# <sup>112TH CONGRESS</sup> **H. R. 4257**

To amend chapter 35 of title 44, United States Code, to revise requirements relating to Federal information security, and for other purposes.

#### IN THE HOUSE OF REPRESENTATIVES

March 26, 2012

Mr. ISSA (for himself and Mr. CUMMINGS) introduced the following bill; which was referred to the Committee on Oversight and Government Reform

# A BILL

- To amend chapter 35 of title 44, United States Code, to revise requirements relating to Federal information security, 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,

### **3** SECTION 1. SHORT TITLE.

- 4 This Act may be cited as the "Federal Information
- 5 Security Amendments Act of 2012".

6 SEC. 2. COORDINATION OF FEDERAL INFORMATION POL-7 ICY.

8 Chapter 35 of title 44, United States Code, is amend9 ed by striking subchapters II and III and inserting the
10 following:

#### "SUBCHAPTER II—INFORMATION SECURITY 1 2 **"§ 3551. Purposes** 3 "The purposes of this subchapter are to— "(1) provide a comprehensive framework for en-4 5 suring the effectiveness of information security controls over information resources that support Fed-6 7 eral operations and assets: "(2) recognize the highly networked nature of 8

9 the current Federal computing environment and pro10 vide effective Governmentwide management and
11 oversight of the related information security risks,
12 including coordination of information security efforts
13 throughout the civilian, national security, and law
14 enforcement communities assets;

15 "(3) provide for development and maintenance
16 of minimum controls required to protect Federal in17 formation and information infrastructure;

"(4) provide a mechanism for improved oversight of Federal agency information security programs and systems through a focus on automated
and continuous monitoring of agency information
systems and regular threat assessments;

23 "(5) acknowledge that commercially developed
24 information security products offer advanced, dy25 namic, robust, and effective information security so-

lutions, reflecting market solutions for the protection
 of critical information infrastructures important to
 the national defense and economic security of the
 Nation that are designed, built, and operated by the
 private sector; and

6 "(6) recognize that the selection of specific
7 technical hardware and software information secu8 rity solutions should be left to individual agencies
9 from among commercially developed products.

### 10 **"§ 3552. Definitions**

"(a) SECTION 3502 DEFINITIONS.—Except as provided under subsection (b), the definitions under section
3502 shall apply to this subchapter.

''(b) ADDITIONAL DEFINITIONS.—In this subchapter:
''(1) The term 'adequate security' means security that complies with the regulations and standards promulgated under section 11331 of title 40.

18 "(2) The term 'automated and continuous mon-19 itoring' means monitoring, with minimal human in-20 volvement, through an uninterrupted, ongoing real-21 time, or near real-time process used to determine if 22 the complete set of planned, required, and deployed 23 security controls within an information system con-24 tinue to be effective over time with rapidly changing 25 information technology and threat development.

1 "(3) 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 information the system processes, stores, or transmits or 5 6 that constitutes a violation or imminent threat of 7 violation of security policies, security procedures, or 8 acceptable use policies.

9 "(4) 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.

"(5) The term 'information security' means
protecting information and information infrastructure from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide—

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 pre23 serving authorized restrictions on access and
24 disclosure, including means for protecting per25 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	"(6) The term 'information technology' has the
8	meaning given that term in section 11101 of title
9	40.
10	((7)(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

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"(V) subject to subparagraph (B), is
critical to the direct fulfillment of military
or intelligence missions; or
"(ii) is protected at all times by procedures
established for information that have been spe-
cifically authorized under criteria established by
an Executive order or an Act of Congress to be
kept classified in the interest of national de-
fense or foreign policy.
"(B) Subparagraph (A)(i)(V) does not include a
system that is to be used for routine administrative
and business applications (including payroll, finance,
logistics, and personnel management applications).
"(8) The term 'information system' means any
equipment or interconnected system or subsystem of
equipment that is used in the automatic acquisition,
storage, manipulation, management, movement, con-
trol, display, switching, interchange, transmission, or
reception of data or information, and includes—
"(A) computers and computer networks;
"(B) ancillary equipment;
"(C) software, firmware, and related proce-
dures;
"(D) services, including support services;
and

"(E) related resources.

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2 "(9) The term 'threat assessment' means the
3 real-time or near real-time process of formally evalu4 ating the degree of threat to an information system
5 or information technology enterprise and describing
6 the nature of the threat.

