technology Act (15 U.S.C. 278g-3)
3	is amended—
4	(A) in subsections $(a)(2)$ and $(e)(5)$, by
5	striking "section 3532(b)(2)" and inserting
6	"section 3552(b)"; and
7	(B) in subsection (e)(2), by striking "sec-
8	tion 3532(1)" and inserting "section 3552(b)".
9	(6) Section 8(d)(1) of the Cyber Security Re-
10	search and Development Act (15 U.S.C. 7406(d)(1))
11	is amended by striking "section 3534(b)" and in-
12	serting "section 3554(b)".
13	SEC. 4. EFFECTIVE DATE.
14	This Act (including the amendments made by this
15	Act) shall take effect 30 days after the date of the enact-
16	ment of this Act.

