112TH CONGRESS 2D SESSION



To enhance the security and resiliency of the cyber and communications infrastructure of the United States.

# IN THE SENATE OF THE UNITED STATES

Mr. LIEBERMAN (for himself, Ms. COLLINS, Mr. ROCKEFELLER, Mrs. FEIN-STEIN, and Mr. CARPER) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

# A BILL

To enhance the security and resiliency of the cyber and communications infrastructure of the United States.

- 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; TABLE OF CONTENTS.

- 4 (a) SHORT TITLE.—This Act may be cited as the
- 5 "Cybersecurity Act of 2012" or the "CSA2012".
- 6 (b) TABLE OF CONTENTS.—The table of contents for

7 this Act is as follows:

Sec. 1. Short title; table of contents. Sec. 2. Definitions.

TITLE I—PUBLIC-PRIVATE PARTNERSHIP TO PROTECT CRITICAL INFRASTRUCTURE

- Sec. 101. National Cybersecurity Council.
- Sec. 102. Inventory of critical infrastructure.
- Sec. 103. Voluntary cybersecurity practices.
- Sec. 104. Voluntary cybersecurity program for critical infrastructure.
- Sec. 105. Rules of construction.
- Sec. 106. Protection of information.
- Sec. 107. Annual assessment of cybersecurity.
- Sec. 108. International cooperation.
- Sec. 109. Effect on other laws.
- Sec. 110. Definitions.

## TITLE II—FEDERAL INFORMATION SECURITY MANAGEMENT AND CONSOLIDATING RESOURCES

- Sec. 201. FISMA Reform.
- Sec. 202. Management of information technology.
- Sec. 203. Savings provisions.
- Sec. 204. Consolidation of existing departmental cyber resources and authorities.

## TITLE III—RESEARCH AND DEVELOPMENT

- Sec. 301. Federal cybersecurity research and development.
- Sec. 302. Homeland security cybersecurity research and development.
- Sec. 303. Research centers for cybersecurity.
- Sec. 304. Centers of excellence.

#### TITLE IV—EDUCATION, WORKFORCE, AND AWARENESS

- Sec. 401. Definitions.
- Sec. 402. Education and awareness.
- Sec. 403. National cybersecurity competition and challenge.
- Sec. 404. Federal Cyber Scholarship-for-Service program.
- Sec. 405. Assessment of cybersecurity Federal workforce.
- Sec. 406. Federal cybersecurity occupation classifications.
- Sec. 407. Training and education of Federal employees.
- Sec. 408. National Center for Cybersecurity and Communications acquisition authorities.
- Sec. 409. Reports on cyber incidents against Government networks.
- Sec. 410. Reports on prosecution for cybercrime.
- Sec. 411. Report on research relating to secure domain.
- Sec. 412. Report on preparedness of Federal courts to promote cybersecurity.
- Sec. 413. Report on impediments to public awareness.
- Sec. 414. Report on protecting the electrical grid of the United States.
- Sec. 415. Marketplace information.

## TITLE V—FEDERAL ACQUISITION RISK MANAGEMENT STRATEGY

- Sec. 501. Federal acquisition risk management strategy.
- Sec. 502. Amendments to Clinger-Cohen provisions to enhance agency planning for information security needs.

#### TITLE VI—INTERNATIONAL COOPERATION

- Sec. 601. Definitions.
- Sec. 602. Findings.
- Sec. 603. Sense of Congress.

- Sec. 604. Coordination of international cyber issues within the United States Government.
- Sec. 605. Consideration of cybercrime in foreign policy and foreign assistance programs.

### TITLE VII—INFORMATION SHARING

- Sec. 701. Affirmative authority to monitor and defend against cybersecurity threats.
- Sec. 702. Voluntary disclosure of cybersecurity threat indicators among private entities.
- Sec. 703. Cybersecurity exchanges.
- Sec. 704. Voluntary disclosure of cybersecurity threat indicators to a cybersecurity exchange.
- Sec. 705. Sharing of classified cybersecurity threat indicators.
- Sec. 706. Limitation on liability and good faith defense for cybersecurity activities.
- Sec. 707. Construction and federal preemption.
- Sec. 708. Definitions.

# 1 SEC. 2. DEFINITIONS.

2 In this Act:

3 (1) CATEGORY OF CRITICAL CYBER INFRA4 STRUCTURE.—The term "category of critical cyber
5 infrastructure" means a category identified by the
6 Council as critical cyber infrastructure in accordance
7 with the procedure established under section 102.

8 (2) COMMERCIAL INFORMATION TECHNOLOGY
9 PRODUCT.—The term "commercial information tech10 nology product" means a commercial item that orga11 nizes or communicates information electronically.

(3) COMMERCIAL ITEM.—The term "commercial item" has the meaning given the term in section
103 of title 41, United States Code.

15 (4) COUNCIL.—The term "Council" means the
16 National Cybersecurity Council established under
17 section 101.

(5) CRITICAL CYBER INFRASTRUCTURE.—The
 term "critical cyber infrastructure" means critical
 infrastructure identified by the Council under sec tion 102(b)(3)(A).

5 (6) CRITICAL INFRASTRUCTURE.—The term
6 "critical infrastructure" has the meaning given that
7 term in section 1016(e) of the USA PATRIOT Act
8 (42 U.S.C. 5195c(e)).

9 (7) CRITICAL INFRASTRUCTURE PARTNERSHIP 10 ADVISORY COUNCIL.—The term "Critical Infrastruc-11 ture Partnership Advisory Council" means the Crit-12 ical Infrastructure Partnership Advisory Council es-13 tablished by the Department under section 871 of 14 the Homeland Security Act of 2002 (6 U.S.C. 451) 15 to coordinate critical infrastructure protection activi-16 ties within the Federal Government and with the 17 private sector and State, local, territorial, and tribal 18 governments.

19 (8) DEPARTMENT.—The term "Department"
20 means the Department of Homeland Security.

(9) FEDERAL AGENCY.—The term "Federal agency" has the meaning given the term "agency"
in section 3502 of title 44, United States Code.

1	(10) Federal information infrastruc-
2	TURE.—The term "Federal information infrastruc-
3	ture"—
4	(A) means information and information
5	systems that are owned, operated, controlled, or
6	licensed for use by, or on behalf of, any Federal
7	agency, including information systems used or
8	operated by another entity on behalf of a Fed-
9	eral agency; and
10	(B) does not include—
11	(i) a national security system; or
12	(ii) information and information sys-
13	tems that are owned, operated, controlled,
14	or licensed solely for use by, or on behalf
15	of, the Department of Defense, a military
16	department, or an element of the intel-
17	ligence community.
18	(11) INCIDENT.—The term "incident" has the
19	meaning given that term in section 3552 of title 44,
20	United States Code, as added by section 201 of this
21	Act.
22	(12) INFORMATION INFRASTRUCTURE.—The
23	term "information infrastructure" means the under-
24	lying framework that information systems and assets
25	rely on to process, transmit, receive, or store infor-

1 mation electronically, including programmable elec-2 tronic devices, communications networks, and indus-3 trial or supervisory control systems and any associ-4 ated hardware, software, or data. 5 (13) INFORMATION SHARING AND ANALYSIS OR-GANIZATION.—The term "Information Sharing and 6 7 Analysis Organization" has the meaning given that 8 term in section 212 of the Homeland Security Act 9 of 2002 (6 U.S.C. 131). 10 (14) INFORMATION SYSTEM.—The term "infor-11 mation system" has the meaning given that term in 12 section 3502 of title 44, United States Code. 13 (15) INSTITUTION OF HIGHER EDUCATION. 14 The term "institution of higher education" has the 15 meaning given that term in section 102 of the High-16 er Education Act of 1965 (20 U.S.C. 1002). 17 (16) INTELLIGENCE COMMUNITY.—The term 18 "intelligence community" has the meaning given 19 that term under section 3(4) of the National Secu-20 rity Act of 1947 (50 U.S.C. 401a(4)). (17) MEMBER AGENCY.—The term "member 21 22 agency" means a Federal agency from which a mem-23 ber of the Council is appointed.

1	(18) NATIONAL INFORMATION INFRASTRUC-
2	TURE.—The term "national information infrastruc-
3	ture" means information and information systems—
4	(A) that are owned, operated, or con-
5	trolled, in whole or in part, within or from the
6	United States; and
7	(B) that are not owned, operated, con-
8	trolled, or licensed for use by a Federal agency.
9	(19) NATIONAL LABORATORY.—The term "na-
10	tional laboratory" has the meaning given the term in
11	section 2 of the Energy Policy Act of $2005$ (42)
12	U.S.C. 15801).
13	(20) NATIONAL SECURITY SYSTEM.—The term
14	"national security system" has the meaning given
15	that term in section 3552 of title 44, United States
16	Code, as added by section 201 of this Act.
17	(21) OWNER.—The term "owner"—
18	(A) means an entity that owns critical in-
19	frastructure; and
20	(B) does not include a company contracted
21	by the owner to manage, run, or operate that
22	critical infrastructure, or to provide a specific
23	information technology product or service that
24	is used or incorporated into that critical infra-
25	structure.