### 7 "§ 3553. Authority and functions of the Director

8 "(a) IN GENERAL.—The Director shall oversee agen-9 cy information security policies and practices, including—

"(1) developing and overseeing the implementation of policies, principles, standards, and guidelines
on information security, including through ensuring
timely agency adoption of and compliance with
standards promulgated under section 11331 of title
40;

16 "(2) requiring agencies, consistent with the 17 standards promulgated under such section 11331 18 and the requirements of this subchapter, to identify 19 and provide information security protections com-20 mensurate with the risk and magnitude of the harm 21 resulting from the unauthorized access, use, disclo-22 sure, disruption, modification, or destruction of—

23 "(A) information collected or maintained
24 by or on behalf of an agency; or

1	"(B) information systems used or operated
2	by an agency or by a contractor of an agency
3	or other organization on behalf of an agency;
4	"(3) coordinating the development of standards
5	and guidelines under section 20 of the National In-
6	stitute of Standards and Technology Act (15 U.S.C.
7	278g–3) with agencies and offices operating or exer-
8	cising control of national security systems (including
9	the National Security Agency) to assure, to the max-
10	imum extent feasible, that such standards and
11	guidelines are complementary with standards and
12	guidelines developed for national security systems;
13	"(4) overseeing agency compliance with the re-
14	quirements of this subchapter, including through
15	any authorized action under section 11303 of title
16	40, to enforce accountability for compliance with
17	such requirements;
18	((5) reviewing at least annually, and approving
19	or disapproving, agency information security pro-
20	grams required under section 3554(b);
21	"(6) coordinating information security policies
22	and procedures with related information resources
23	management policies and procedures;

1	((7) overseeing the operation of the Federal in-
2	formation security incident center required under
3	section 3555; and
4	"(8) reporting to Congress no later than March
5	1 of each year on agency compliance with the re-
6	quirements of this subchapter, including—
7	"(A) an assessment of the development,
8	promulgation, and adoption of, and compliance
9	with, standards developed under section 20 of
10	the National Institute of Standards and Tech-
11	nology Act (15 U.S.C. 278g-3) and promul-
12	gated under section 11331 of title 40;
13	"(B) significant deficiencies in agency in-
14	formation security practices;
15	"(C) planned remedial action to address
16	such deficiencies; and
17	"(D) a summary of, and the views of the
18	Director on, the report prepared by the Na-
19	tional Institute of Standards and Technology
20	under section $20(d)(10)$ of the National Insti-
21	tute of Standards and Technology Act (15
22	U.S.C. 278g–3).
23	"(b) NATIONAL SECURITY SYSTEMS.—Except for the
24	authorities described in paragraphs (4) and (8) of sub-

section (a), the authorities of the Director under this sec tion shall not apply to national security systems.

3 "(c) DEPARTMENT OF DEFENSE AND CENTRAL IN-4 TELLIGENCE AGENCY SYSTEMS.—(1) The authorities of 5 the Director described in paragraphs (1) and (2) of sub-6 section (a) shall be delegated to the Secretary of Defense 7 in the case of systems described in paragraph (2) and to 8 the Director of Central Intelligence in the case of systems 9 described in paragraph (3).

10 "(2) The systems described in this paragraph 11 are systems that are operated by the Department of 12 Defense, a contractor of the Department of Defense, 13 or another entity on behalf of the Department of 14 Defense that processes any information the unau-15 thorized access, use, disclosure, disruption, modifica-16 tion, or destruction of which would have a debili-17 tating impact on the mission of the Department of 18 Defense.

19 "(3) The systems described in this paragraph 20 are systems that are operated by the Central Intel-21 ligence Agency, a contractor of the Central Intel-22 ligence Agency, or another entity on behalf of the 23 Central Intelligence Agency that processes any infor-24 mation the unauthorized access, use, disclosure, dis-25 ruption, modification, or destruction of which would

1	have a debilitating impact on the mission of the Cen-
2	tral Intelligence Agency.
3	"§ 3554. 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) information security policies,
21	principles, standards, and guidelines pro-
22	mulgated under section $11331$ of title $40$
23	and section 20 of the National Institute of
24	Standards and Technology Act (15 U.S.C.
25	278g–3);

- "(ii) information security standards 1 2 and guidelines for national security systems issued in accordance with law and as 3 directed by the President; and 4 "(iii) ensuring the standards imple-5 6 mented for information systems and na-7 tional security systems of the agency are 8 complementary and uniform, to the extent 9 practicable; "(C) ensuring that information security 10 11 management processes are integrated with 12 agency strategic and operational planning and 13 budget processes, including policies, procedures,
- "(D) as appropriate, maintaining secure
  facilities that have the capability of accessing,
  sending, receiving, and storing classified information;

and practices described in subsection (c)(2);

"(E) maintaining a sufficient number of
personnel with security clearances, at the appropriate levels, to access, send, receive and
analyze classified information to carry out the
responsibilities of this subchapter; and