1	(22) Operator.—The term "operator"—
2	(A) means an entity that manages, runs,
3	or operates, in whole or in part, the day-to-day
4	operations of critical infrastructure; and
5	(B) may include the owner of critical infra-
6	structure.
7	(23) Secretary.—The term "Secretary"
8	means the Secretary of Homeland Security.
9	(24) SIGNIFICANT CYBER INCIDENT.—The term
10	"significant cyber incident" means an incident re-
11	sulting in, or an attempted to cause an incident
12	that, if successful, would have resulted in—
13	(A) the exfiltration of data that is essential
14	to the operation of critical cyber infrastructure;
15	or
16	(B) the defeat of an operational control or
17	technical control, as those terms are defined in
18	section 708, essential to the security or oper-
19	ation of critical cyber infrastructure.
20	TITLE I—PUBLIC-PRIVATE PART-
21	NERSHIP TO PROTECT CRIT-
22	ICAL INFRASTRUCTURE
23	SEC. 101. NATIONAL CYBERSECURITY COUNCIL.
24	(a) IN GENERAL.—There is established a National
25	Cybersecurity Council.

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(b) RESPONSIBILITIES.—The Council shall—

2 (1) conduct sector-by-sector risk assessments in
3 partnership with owners and operators, private sec4 tor entities, relevant Federal agencies, and appro5 priate non-governmental entities and institutions of
6 higher education;

7 (2) identify categories of critical cyber infra8 structure, in partnership with relevant Federal agen9 cies, owners and operators, other appropriate private
10 sector entities, and appropriate non-governmental
11 entities and institutions of higher education;

12 (3) coordinate the adoption of private-sector 13 recommended voluntary outcome-based cybersecurity 14 practices with owners and operators, private sector 15 entities, relevant Federal agencies, the Critical In-16 frastructure Partnership Advisory Council, institu-17 tions of higher education, and appropriate non-gov-18 ernmental cybersecurity experts, in accordance with 19 this title;

20 (4) establish an incentives-based voluntary cy21 bersecurity program for critical infrastructure to en22 courage owners to adopt voluntary outcome-based
23 cybersecurity practices under section 103;

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1	(5) develop procedures to inform owners and
2	operators of cyber threats, vulnerabilities, and con-
3	sequences; and
4	(6) upon request and to the maximum extent
5	possible, provide any technical guidance or assist-
6	ance to owners and operators consistent with this
7	title.
8	(c) PROCEDURES.—The President shall establish pro-
9	cedures, consistent with this section, for the operation of
10	the Council, which shall include procedures that—
11	(1) prescribe the responsibilities of the Council
12	and the member agencies;
13	(2) ensure the timely implementation of deci-
14	sions of the Council;
15	(3) delegate authority to the Chairperson to
16	take action to fulfill the responsibilities of the Coun-
17	cil if—
18	(A) the Council is not fulfilling the respon-
19	sibilities of the Council in a timely fashion; or
20	(B) necessary to prevent or mitigate an
21	imminent cybersecurity threat.
22	(d) Membership.—The Council shall be comprised
23	of appropriate representatives appointed by the President
24	from—
25	(1) the Department of Commerce;

1	(2) the Department of Defense;
2	(3) the Department of Justice;
3	(4) the intelligence community;
4	(5) sector-specific Federal agencies, as appro-
5	priate;
6	(6) Federal agencies with responsibility for reg-
7	ulating the security of critical cyber infrastructure,
8	as appropriate; and
9	(7) the Department.
10	(e) COORDINATION.—The Council shall coordinate
11	the activities of the Council with—
12	(1) appropriate representatives of the private
13	sector; and
14	(2) owners and operators.
15	(f) CHAIRPERSON.—
16	(1) IN GENERAL.—The Secretary shall serve as
17	Chairperson of the Council (referred to in this sec-
18	tion as the "Chairperson").
19	(2) Responsibilities of the chair-
20	PERSON.—The Chairperson shall—
21	(A) ensure the responsibilities of the Coun-
22	cil are expeditiously fulfilled;
23	(B) provide expertise and support to the
24	
27	Council; and

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1 (C) provide recommendations to the Coun-2 cil.

3 (g) PARTICIPATION OF SECTOR-SPECIFIC FEDERAL 4 AGENCIES AND FEDERAL REGULATORY AGENCIES.—A 5 sector-specific Federal agency and a Federal agency with responsibility for regulating the security of critical cyber 6 7 infrastructure shall participate on the Council on matters 8 directly relating to the sector of critical infrastructure for 9 which the Federal agency has responsibility to ensure that 10 any cybersecurity practice adopted by the Council under 11 section 103—

(1) does not contradict any regulation or compulsory standard in effect before the adoption of the
cybersecurity practice; and

(2) to the extent possible, complements or otherwise improves the regulation or compulsory standard described in paragraph (1).

18 SEC. 102. INVENTORY OF CRITICAL INFRASTRUCTURE.

19 (a) RISK ASSESSMENTS.—

20 (1) IN GENERAL.—

21 (A) DESIGNATION OF MEMBER AGENCY.—
22 The Council shall designate a member agency
23 to conduct top-level cybersecurity assessments
24 of cyber risks to critical infrastructure with vol-

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untary participation from private sector enti ties.

(B) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to give new authority to a Federal agency to require owners or operators to provide information to the Federal Government.

8 (2)RESPONSIBILITY.—The member agency 9 designated under paragraph (1), in consultation with 10 owners and operators, the Critical Infrastructure 11 Partnership Advisory Council, and appropriate In-12 formation Sharing and Analysis Organizations, and 13 in coordination with other member agencies, the in-14 telligence community, and the Department of Com-15 merce, shall—

16 (A) not later than 180 days after the date 17 of enactment of this Act, conduct a top-level as-18 of the cybersecurity sessment threats, 19 vulnerabilities, and consequences and the prob-20 ability of a catastrophic incident and associated 21 risk across all critical infrastructure sectors to 22 determine which sectors pose the greatest im-23 mediate risk, in order to guide the allocation of 24 resources for the implementation of this Act; 25 and

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1	(B) beginning with the highest priority sec-
2	tors identified under subparagraph (A), con-
3	duct, on an ongoing, sector-by-sector basis,
4	cyber risk assessments of the threats to,
5	vulnerabilities of, and consequences of a cyber
6	attack on critical infrastructure.
7	(3) Voluntary input of owners and oper-
8	ATORS.—The member agency designated under
9	paragraph (1) shall—
10	(A) establish a process under which owners
11	and operators and other relevant private sector
12	experts may provide input into the risk assess-
13	ments conducted under this section; and
14	(B) seek and incorporate private sector ex-
15	pertise available through established public-pri-
16	vate partnerships, including the Critical Infra-
17	structure Partnership Advisory Council and ap-
18	propriate Information Sharing and Analysis Or-
19	ganizations.
20	(4) PROTECTION OF INFORMATION.—Any infor-
21	mation submitted as part of the process established
22	under paragraph (3) shall be protected in accord-
23	ance with section 106.
24	(5) SUBMISSION OF RISK ASSESSMENTS.—The
25	Council shall submit each risk assessment conducted

1	under this section, in a classified or unclassified
2	form as necessary, to—
3	(A) the President;
4	(B) appropriate Federal agencies; and
5	(C) appropriate congressional committees.
6	(b) Identification of Critical Cyber Infra-
7	STRUCTURE CATEGORIES.—
8	(1) IN GENERAL.—The Council, in consultation
9	with owners and operators, the Critical Infrastruc-
10	ture Partnership Advisory Council, appropriate In-
11	formation Sharing and Analysis Organizations, and
12	other appropriate representatives of State and local
13	governments, shall establish procedures to identify
14	categories of critical cyber infrastructure within each
15	sector of critical infrastructure for the purposes of
16	this Act.
17	(2) DUTIES.—In establishing the procedure
18	under paragraph (1), the Council shall—
19	(A) prioritize efforts based on the
20	prioritization established under subsection (a);
21	(B) incorporate, to the extent practicable,
22	the input of owners and operators, the Critical
23	Infrastructure Partnership Advisory Council,
24	appropriate Information Sharing and Analysis
25	Organizations, and other appropriate represent-

1	atives of the private sector and State and local
2	governments;
3	(C) develop a voluntary mechanism for
4	owners to submit information to assist the
5	Council in making determinations under this
6	section;
7	(D) inform owners and operators of the
8	criteria used to identify categories of critical
9	cyber infrastructure;
10	(E) establish procedures for an owner of
11	critical infrastructure identified as critical cyber
12	infrastructure to challenge the identification;
13	(F) select a member agency to make rec-
14	ommendations to the Council on the identifica-
15	tion of categories of critical cyber infrastruc-
16	ture; and
17	(G) periodically review and update identi-
18	fications under this subsection.
19	(3) Identification requirements.—The
20	Council shall—
21	(A) identify categories of critical cyber in-
22	frastructure within each sector of critical infra-
23	structure and identify owners of critical infra-
24	structure within each category of critical cyber
25	infrastructure;

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1	(B) only identify a category of critical in-
2	frastructure as critical cyber infrastructure if
3	damage to or unauthorized access to such crit-
4	ical infrastructure could reasonably result in—
5	(i) the interruption of life-sustaining
6	services, including energy, water, transpor-
7	tation, emergency services, or food, suffi-
8	cient to cause—
9	(I) a mass casualty event; or
10	(II) mass evacuations;
11	(ii) catastrophic economic damage to
12	the United States including—
13	(I) failure or substantial disrup-
14	tion of a financial market of the
15	United States;
16	(II) incapacitation or sustained
17	disruption of a transportation system;
18	or
19	(III) other systemic, long-term
20	damage to the economy of the United
21	States; or
22	(iii) severe degradation of national se-
23	curity or national security capabilities, in-
24	cluding intelligence and defense functions;
25	and

1	(C) consider the sector-by-sector risk as-
2	sessments developed in accordance with sub-
3	section (a).
4	(4) INCIDENT REPORTING.—The Council shall
5	establish procedures under which each owner of crit-
6	ical cyber infrastructure shall report significant
7	cyber incidents affecting critical cyber infrastruc-
8	ture.
9	(5) LIMITATIONS.—The Council may not iden-
10	tify as a category of critical cyber infrastructure
11	under this section—
12	(A) critical infrastructure based solely on
13	activities protected by the first amendment to
14	the Constitution of the United States;
15	(B) an information technology product
16	based solely on a finding that the product is ca-
17	pable of, or is actually, being used in critical
18	cyber infrastructure; or
19	(C) a commercial item that organizes or
20	communicates information electronically.
21	(6) NOTIFICATION OF IDENTIFICATION OF CAT-
22	EGORY OF CRITICAL CYBER INFRASTRUCTURE.—Not
23	later than 10 days after the Council identifies a cat-
24	egory of critical cyber infrastructure under this sec-

1	tion the Council shall notify the volument owners of
	tion, the Council shall notify the relevant owners of
2	the identified critical cyber infrastructure.
3	(7) DEFINITION.—In this subsection, the term
4	"damage" has the meaning given that term in sec-
5	tion 1030(e) of title 18, United States Code.
6	(c) Congressional Notice and Opportunity for
7	DISAPPROVAL.—
8	(1) NOTIFICATION.—Not later than 10 days
9	after the date on which the Council identifies a cat-
10	egory of critical infrastructure as critical cyber infra-
11	structure under this section, the Council shall—
12	(A) notify Congress of the identification;
13	and
14	(B) submit to Congress a report explaining
1 4	(D) sushing to congress a report explaining
15	the basis for the identification.
15	the basis for the identification.
15 16	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE-
15 16 17	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE- VIEW.—The identification of a category of critical
15 16 17 18	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE- VIEW.—The identification of a category of critical infrastructure as critical cyber infrastructure shall
15 16 17 18 19	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE- VIEW.—The identification of a category of critical infrastructure as critical cyber infrastructure shall not take effect for purposes of this title until the
15 16 17 18 19 20	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE- VIEW.—The identification of a category of critical infrastructure as critical cyber infrastructure shall not take effect for purposes of this title until the date that is 60 days after the date on which the
<ol> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE- VIEW.—The identification of a category of critical infrastructure as critical cyber infrastructure shall not take effect for purposes of this title until the date that is 60 days after the date on which the Council notifies Congress under paragraph (1).
<ol> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	the basis for the identification. (2) OPPORTUNITY FOR CONGRESSIONAL RE- VIEW.—The identification of a category of critical infrastructure as critical cyber infrastructure shall not take effect for purposes of this title until the date that is 60 days after the date on which the Council notifies Congress under paragraph (1). SEC. 103. VOLUNTARY CYBERSECURITY PRACTICES.

council shall propose to the Council voluntary outcome based cybersecurity practices (referred to in this section
 as "cybersecurity practices") sufficient to effectively reme diate or mitigate cyber risks identified through an assess ment conducted under section 102(a) comprised of—

6 (1) industry best practices, standards, and7 guidelines; or

8 (2) practices developed by the sector coordi-9 nating council in coordination with owners and oper-10 ators, voluntary consensus standards development 11 organizations, representatives of State and local gov-12 ernments, the private sector, and appropriate infor-13 mation sharing and analysis organizations.

14 (b) REVIEW OF CYBERSECURITY PRACTICES.—

(1) IN GENERAL.—The Council shall, in consultation with owners and operators, the Critical Infrastructure Partnership Advisory Council, and appropriate information sharing and analysis organizations, and in coordination with appropriate representatives from State and local governments—

(A) consult with relevant security experts
and institutions of higher education, including
university information security centers, appropriate nongovernmental cybersecurity experts,
and representatives from national laboratories;

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1	(B) review relevant regulations or compul-
2	sory standards or guidelines;
3	(C) review cybersecurity practices proposed
4	under subsection (a); and
5	(D) consider any amendments to the cyber-
6	security practices and any additional cybersecu-
7	rity practices necessary to ensure adequate re-
8	mediation or mitigation of the cyber risks iden-
9	tified through an assessment conducted under
10	section 102(a).
11	(2) Adoption.—
12	(A) IN GENERAL.—Not later than 1 year
13	after the date of enactment of this Act, the
14	Council shall—
15	(i) adopt any cybersecurity practices
16	proposed under subsection (a) that ade-
17	quately remediate or mitigate identified
18	cyber risks and any associated con-
19	sequences identified through an assessment
20	conducted under section 102(a); and
21	(ii) adopt any amended or additional
22	cybersecurity practices necessary to ensure
23	the adequate remediation or mitigation of
24	the cyber risks identified through an as-
25	sessment conducted under section 102(a).

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1 (B) NO SUBMISSION BY SECTOR COORDI-2 NATING COUNCIL.—If a sector coordinating 3 council fails to propose to the Council cyberse-4 curity practices under subsection (a) within 180 5 days of the date of enactment of this Act, not 6 later than 1 year after the date of enactment of 7 this Act the Council shall adopt cybersecurity 8 practices that adequately remediate or mitigate 9 identified cyber risks and associated con-10 sequences identified through an assessment con-11 ducted under section 102(a) for the sector. 12 (c) FLEXIBILITY OF CYBERSECURITY PRACTICES.—

13 Each sector coordinating council and the Council shall periodically assess cybersecurity practices, but not less fre-14 15 quently than once every 3 years, and update or modify cybersecurity practices as necessary to ensure adequate re-16 17 mediation and mitigation of the cyber risks identified through an assessment conducted under section 102(a). 18 19 (d) PRIORITIZATION.—Based on the risk assessments 20 performed under section 102(a), the Council shall 21 prioritize the development of cybersecurity practices to en-22 sure the reduction or mitigation of the greatest cyber 23 risks.

24 (e) PRIVATE SECTOR RECOMMENDED MEASURES.—
25 Each sector coordinating council shall develop voluntary

recommended cybersecurity measures that provide owners 1 2 reasonable and cost-effective methods of meeting any cy-3 bersecurity practice. 4 (f) TECHNOLOGY NEUTRALITY.—No cybersecurity 5 practice shall require— 6 (1) the use of a specific commercial information 7 technology product; or 8 (2) that a particular commercial information 9 technology product be designed, developed, or manu-10 factured in a particular manner. 11 (g) Relationship to Existing Regulations.— 12 (1) INCLUSION IN REGULATORY REGIMES.— 13 (A) IN GENERAL.—A Federal agency with 14 responsibilities for regulating the security of 15 critical infrastructure may adopt the cybersecu-16 rity practices as mandatory requirements. 17 (B) REPORTS.—If, as of the date that is 18 1 year after the date of enactment of this Act, 19 a Federal agency with responsibilities for regu-20 lating the security of critical infrastructure has 21 not adopted the cybersecurity practices as man-22 datory requirements, the agency shall submit to 23 the appropriate congressional committees a re-24 port on the reasons the agency did not do so, 25 including a description of whether the critical