24 "(F) ensuring that information security25 performance indicators and measures are in-

1	"(D) with a frequency commensurate with
2	the risk to information security, continuously
3	testing and evaluating information security con-
4	trols and techniques to ensure that such con-
5	trols and techniques are effectively implemented
6	and operated; and
7	"(E) with a frequency commensurate with
8	the risk to information security, continuously
9	conducting threat assessments by monitoring
10	information infrastructure, identifying potential
11	system vulnerabilities, and reporting security
12	incidents in accordance with paragraph
13	(3)(A)(v);
14	"(3) delegate to the Chief Information Officer
15	or equivalent (or a senior agency official who reports
16	to the Chief Information Officer or equivalent), who
17	is designated as the 'Chief Information Security Of-
18	ficer', the authority and primary responsibility to de-
19	velop, implement, and oversee an agencywide infor-
20	mation security program to ensure and enforce com-
21	pliance with the requirements imposed on the agency
22	under this subchapter, including—
23	"(A) overseeing the establishment and

maintenance of a security operations capability

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•HR 4257 IH

1	that through automated and continuous moni-
2	toring can—
3	"(i) detect, report, respond to, con-
4	tain, and mitigate incidents that impair in-
5	formation security, information systems,
6	and agency information infrastructure, in
7	accordance with policy provided by the Di-
8	rector;
9	"(ii) commensurate with the risk to
10	information security, monitor and mitigate
11	the vulnerabilities of every information sys-
12	tem within the agency information infra-
13	structure;
14	"(iii) continually evaluate risks posed
15	to information collected or maintained by
16	or on behalf of the agency and information
17	systems and hold senior agency officials
18	accountable for ensuring information secu-
19	rity;
20	"(iv) collaborate with the Director and
21	appropriate public and private sector secu-
22	rity operations centers to detect, report, re-

rity operations centers to detect, report, respond to, contain, and mitigate incidents
that impact the security of information

1	and information systems that extend be-
2	yond the control of the agency; and
3	"(v) report any incident described
4	under clauses (i) and (ii) to the appro-
5	priate security operations center and the
6	Inspector General of the agency, to the ex-
7	tent practicable, within 24 hours after dis-
8	covery of the incident, but no later than 48
9	hours after such discovery;
10	"(B) developing, maintaining, and over-
11	seeing an agencywide information security pro-
12	gram as required by subsection (b);
13	"(C) developing, maintaining, and over-
14	seeing information security policies, procedures,
15	and control techniques to address all applicable
16	requirements, including those issued under sec-
17	tion 11331 of title 40;
18	"(D) training and overseeing personnel
19	with significant responsibilities for information
20	security with respect to such responsibilities;
21	and
22	"(E) assisting senior agency officials con-
23	cerning their responsibilities under paragraph
24	(2);

1	"(4) ensure that the agency has a sufficient
2	number of trained and cleared personnel to assist
3	the agency in complying with the requirements of
4	this subchapter, other applicable laws, and related
5	policies, procedures, standards, and guidelines;
6	"(5) ensure that the Chief Information Security
7	Officer, in consultation with other senior agency offi-
8	cials, reports periodically, but not less than annually,
9	to the agency head on—
10	"(A) the effectiveness of the agency infor-
11	mation security program;
12	"(B) information derived from automated
13	and continuous monitoring and threat assess-
14	ments; and
15	"(C) the progress of remedial actions;
16	"(6) ensure that the Chief Information Security
17	Officer possesses the necessary qualifications, includ-
18	ing education, professional certifications, training,
19	experience, and the security clearance required to
20	administer the functions described under this sub-
21	chapter; and has information security duties as the
22	primary duty of that official;
23	((7) ensure that components of that agency es-
24	tablish and maintain an automated reporting mecha-
25	nism that allows the Chief Information Security Of-

ficer with responsibility for the entire agency, and all
 components thereof, to implement, monitor, and hold
 senior agency officers accountable for the implemen tation of appropriate security policies, procedures,
 and controls of agency components; and

6 "(8) delegate to agency officials who are re-7 sponsible for particular agency systems or sub-8 systems the responsibility to ensure and enforce 9 compliance with all requirements of the agency's in-10 formation security program in consultation with the 11 Chief Information Security Officer designated under 12 paragraph (3).