1	cyber infrastructure for which the Federal
2	agency has responsibility is maintaining prac-
3	tices sufficient to effectively remediate or miti-
4	gate cyber risks identified through an assess-
5	ment conducted under section 102(a).
6	(C) RULE OF CONSTRUCTION.—Nothing in
7	this subsection shall be construed to provide a
8	Federal agency with authority for regulating
9	the security of critical cyber infrastructure in
10	addition or to a greater extent than the author-
11	ity the Federal agency has under other law.
12	(2) Avoidance of conflict.—No cybersecu-
13	rity practice shall—
14	(A) prevent an owner (including a certified
15	owner) from complying with any law or regula-
16	tion; or
17	(B) require an owner (including a certified
18	owner) to implement cybersecurity measures
19	that prevent the owner from complying with
20	any law or regulation.
21	(3) Avoidance of duplication.—Where reg-
22	ulations or compulsory standards regulate the secu-
23	rity of critical cyber infrastructure, a cybersecurity
24	practice shall, to the greatest extent possible, com-

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1	plement or otherwise improve the regulations or
2	compulsory standards.
3	(h) INDEPENDENT REVIEW.—
4	(1) IN GENERAL.—Each cybersecurity practice
5	shall be publicly reviewed by the relevant sector co-
6	ordinating council and the Critical Infrastructure
7	Partnership Advisory Council, which may include
8	input from relevant institutions of higher education,
9	including university information security centers, na-
10	tional laboratories, and appropriate non-govern-
11	mental cybersecurity experts.
12	(2) Consideration by council.—The Council
13	shall consider any review conducted under paragraph
14	(1).
15	(i) Voluntary Technical Assistance.—At the re-
16	quest of an owner or operator of critical infrastructure,
17	the Council shall provide guidance on the application of
18	cybersecurity practices to the critical infrastructure.
19	SEC. 104. VOLUNTARY CYBERSECURITY PROGRAM FOR
20	
	CRITICAL INFRASTRUCTURE.
21	<b>CRITICAL INFRASTRUCTURE.</b> (a) VOLUNTARY CYBERSECURITY PROGRAM FOR
21 22	
	(a) Voluntary Cybersecurity Program for
22	(a) Voluntary Cybersecurity Program for Critical Infrastructure.—

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ical Infrastructure Partnership Advisory Council,
shall establish the Voluntary Cybersecurity Program
for Critical Infrastructure in accordance with this
section.
(2) ELIGIBILITY.—
(A) IN GENERAL.—An owner of critical
cyber infrastructure may apply for certification
under the Voluntary Cybersecurity Program for
Critical Infrastructure.
(B) CRITERIA.—The Council shall estab-
lish criteria for owners of critical infrastructure
that is not critical cyber infrastructure to be eli-
gible to apply for certification in the Voluntary
Cybersecurity Program for Critical Infrastruc-
ture.
(3) Application for certification.—An
owner of critical cyber infrastructure or an owner of
critical infrastructure that meets the criteria estab-
lished under paragraph (2)(B) that applies for cer-
tification under this subsection shall—
(A) select and implement cybersecurity
measures of their choosing that satisfy the out-
come-based cybersecurity practices established
under section 103; and

	21
1	(B)(i) certify in writing and under penalty
2	of perjury to the Council that the owner has de-
3	veloped and effectively implemented cybersecu-
4	rity measures sufficient to satisfy the outcome-
5	based cybersecurity practices established under
6	section 103; or
7	(ii) submit to the Council an assessment
8	verifying that the owner has developed and ef-
9	fectively implemented cybersecurity measures
10	sufficient to satisfy the outcome-based cyberse-
11	curity practices established under section 103.
12	(4) CERTIFICATION.—Upon receipt of a self-
13	certification under paragraph (3)(B)(i) or an assess-
14	ment under paragraph (3)(B)(ii) the Council shall
15	certify an owner.
16	(5) NONPERFORMANCE.—If the Council deter-
17	mines that a certified owner is not in compliance
18	with the cybersecurity practices established under
19	section 103, the Council shall—
20	(A) notify the certified owner of such de-
21	termination; and
22	(B) work with the certified owner to reme-
23	diate promptly any deficiencies.
24	(6) REVOCATION.—If a certified owner fails to
25	remediate promptly any deficiencies identified by the

1	Council, the Council shall revoke the certification of
2	the certified owner.
3	(7) Redress.—
4	(A) IN GENERAL.—If the Council revokes
5	a certification under paragraph (6), the Council
6	shall—
7	(i) notify the owner of such revoca-
8	tion; and
9	(ii) provide the owner with specific cy-
10	bersecurity measures that, if implemented,
11	would remediate any deficiencies.
12	(B) RECERTIFICATION.—If the Council de-
13	termines that an owner has remedied any defi-
14	ciencies and is in compliance with the cyberse-
15	curity practices, the Council may recertify the
16	owner.
17	(b) Assessments.—
18	(1) THIRD-PARTY ASSESSMENTS.—The Council,
19	in consultation with owners and operators and the
20	Critical Infrastructure Protection Advisory Council,
21	shall enter into agreements with qualified third-
22	party private entities, to conduct assessments that
23	use reliable, repeatable, performance-based evalua-
24	tions and metrics to assess whether an owner cer-

1	tified under subsection $(a)(3)(B)(ii)$ is in compliance
2	with all applicable cybersecurity practices.
3	(2) TRAINING.—The Council shall ensure that
4	third party assessors described in paragraph $(1)$ un-
5	dergo regular training and accreditation.
6	(3) OTHER ASSESSMENTS.—Using the proce-
7	dures developed under this section, the Council may
8	perform cybersecurity assessments of a certified
9	owner based on actual knowledge or a reasonable
10	suspicion that the certified owner is not in compli-
11	ance with the cybersecurity practices or any other
12	risk-based factors as identified by the Council.
13	(4) NOTIFICATION.—The Council shall provide
14	copies of any assessments by the Federal Govern-
15	ment to the certified owner.
16	(5) Access to information.—
17	(A) IN GENERAL.—For the purposes of an
18	assessment conducted under this subsection, a
19	certified owner shall provide the Council, or a
20	third party assessor, any reasonable access nec-
21	essary to complete an assessment.
22	(B) PROTECTION OF INFORMATION.—In-
23	formation provided to the Council, the Council's
24	designee, or any assessor during the course of
25	an assessment under this section shall be pro-

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1	tected from disclosure in accordance with sec-
2	tion 106.
3	(c) BENEFITS OF CERTIFICATION.—
4	(1) LIMITATIONS ON CIVIL LIABILITY.—
5	(A) IN GENERAL.—In any civil action for
6	damages directly caused by an incident related
7	to a cyber risk identified through an assessment
8	conducted under section 102(a), a certified
9	owner shall not be liable for any punitive dam-
10	ages intended to punish or deter if the certified
11	owner is in substantial compliance with the ap-
12	propriate cybersecurity practices at the time of
13	the incident related to that cyber risk.
14	(B) LIMITATION.—Subaragraph (A) shall
15	only apply to harm directly caused by the inci-
16	dent related to the cyber risk and shall not
17	apply to damages caused by any additional or
18	intervening acts or omissions by the owner.
19	(2) EXPEDITED SECURITY CLEARANCE PROC-
20	ESS.—The Council, in coordination with the Office
21	of the Director of National Intelligence, shall estab-
22	lish a procedure to expedite the provision of security
23	clearances to appropriate personnel employed by a
24	certified owner.

1 (3)PRIORITIZED TECHNICAL ASSISTANCE.— 2 The Council shall ensure that certified owners are 3 eligible to receive prioritized technical assistance. 4 (4) PROVISION OF CYBER THREAT INFORMA-5 TION.—The Council shall develop, in coordination 6 with certified owners, a procedure for ensuring that 7 certified owners are, to the maximum extent prac-8 ticable and consistent with the protection of sources 9 and methods, informed of relevant real-time cyber 10 threat information. 11 (5) PUBLIC RECOGNITION.—With the approval 12 of a certified owner, the Council may publicly recog-13 nize the certified owner if the Council determines 14 such recognition does not pose a risk to the security 15 of critical cyber infrastructure. 16 (6) STUDY TO EXAMINE BENEFITS OF PRO-17 CUREMENT PREFERENCE. 18 (A) IN GENERAL.—The Federal Acquisi-19 tion Regulatory Council, in coordination with 20 the Council and with input from relevant pri-21 vate sector individuals and entities, shall con-22 duct a study examining the potential benefits of 23 establishing a procurement preference for the 24 Federal Government for certified owners.

1	(B) AREAS.—The study under subpara-
2	graph (A) shall include a review of—
3	(i) potential persons and related prop-
4	erty and services that could be eligible for
5	preferential consideration in the procure-
6	ment process;
7	(ii) development and management of
8	an approved list of categories of property
9	and services that could be eligible for pref-
10	erential consideration in the procurement
11	process;
12	(iii) appropriate mechanisms to imple-
13	ment preferential consideration in the pro-
14	curement process, including—
15	(I) establishing a policy encour-
16	aging Federal agencies to conduct
17	market research and industry out-
18	reach to identify property and services
19	that adhere to relevant cybersecurity
20	practices;
21	(II) authorizing the use of a
22	mark for the Voluntary Cybersecurity
23	Program for Critical Infrastructure to
24	be used for marketing property or
25	services to the Federal Government;

1 (III) establishing a policy of en-2 procurement of couraging certain 3 property and services from an ap-4 proved list; (IV) authorizing the use of a 5 6 preference by Federal agencies in the 7 evaluation process; and 8 (V) authorizing a requirement in 9 certain solicitations that the person 10 providing the property or services be a 11 certified owner; and 12 (iv) benefits of and impact on the 13 economy and efficiency of the Federal pro-14 curement system, if preferential consider-15 ation were given in the procurement proc-16 ess to encourage the procurement of prop-17 erty and services that adhere to relevant 18 baseline performance goals establishing 19 under the Voluntary Cybersecurity Pro-20 gram for Critical Infrastructure. 21 SEC. 105. RULES OF CONSTRUCTION. 22 Nothing in this title shall be construed to— 23 (1) limit the ability of a Federal agency with re-24 sponsibilities for regulating the security of critical

1	infrastructure from requiring that the cybersecurity
2	practices developed under section 103 be met;
3	(2) provide additional authority for any sector-
4	specific agency or any Federal agency that is not a
5	sector-specific agency with responsibilities for regu-
6	lating the security of critical infrastructure to estab-
7	lish standards or other cybersecurity measures that
8	are applicable to the security of critical infrastruc-
9	ture not otherwise authorized by law;
10	(3) limit or restrict the authority of the Depart-
11	ment, or any other Federal agency, under any other
12	provision of law; or
13	(4) permit any owner (including a certified
14	owner) to fail to comply with any other law or regu-
15	lation, unless specifically authorized.
16	SEC. 106. PROTECTION OF INFORMATION.
17	(a) DEFINITIONS.—In this section—
18	(1) the tarm "correct information" means and
	(1) the term "covered information" means any
19	(1) the term covered mormation means any information—
19 20	
	information—
20	information— (A) submitted as part of the process estab-
20 21	information— (A) submitted as part of the process estab- lished under section 102(a)(3);

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1	(D) provided to the Secretary, the Sec-
2	retary's designee, or any assessor during the
3	course of an assessment under section 104; or
4	(E) provided to the Secretary or the In-
5	spector General of the Department through the
6	tip line or another secure channel established
7	under subsection (c); and
8	(2) the term "Inspector General" means an In-
9	spector General described in subparagraph (A), (B),
10	or (I) of section $11(b)(1)$ of the Inspector General
11	Act of 1978 (5 U.S.C. App.), the Inspector General
12	of the United States Postal Service, the Inspector
13	General of the Central Intelligence Agency, and the
14	Inspector General of the Intelligence Community.
15	(b) Critical Infrastructure Information.—
16	(1) IN GENERAL.—Covered information shall be
17	treated as voluntarily shared critical infrastructure
18	information under section 214 of the Homeland Se-
19	curity Act of 2002 (6 U.S.C. 133), except that the
20	requirement of such section 214 that the informa-
21	tion be voluntarily submitted shall not be required
22	for protection of information under this section to
23	apply.
24	(2) Savings clause for existing whistle-
25	BLOWER PROTECTIONS.—With respect to covered in-

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1	formation, the rights and protections relating to dis-
2	closure by individuals of voluntarily shared critical
3	infrastructure information submitted under subtitle
4	B of title II of the Homeland Security Act of 2002
5	(6 U.S.C. 131 et seq.) shall apply with respect to
6	disclosure of the covered information by individuals.
7	(c) Critical Infrastructure Cyber Security
8	TIP LINE.—
9	(1) IN GENERAL.—The Secretary shall establish
10	and publicize the availability of a Critical Infrastruc-
11	ture Cyber Security Tip Line (and any other secure
12	means the Secretary determines would be desirable
13	to establish), by which individuals may report—
14	(A) concerns involving the security of cov-
15	ered critical infrastructure against cyber risks;
16	and
17	(B) concerns (in addition to any concerns
18	described under subparagraph (A)) with respect
19	to programs and functions authorized or funded
20	under this title involving—
21	(i) a possible violation of any law,
22	rule, regulation or guideline;
23	(ii) mismanagement;
24	(iii) risk to public health, safety, secu-
25	rity, or privacy; or

1	(iv) other misfeasance or nonfeasance.
2	(2) DESIGNATION OF EMPLOYEES.—The Sec-
3	retary and the Inspector General of the Department
4	shall each designate employees authorized to receive
5	concerns reported under this subsection that in-
6	clude—
7	(A) disclosure of covered information; or
8	(B) any other disclosure of information
9	that is specifically prohibited by law or is spe-
10	cifically required by Executive order to be kept
11	secret in the interest of national defense or the
12	conduct of foreign affairs.
13	(3) HANDLING OF CERTAIN CONCERNS.—A
14	concern described in paragraph $(1)(B)$ —
15	(A) shall be received initially to the Inspec-
16	tor General of the Department;
17	(B) shall not be provided initially to the
18	Secretary; and
19	(C) may be provided to the Secretary if de-
20	termined appropriate by the Inspector General
21	of the Department.
22	(d) RULES OF CONSTRUCTION.—Nothing in this sec-
23	tion shall be construed to—
24	(1) limit or otherwise affect the right, ability,
25	duty, or obligation of any entity to use or disclose

any information of that entity, including in the con duct of any judicial or other proceeding;

3 (2) prevent the classification of information 4 submitted under this section if that information 5 meets the standards for classification under Execu-6 tive Order 12958, or any successor thereto, or affect 7 measures and controls relating to the protection of 8 classified information as prescribed by Federal stat-9 ute or under Executive Order 12958, or any suc-10 cessor thereto;

11 (3) limit or otherwise affect the ability of an en-12 tity, agency, or authority of a State, a local govern-13 ment, or the Federal Government or any other indi-14 vidual or entity under applicable law to obtain infor-15 mation that is not covered information (including 16 any information lawfully and properly disclosed gen-17 erally or broadly to the public) and to use such in-18 formation in any manner permitted by law, including 19 the disclosure of such information under—

20 (A) section 552 or 2302(b)(8) of title 5,
21 United States Code;

(B) section 2409 of title 10, United States
Code; or

24 (C) any other Federal, State, or local law,
25 ordinance, or regulation that protects against

1	retaliation an individual who discloses informa-
2	tion that the individual reasonably believes evi-
3	dences a violation of any law, rule, or regula-
4	tion, gross mismanagement, substantial and
5	specific danger to public health, safety, or secu-
6	rity, or other misfeasance or nonfeasance;
7	(4) prevent the Secretary from using informa-
8	tion required to be submitted under this Act for en-
9	forcement of this title, including enforcement pro-
10	ceedings subject to appropriate safeguards;
11	(5) authorize information to be withheld from
12	any committee of Congress, the Comptroller General,
13	or any Inspector General;
14	(6) affect protections afforded to trade secrets
15	under any other provision of law; or
16	(7) create a private right of action for enforce-
17	ment of any provision of this section.
18	(e) Audit.—
19	(1) IN GENERAL.—Not later than 1 year after
20	the date of enactment of this Act, the Inspector
21	General of the Department shall conduct an audit of
22	the management of covered information under this
23	title and report the findings to appropriate congres-
24	sional committees.

1	(2) CONTENTS.—The audit under paragraph
2	(1) shall include assessments of—
3	(A) whether the covered information is
4	adequately safeguarded against inappropriate
5	disclosure;
6	(B) the processes for marking and dissemi-
7	nating the covered information and resolving
8	any disputes;
9	(C) how the covered information is used
10	for the purposes of this title, and whether that
11	use is effective;
12	(D) whether sharing of covered informa-
13	tion has been effective to fulfill the purposes of
14	this title;
15	(E) whether the kinds of covered informa-
16	tion submitted have been appropriate and use-
17	ful, or overbroad or overnarrow;
18	(F) whether the protections of covered in-
19	formation allow for adequate accountability and
20	transparency of the regulatory, enforcement,
21	and other aspects of implementing this title;
22	and
23	(G) any other factors at the discretion of
24	the Inspector General of the Department.

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## 1 SEC. 107. ANNUAL ASSESSMENT OF CYBERSECURITY.

2 (a) IN GENERAL.—Not later than 1 year after the
3 date of enactment of this Act, and every year thereafter,
4 the Council shall submit to the appropriate congressional
5 committees a report on the effectiveness of this title in
6 reducing the risk of cyber attack to critical infrastructure.

7 (b) CONTENTS.—Each report submitted under sub-8 section (a) shall include—

9 (1) a discussion of cyber risks and associated 10 consequences and whether the cybersecurity prac-11 tices developed under section 103 are sufficient to 12 effectively remediate and mitigate cyber risks and 13 associated consequences; and

14 (2) an analysis of—

(A) whether owners of critical cyber infrastructure are successfully implementing the cybersecurity practices adopted under section 103;

(B) whether the critical infrastructure of
the United States is effectively secured from cybersecurity threats, vulnerabilities, and consequences;

(C) whether Federal agencies with responsibilities for regulating the security of critical
infrastructure are adequately adopting and enforcing the cybersecurity practices adopted
under section 103; and

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(D) whether additional legislative authority
 or other actions are needed to effectively reme diate or mitigate cyber risks and associated
 consequences.