13 "(b) AGENCY PROGRAM.—Each agency shall develop, 14 document, and implement an agencywide information se-15 curity program, approved by the Director and consistent with components across and within agencies, to provide 16 17 information security for the information and information 18 infrastructure that support the operations and assets of 19 the agency, including those provided or managed by another agency, contractor, or other source, that includes— 20

21 "(1) automated and continuous monitoring—

"(A) of the risk and magnitude of the
harm that could result from the disruption or
unauthorized access, use, disclosure, modification, or destruction of information and informa-

1	tion systems that support the operations and
2	assets of the agency; and
3	"(B) that assesses whether information or
4	information systems should be removed or mi-
5	grated to more secure networks or standards
6	and make recommendations to the head of the
7	agency and the Director based on that assess-
8	ment;
9	"(2) consistent with guidance developed under
10	section 11331 of title 40, vulnerability assessments
11	and penetration tests commensurate with the risk
12	posed to an agency information infrastructure;
13	"(3) policies and procedures that—
14	"(A) mitigate and, to the extent prac-
15	ticable, remediate information security
16	vulnerabilities based on the risk posed to the
17	agency;
18	"(B) cost effectively reduce information se-
19	curity risks to an acceptable level;
20	"(C) ensure compliance with—
21	"(i) the requirements of this sub-
22	chapter;
23	"(ii) policies and procedures as may
24	be prescribed by the Director, and infor-

1	mation security standards promulgated
2	pursuant to section 11331 of title 40;
3	"(iii) minimally acceptable system
4	configuration requirements, as determined
5	by the Director; and
6	"(iv) any other applicable require-
7	ments, including—
8	"(I) standards and guidelines for
9	national security systems issued in ac-
10	cordance with law and as directed by
11	the President;
12	"(II) the National Institute of
13	Standards and Technology guidance;
14	and
15	"(III) the Chief Information Offi-
16	cers Council recommended ap-
17	proaches;
18	"(D) develop, maintain, and oversee infor-
19	mation security policies, procedures, and control
20	techniques to address all applicable require-
21	ments, including those promulgated pursuant
22	section 11331 of title 40; and
23	"(E) ensure the oversight and training of
24	personnel with significant responsibilities for in-

formation security with respect to such respon- sibilities; "(4) consistent with the risk to information se-
"(4) consistent with the risk to information se-
curity, automated and continuous monitoring for
testing, and evaluation of the effectiveness and com-
pliance of information security policies, procedures,
and practices, including—
"(A) management, operational, and tech-
nical controls of every information system iden-
tified in the inventory required under section
3505(c); and
"(B) management, operational, and tech-
nical controls relied on for an evaluation under
this section;
"(5) a process for planning, implementing, eval-
uating, and documenting remedial action to address
any deficiencies in the information security policies,
procedures, and practices of the agency;
"(6) consistent with the risk to information se-
curity, automated and continuous monitoring for de-
tecting, reporting, and responding to security inci-
dents, consistent with standards and guidelines
issued by the Director, including—
"(A) mitigating risks associated with such
incidents before substantial damage is done;

1	"(B) notifying and consulting with the ap-
2	propriate security operations response center;
3	and
4	"(C) notifying and consulting with, as ap-
5	propriate—
6	"(i) law enforcement agencies and rel-
7	evant Offices of Inspectors General; and
8	"(ii) any other agency, office, or enti-
9	ty, in accordance with law or as directed
10	by the President; and
11	"(7) plans and procedures to ensure continuity
12	of operations for information infrastructure that
13	support the operations and assets of the agency.
14	"(c) AGENCY REPORTING.—Each agency shall—
15	((1) submit an annual report on the adequacy
16	and effectiveness of information security policies,
17	procedures, and practices, and compliance with the
18	requirements of this subchapter, including compli-
19	ance with each requirement of subsection (b) to—
20	"(A) the Director;
21	"(B) the Committee on Homeland Security
22	and Governmental Affairs of the Senate;
23	"(C) the Committee on Oversight and Gov-
24	ernment Reform of the House of Representa-
25	tives;

1	"(D) other appropriate authorization and
2	appropriations committees of Congress; and
3	"(E) the Comptroller General;
4	((2)) address the adequacy and effectiveness of
5	information security policies, procedures, and prac-
6	tices in plans and reports relating to—
7	"(A) annual agency budgets;
8	"(B) information resources management of
9	this subchapter;
10	"(C) information technology management
11	under this chapter;
12	"(D) program performance under sections
13	1105 and 1115 through 1119 of title 31, and
14	sections 2801 and 2805 of title 39;
15	"(E) financial management under chapter
16	9 of title 31, and the Chief Financial Officers
17	Act of 1990 (31 U.S.C. 501 note; Public Law
18	101–576);
19	"(F) financial management systems under
20	the Federal Financial Management Improve-
21	ment Act of 1996 (31 U.S.C. 3512 note); and
22	"(G) internal accounting and administra-
23	tive controls under section 3512 of title 31; and