5 (c) FORM OF REPORT.—A report submitted under
6 this subsection shall be submitted in an unclassified form,
7 but may include a classified annex, if necessary.

## 8 SEC. 108. INTERNATIONAL COOPERATION.

9 (a) IN GENERAL.—The Secretary, in coordination 10 with the Secretary of State, the heads of appropriate sec-11 tor-specific agencies, and the heads of any appropriate 12 Federal agency with responsibilities for regulating the se-13 curity of covered critical infrastructure, shall—

14 (1) consistent with the protection of intelligence 15 sources and methods and other sensitive matters, in-16 form the owner or operator of information infra-17 structure located outside the United States the dis-18 ruption of which could result in national or regional 19 catastrophic damage within the United States and 20 the government of the country in which the informa-21 tion infrastructure is located of any cyber risks to 22 such information infrastructure; and

(2) coordinate with the government of the country in which such information infrastructure is located and, as appropriate, the owner or operator of

the information infrastructure regarding the imple mentation of cybersecurity measures or other meas ures to the information infrastructure to mitigate or
 remediate cyber risks.

(b) INTERNATIONAL AGREEMENTS.—The Secretary,
in coordination with the Secretary of State, including in
particular with the interpretation of international agreements, shall perform the functions prescribed by this section consistent with applicable international agreements.

## 10 SEC. 109. EFFECT ON OTHER LAWS.

Except as expressly provided in section 104(c)(1) and section 106, nothing in this Act shall be construed to preempt the applicability of any State law or requirement. **SEC. 110. DEFINITIONS.** 

15 In this title:

16 (1) CERTIFIED OWNER.—The term "certified
17 owner" means an owner of critical cyber infrastruc18 ture or an owner of critical infrastructure that is
19 certified by the Council under section 104(a)(4).

20 (2) CYBER RISK.—The term "cyber risk"
21 means any risk to information infrastructure, includ22 ing physical or personnel risks and security
23 vulnerabilities, that, if exploited or not mitigated,
24 could pose a significant risk of disruption to the op-

eration of information infrastructure essential to the
 reliable operation of critical infrastructure.

3 (3) SECTOR COORDINATING COUNCIL.—The
4 term "sector coordinating council" means a private
5 sector coordinating council comprised of representa6 tives of owners and operators within a particular
7 sector of critical infrastructure established by the
8 National Infrastructure Protection Plan.

9 (4) SECTOR-SPECIFIC AGENCY.—The term "sec-10 tor-specific agency" means the relevant Federal 11 agency responsible for infrastructure protection ac-12 tivities in a designated critical infrastructure sector 13 or key resources category under the National Infra-14 structure Protection Plan, or any other appropriate 15 Federal agency identified by the President after the 16 date of enactment of this Act.

# 17 TITLE II—FEDERAL INFORMA18 TION SECURITY MANAGE19 MENT AND CONSOLIDATING 20 RESOURCES

21 SEC. 201. FISMA REFORM.

(a) IN GENERAL.—Chapter 35 of title 44, United
States Code, is amended by striking subchapters II and
III and inserting the following:

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# "SUBCHAPTER II—INFORMATION SECURITY \$3551. Purposes

3 "The purposes of this subchapter are to—

4 "(1) provide a comprehensive framework for en5 suring the effectiveness of information security con6 trols over information resources that support Fed7 eral operations and assets;

8 "(2) recognize the highly networked nature of 9 the Federal computing environment and provide ef-10 fective governmentwide management of policies, di-11 rectives, standards, and guidelines, as well as effec-12 tive and nimble oversight of and response to infor-13 mation security risks, including coordination of in-14 formation security efforts throughout the Federal ci-15 vilian, national security, and law enforcement com-16 munities;

"(3) provide for development and maintenance
of controls required to protect agency information
and information systems and contribute to the overall improvement of agency information security posture; and

"(4) provide a mechanism to improve and continuously monitor the security of agency information
security programs and systems through a focus on
continuous monitoring of agency information sys-

tems and streamlined reporting requirements rather
 than overly prescriptive manual reporting.

# 3 **"§ 3552. Definitions**

4 "(a) IN GENERAL.—Except as provided under sub5 section (b), the definitions under section 3502 (including
6 the definitions of the terms 'agency' and 'information sys7 tem') shall apply to this subchapter.

8 "(b) OTHER TERMS.—In this subchapter:

9 "(1) ADEQUATE SECURITY.—The term 'ade-10 quate security' means security commensurate with 11 the risk and impact resulting from the unauthorized 12 access to or loss, misuse, destruction, or modifica-13 tion of information.

14 "(2) CONTINUOUS MONITORING.—The term 15 'continuous monitoring' means the ongoing real time 16 or near real-time process used to determine if the 17 complete set of planned, required, and deployed se-18 curity controls within an information system con-19 tinue to be effective over time in light of rapidly 20 changing information technology and threat develop-21 ment. To the maximum extent possible, this also re-22 quires automation of that process to enable cost ef-23 fective, efficient, and consistent monitoring and pro-24 vide a more dynamic view of the security state of 25 those deployed controls.

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1 "(3) COUNTERMEASURE.—The term 'counter-2 measure' means automated or manual actions with 3 defensive intent to modify or block data packets as-4 sociated with electronic or wire communications, 5 Internet traffic, program code, or other system traf-6 fic transiting to or from or stored on an information 7 system for the purpose of protecting the information 8 system from cybersecurity threats, conducted on an 9 information system owned or operated by or on be-10 half of the party to be protected or operated by a 11 private entity acting as a provider of electronic com-12 munication services, remote computing services, or 13 cybersecurity services to the party to be protected. 14 "(4) INCIDENT.—The term 'incident' means an 15 occurrence that— "(A) actually or imminently jeopardizes, 16 17 without lawful authority, the integrity, con-18 fidentiality, or availability of information or an 19 information system; or "(B) constitutes a violation or imminent 20 21 threat of violation of law, security policies, secu-22 rity procedures, or acceptable use policies. 23 "(5) INFORMATION SECURITY.—The term 'information security' means protecting information 24 25 and information systems from unauthorized access,

1	use, disclosure, disruption, modification, or destruc-
2	tion in order to provide—
3	"(A) integrity, which means guarding
4	against improper information modification or
5	destruction, and includes ensuring nonrepudi-
6	ation and authenticity;
7	"(B) confidentiality, which means pre-
8	serving authorized restrictions on access and
9	disclosure, including means for protecting per-
10	sonal privacy and proprietary information; and
11	"(C) availability, which means ensuring
12	timely and reliable access to and use of infor-
13	mation.
14	"(6) INFORMATION TECHNOLOGY.—The term
15	'information technology' has the meaning given that
16	term in section 11101 of title 40.
17	"(7) NATIONAL SECURITY SYSTEM.—
18	"(A) IN GENERAL.—The term 'national se-
19	curity system' means any information system
20	(including any telecommunications system) used
21	or operated by an agency or by a contractor of
22	an agency, or other organization on behalf of an
23	agency—
24	"(i) the function, operation, or use of
25	which—

1	"(I) involves intelligence activi-
2	ties;
3	"(II) involves cryptologic activi-
4	ties related to national security;
5	"(III) involves command and
6	control of military forces;
7	"(IV) involves equipment that is
8	an integral part of a weapon or weap-
9	ons system; or
10	"(V) subject to subparagraph
11	(B), is critical to the direct fulfillment
12	of military or intelligence missions; or
13	"(ii) that is protected at all times by
14	procedures established for information that
15	have been specifically authorized under cri-
16	teria established by an Executive order or
17	an Act of Congress to be kept classified in
18	the interest of national defense or foreign
19	policy.
20	"(B) EXCLUSION.—Subparagraph
21	(A)(i)(V) does not include a system that is to
22	be used for routine administrative and business
23	applications (including payroll, finance, logis-
24	tics, and personnel management applications).

"(8) SECRETARY.—The term 'Secretary' means 1 2 the Secretary of Homeland Security. 3 "§ 3553. Federal information security authority and 4 coordination 5 "(a) IN GENERAL.—Except as provided in subsections (f) and (g), the Secretary shall oversee agency in-6 7 formation security policies and practices, including the de-8 velopment and oversight of information security policies 9 and directives and compliance with this subchapter. 10 "(b) DUTIES.—The Secretary shall— 11 "(1) develop, issue, and oversee the implemen-12 tation of information security policies and directives, 13 which shall be compulsory and binding on agencies 14 to the extent determined appropriate by the Sec-15 retary, including— "(A) policies and directives consistent with 16 17 the standards promulgated under section 11331 18 of title 40 to identify and provide information 19 security protections that are commensurate 20 with the risk and impact resulting from the un-21 authorized access, use, disclosure, disruption, 22 modification, or destruction of— 23 "(i) information collected, created, 24 processed, stored, disseminated, or other-

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1	wise used or maintained by or on behalf of
2	an agency; or
3	"(ii) information systems used or op-
4	erated by an agency or by a contractor of
5	an agency or other organization, such as a
6	State government entity, on behalf of an
7	agency;
8	"(B) minimum operational requirements
9	for network operations centers and security op-
10	erations centers of agencies to facilitate the
11	protection of and provide common situational
12	awareness for all agency information and infor-
13	mation systems;
14	"(C) reporting requirements, consistent
15	with relevant law, regarding information secu-
16	rity incidents;
17	"(D) requirements for agencywide informa-
18	tion security programs, including continuous
19	monitoring of information security;
20	"(E) performance requirements and
21	metrics for the security of agency information
22	systems;
23	"(F) training requirements to ensure that
24	agencies are able to fully and timely comply

1	with directions issued by the Secretary under
2	this subchapter;
3	"(G) training requirements regarding pri-
4	vacy, civil rights, civil liberties, and information
5	oversight for agency information security em-
6	ployees;
7	"(H) requirements for the annual reports
8	to the Secretary under section 3554(c); and
9	"(I) any other information security re-
10	quirements as determined by the Secretary;
11	"(2) review agency information security pro-
12	grams required to be developed under section
13	3554(b);
14	"(3) develop and conduct targeted risk assess-
15	ments and operational evaluations for agency infor-
16	mation and information systems in consultation with
17	the heads of other agencies or governmental and pri-
18	vate entities that own and operate such systems,
19	that may include threat, vulnerability, and impact
20	assessments and penetration testing;
21	"(4) operate consolidated intrusion detection,
22	prevention, or other protective capabilities and use
23	associated countermeasures for the purpose of pro-
24	tecting agency information and information systems
25	from information security threats;

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1	((5) in conjunction with other agencies and the
2	private sector, assess and foster the development of
3	information security technologies and capabilities for
4	use across multiple agencies;
5	"(6) designate an entity to receive reports and
6	information about information security incidents,
7	threats, and vulnerabilities affecting agency informa-
8	tion systems;
9	"(7) provide incident detection, analysis, miti-
10	gation, and response information and remote or on-
11	site technical assistance to the heads of agencies;
12	"(8) coordinate with appropriate agencies and
13	officials to ensure, to the maximum extent feasible,
14	that policies and directives issued under paragraph
15	(1) are complementary with—
16	"(A) standards and guidelines developed
17	for national security systems; and
18	"(B) policies and directives issues by the
19	Secretary of Defense, Director of the Central
20	Intelligence Agency, and Director of National
21	Intelligence under subsection $(g)(1)$ ; and
22	((9) not later than March 1 of each year, sub-
23	mit to Congress a report on agency compliance with
24	the requirements of this subchapter, which shall in-
25	clude—

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1	"(A) a summary of the incidents described
2	by the reports required in section 3554(c);
3	"(B) a summary of the results of assess-
4	ments required by section 3555;
5	"(C) a summary of the results of evalua-
6	tions required by section 3556;
7	"(D) significant deficiencies in agency in-
8	formation security practices as identified in the
9	reports, assessments, and evaluations referred
10	to in subparagraphs (A), (B), and (C), or other-
11	wise; and
12	"(E) planned remedial action to address
13	any deficiencies identified under subparagraph
14	(D).
15	"(c) Issuing Policies and Directives.—When
16	issuing policies and directives under subsection (b), the
17	Secretary shall consider any applicable standards or guide-
18	lines developed by the National Institute of Standards and
19	Technology and issued by the Secretary of Commerce
20	under section 11331 of title 40. The Secretary shall con-
21	sult with the Director of the National Institute of Stand-
22	ards and Technology when such policies and directives im-
23	plement standards or guidelines developed by National In-
24	stitute of Standards and Technology. To the maximum ex-
25	tent feasible, such standards and guidelines shall be com-

plementary with standards and guidelines developed for
 national security systems.

3 "(d) Communications and System Traffic.—

4 "(1) IN GENERAL.—Notwithstanding any other 5 provision of law, in carrying out the responsibilities 6 under paragraphs (3) and (4) of subsection (b), if the Secretary makes a certification described in 7 8 paragraph (2), the Secretary may acquire, intercept, 9 retain, use, and disclose communications and other 10 system traffic that are transiting to or from or 11 stored on agency information systems and deploy 12 countermeasures with regard to the communications 13 and system traffic.

14 "(2) CERTIFICATION.—A certification described
15 in this paragraph is a certification by the Secretary
16 that—

17 "(A) the acquisitions, interceptions, and
18 countermeasures are reasonably necessary for
19 the purpose of protecting agency information
20 systems from information security threats;

21 "(B) the content of communications will be
22 collected and retained only when the commu23 nication is associated with a known or reason24 ably suspected information security threat, and
25 communications and system traffic will not be

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1	subject to the operation of a countermeasure
2	unless associated with the threats;
3	"(C) information obtained under activities
4	authorized under this subsection will only be re-
5	tained, used, or disclosed to protect agency in-
6	formation systems from information security
7	threats, mitigate against such threats, or, with
8	the approval of the Attorney General, for law
9	enforcement purposes when—
10	"(i) the information is evidence of a
11	crime that has been, is being, or is about
12	to be committed; and
13	"(ii) disclosure of the information to a
14	law enforcement agency is not otherwise
15	prohibited by law;
16	"(D) notice has been provided to users of
17	agency information systems concerning the po-
18	tential for acquisition, interception, retention,
19	use, and disclosure of communications and
20	other system traffic; and
21	"(E) the activities are implemented pursu-
22	ant to policies and procedures governing the ac-
23	quisition, interception, retention, use, and dis-
24	closure of communications and other system

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1	traffic that have been reviewed and approved by
2	the Attorney General.
3	"(3) Private entities.—The Secretary may
4	enter into contracts or other agreements, or other-
5	wise request and obtain the assistance of, private en-
6	tities that provide electronic communication or infor-
7	mation security services to acquire, intercept, retain,
8	use, and disclose communications and other system
9	traffic or to deploy countermeasures in accordance
10	with this subsection.
11	"(e) Directions to Agencies.—
12	"(1) AUTHORITY.—
13	"(A) IN GENERAL.—Notwithstanding sec-
14	tion 3554, and subject to subparagraph (B), in
15	response to a known or reasonably suspected in-
16	formation security threat, vulnerability, or inci-
17	dent that represents a substantial threat to the
18	information security of an agency, the Secretary
19	may direct other agency heads to take any law-
20	ful action with respect to the operation of the
21	information systems, including those owned or
22	operated by another entity on behalf of an
23	agency, that collect, process, store, transmit,
24	disseminate, or otherwise maintain agency in-
25	formation, for the purpose of protecting the in-

1	formation system from or mitigating an infor-
2	mation security threat.
3	"(B) EXCEPTION.—The authorities of the
4	Secretary under this subsection shall not apply
5	to a system described in paragraph (2), (3), or
6	(4) of subsection (g).
7	"(2) Procedures for use of authority.—
8	The Secretary shall—
9	"(A) in coordination with the Director of
10	the Office of Management and Budget and, as
11	appropriate, in consultation with operators of
12	information systems, establish procedures gov-
13	erning the circumstances under which a direc-
14	tive may be issued under this subsection, which
15	shall include—
16	"(i) thresholds and other criteria;
17	"(ii) privacy and civil liberties protec-
18	tions; and
19	"(iii) providing notice to potentially
20	affected third parties;
21	"(B) specify the reasons for the required
22	action and the duration of the directive;
23	"(C) minimize the impact of directives
24	under this subsection by—

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1	"(i) adopting the least intrusive
2	means possible under the circumstances to
3	secure the agency information systems;
4	and
5	"(ii) limiting directives to the shortest
6	period practicable; and
7	"(D) notify the Director of the Office of
8	Management and Budget and head of any af-
9	fected agency immediately upon the issuance of
10	a directive under this subsection.
11	"(3) Imminent threats.—
12	"(A) IN GENERAL.—If the Secretary deter-
13	mines that there is an imminent threat to agen-
14	cy information systems and a directive under
15	this subsection is not reasonably likely to result
16	in a timely response to the threat, the Secretary
17	may authorize the use of protective capabilities
18	under the control of the Secretary for commu-
19	nications or other system traffic transiting to or
20	from or stored on an agency information system
21	without prior consultation with the affected
22	agency for the purpose of ensuring the security
23	of the information or information system or
24	other agency information systems.