1	"(3) report any significant deficiency in a pol-
2	icy, procedure, or practice identified under para-
3	graph (1) or (2)—
4	"(A) as a material weakness in reporting
5	under section 3512 of title 31; and
6	"(B) if relating to financial management
7	systems, as an instance of a lack of substantial
8	compliance under the Federal Financial Man-
9	agement Improvement Act of 1996 (31 U.S.C.
10	3512 note).
11	"§3555. Federal information security incident center
12	"(a) IN GENERAL.—The Director shall ensure the
13	operation of a central Federal information security inci-
14	dent center to—
15	"(1) provide timely technical assistance to oper-
16	ators of agency information systems and information
17	infrastructure regarding security incidents, including
18	guidance on detecting and handling information se-
19	curity incidents;
20	"(2) compile and analyze information about in-
21	cidents that threaten information security;
22	"(3) inform operators of agency information
23	systems and information infrastructure about cur-
24	rent and potential information security threats, and
25	vulnerabilities; and

"(4) consult with the National Institute of
Standards and Technology, agencies or offices operating or exercising control of national security systems (including the National Security Agency), and
such other agencies or offices in accordance with law
and as directed by the President regarding information security incidents and related matters.

8 "(b) NATIONAL SECURITY SYSTEMS.—Each agency 9 operating or exercising control of a national security sys-10 tem shall share information about information security incidents, threats, and vulnerabilities with the Federal infor-11 mation security incident center to the extent consistent 12 13 with standards and guidelines for national security systems, issued in accordance with law and as directed by 14 15 the President.

"(c) REVIEW AND APPROVAL.—The Director shall 16 review and approve the policies, procedures, and guidance 17 18 established in this subchapter to ensure that the incident center has the capability to effectively and efficiently de-19 20 tect, correlate, respond to, contain, mitigate, and reme-21 diate incidents that impair the adequate security of the 22 information systems and information infrastructure of 23 more than one agency. To the extent practicable, the capa-24 bility shall be continuous and technically automated.

1 "§ 3556. National security systems

2 "The head of each agency operating or exercising
3 control of a national security system shall be responsible
4 for ensuring that the agency—

5 "(1) provides information security protections
6 commensurate with the risk and magnitude of the
7 harm resulting from the unauthorized access, use,
8 disclosure, disruption, modification, or destruction of
9 the information contained in such system;

"(2) implements information security policies
and practices as required by standards and guidelines for national security systems, issued in accordance with law and as directed by the President; and
"(3) complies with the requirements of this subchapter.".

#### 16 SEC. 3. TECHNICAL AND CONFORMING AMENDMENTS.

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

"SUBCHAPTER II—INFORMATION SECURITY

"3552. Definitions.

"3553. Authority and functions of the Director.

- "3554. Agency responsibilities.
- ``3555. Federal information security incident center.

"3556. National security systems.".

#### 21 (b) OTHER REFERENCES.—

<sup>&</sup>quot;3551. Purposes.

1	(1) Section $1001(c)(1)(A)$ of the Homeland Se-
2	curity Act of 2002 (6 U.S.C. $511(c)(1)(A)$ ) is
3	amended by striking "section 3532(3)" and insert-
4	ing "section 3552(b)".
5	(2) Section 2222(j)(6) of title 10, United States
6	Code, is amended by striking "section $3542(b)(2)$ )"
7	and inserting "section 3552(b)".
8	(3) Section $2223(c)(3)$ of title 10, United
9	States Code, is amended, by striking "section
10	3542(b)(2))" and inserting "section 3552(b)".
11	(4) Section 2315 of title 10, United States
12	Code, is amended by striking "section $3542(b)(2)$ "
13	and inserting "section 3552(b)".
14	(5) Section 20 of the National Institute of
15	Standards and Technology Act (15 U.S.C. 278g–3)
16	is amended—
17	(A) in subsections $(a)(2)$ and $(e)(5)$ , by
18	striking "section $3532(b)(2)$ " and inserting
19	"section 3552(b)"; and
20	(B) in subsection $(e)(2)$ , by striking "sec-
21	tion $3532(1)$ " and inserting "section $3552(b)$ ".
22	(6) Section $8(d)(1)$ of the Cyber Security Re-
23	search and Development Act (15 U.S.C. $7406(d)(1)$ )
24	is amended by striking "section 3534(b)" and in-
25	serting "section 3554(b)".

## 1 SEC. 4. EFFECTIVE DATE.

2 This Act (including the amendments made by this3 Act) shall take effect 30 days after the date of the enact-4 ment of this Act.

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