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1	"(B) LIMITATION ON DELEGATION.—The
2	authority under this paragraph may not be del-
3	egated to an official in a position lower than
4	Assistant Secretary or Director of the National
5	Cybersecurity and Communications Integration
6	Center.
7	"(C) NOTICE.—The Secretary or designee
8	of the Secretary shall immediately notify the
9	Director of the Office of Management and
10	Budget and the head and chief information offi-
11	cer (or equivalent official) of each affected
12	agency of—
13	"(i) any action taken under this sub-
14	section; and
15	"(ii) the reasons for and duration and
16	nature of the action.
17	"(D) OTHER LAW.—The actions of the
18	Secretary under this paragraph shall be con-
19	sistent with applicable law.
20	"(4) LIMITATION.—The Secretary may direct
21	or authorize lawful action or protective capability
22	under this subsection only to—
23	"(A) protect agency information from un-
24	authorized access, use, disclosure, disruption,
25	modification, or destruction; or

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1	"(B) require the remediation of or protect
2	against identified information security risks
3	with respect to—
4	"(i) information collected or main-
5	tained by or on behalf of an agency; or
6	"(ii) that portion of an information
7	system used or operated by an agency or
8	by a contractor of an agency or other orga-
9	nization on behalf of an agency.
10	"(f) NATIONAL SECURITY SYSTEMS.—
11	"(1) IN GENERAL.—This section shall not apply
12	to a national security system.
13	"(2) INFORMATION SECURITY.—Information se-
14	curity policies, directives, standards, and guidelines
15	for national security systems shall be overseen as di-
16	rected by the President and, in accordance with that
17	direction, carried out under the authority of the
18	heads of agencies that operate or exercise authority
19	over national security systems.
20	"(g) Delegation of Authorities.—
21	"(1) IN GENERAL.—The authorities of the Sec-
22	retary described in paragraphs $(1)$ , $(2)$ , $(3)$ , and $(4)$
23	of subsection (b) shall be delegated to—
24	"(A) the Secretary of Defense in the case
25	of systems described in paragraph (2);

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1	"(B) the Director of the Central Intel-
2	ligence Agency in the case of systems described
3	in paragraph (3); and
4	"(C) the Director of National Intelligence
5	in the case of systems described in paragraph
6	(4).
7	"(2) Department of defense.—The systems
8	described in this paragraph are systems that are op-
9	erated by the Department of Defense, a contractor
10	of the Department of Defense, or another entity on
11	behalf of the Department of Defense that process
12	any information the unauthorized access, use, disclo-
13	sure, disruption, modification, or destruction of
14	which would have a debilitating impact on the mis-
15	sion of the Department of Defense.
16	"(3) CENTRAL INTELLIGENCE AGENCY.—The
17	systems described in this paragraph are systems
18	that are operated by the Central Intelligence Agen-
19	cy, a contractor of the Central Intelligence Agency,
20	or another entity on behalf of the Central Intel-
21	ligence Agency that process any information the un-
22	authorized access, use, disclosure, disruption, modi-
23	fication, or destruction of which would have a debili-
24	tating impact on the mission of the Central Intel-
25	ligence Agency.

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"(4) OFFICE OF THE DIRECTOR OF NATIONAL 1 2 INTELLIGENCE.—The systems described in this 3 paragraph are systems that are operated by the Of-4 fice of the Director of National Intelligence, a con-5 tractor of the Office of the Director of National In-6 telligence, or another entity on behalf of the Office 7 of the Director of National Intelligence that process 8 any information the unauthorized access, use, disclo-9 sure, disruption, modification, or destruction of 10 which would have a debilitating impact on the mis-11 sion of the Office of the Director of National Intel-12 ligence.

13 ((5))INTEGRATION OF INFORMATION.—The 14 Secretary of Defense, the Director of the Central Intelligence Agency, and the Director of National In-15 16 telligence shall carry out their responsibilities under 17 this subsection in coordination with the Secretary 18 and share relevant information in a timely manner 19 with the Secretary relating to the security of agency 20 information and information systems, including sys-21 tems described in paragraphs (2), (3), and (4), to 22 enable the Secretary to carry out the responsibilities 23 set forth in this section and to maintain comprehen-24 sive situational awareness regarding information se-25 curity incidents, threats, and vulnerabilities affecting

1	agency information systems, consistent with stand-
2	ards and guidelines for national security systems,
3	issued in accordance with law and as directed by the
4	President.
5	"§ 3554. Agency responsibilities
6	"(a) IN GENERAL.—The head of each agency shall—
7	"(1) be responsible for—
8	"(A) providing information security protec-
9	tions commensurate with the risk resulting
10	from unauthorized access, use, disclosure, dis-
11	ruption, modification, or destruction of—
12	"(i) information collected, created,
13	processed, stored, disseminated, or other-
14	wise used or maintained by or on behalf of
15	the agency; or
16	"(ii) information systems used or op-
17	erated by the agency or by a contractor of
18	the agency or other organization, such as
19	a State government entity, on behalf of the
20	agency;
21	"(B) complying with this subchapter, in-
22	cluding-
23	"(i) the policies and directives issued
24	under section 3553, including any direc-
25	tions under section 3553(e); and

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"(ii) information security policies, di-
rectives, standards, and guidelines for na-
tional security systems issued in accord-
ance with law and as directed by the Presi-
dent;
"(C) complying with the requirements of
the information security standards prescribed
under section 11331 of title 40, including any
required security configuration checklists; and
"(D) ensuring that information security
management processes are integrated with
agency strategic and operational planning proc-
esses;
"(2) ensure that senior agency officials provide
information security for the information and infor-
mation systems that support the operations and as-
sets under the control of the officials, including
through—
"(A) assessing, with a frequency commen-
surate with risk, the risk and impact that could
result from the unauthorized access, use, disclo-
sure, disruption, modification, or destruction of
the information or information systems;
"(B) determining the levels of information
security appropriate to protect the information

1	and information systems in accordance with the
2	policies and directives issued under section
3	3553(b) and standards prescribed under section
4	11331 of title 40;
5	"(C) implementing policies, procedures,
6	and capabilities to reduce risks to an acceptable
7	level in a cost-effective manner;
8	"(D) security testing and evaluation, in-
9	cluding continuously monitoring the effective
10	implementation of information security controls
11	and techniques, threats, vulnerabilities, assets,
12	and other aspects of information security as ap-
13	propriate; and
14	"(E) reporting information about informa-
15	tion security incidents, threats, and
16	vulnerabilities in a timely manner as required
17	under policies and procedures established under
18	subsection $(b)(7);$
19	"(3) assess and maintain the resiliency of infor-
20	mation systems critical to the mission and oper-
21	ations of the agency;
22	"(4) delegate to the chief information officer or
23	equivalent official (or to a senior agency official who
24	reports to the chief information officer or equivalent
25	official) the authority to ensure and primary respon-

1	sibility for ensuring compliance with this subchapter,
2	including—
3	"(A) overseeing the establishment and
4	maintenance of an agencywide security oper-
5	ations capability that on a continuous basis
6	can—
7	"(i) detect, report, respond to, con-
8	tain, and mitigate information security in-
9	cidents that impair adequate security of
10	the agency information and information
11	systems in a timely manner and in accord-
12	ance with the policies and directives issued
13	under section 3553(b); and
14	"(ii) report any information security
15	incident described under clause (i) to the
16	entity designated under section $3553(b)(6)$ ;
17	"(B) developing, maintaining, and over-
18	seeing an agencywide information security pro-
19	gram as required under subsection (b);
20	"(C) developing, maintaining, and over-
21	seeing information security policies, procedures,
22	and control techniques to address all applicable
23	requirements, including those issued under sec-
24	tion 3553 and section 11331 of title 40;

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1	"(D) training and overseeing employees
2	and contractors of the agency with significant
3	responsibilities for information security with re-
4	spect to such responsibilities; and
5	"(E) assisting senior agency officials con-
6	cerning their responsibilities under paragraph
7	(2);
8	((5) the agency has trained and obtained secu-
9	rity clearances for an adequate number of employees
10	to assist the agency in complying with this sub-
11	chapter, including the policies and directives issued
12	under section 3553(b);
13	"(6) ensure that the chief information officer
14	(or other senior agency official designated under
15	paragraph (4)), in coordination with other senior
16	agency officials, reports to the head of the agency on
17	the effectiveness of the agency information security
18	program, including the progress of remedial actions;
19	((7) ensure that the chief information officer
20	(or other senior agency official designated under
21	paragraph (4))—
22	"(A) possesses the necessary qualifications
23	to administer the duties of the official under
24	this subchapter; and

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1 "(B) has information security duties as a 2 primary duty of the official; and 3 "(8) ensure that senior agency officials (includ-4 ing component chief information officers or equiva-5 lent officials) carry out responsibilities under this 6 subchapter as directed by the official delegated au-7 thority under paragraph (4). 8 "(b) AGENCY PROGRAM.—The head of each agency 9 shall develop, document, and implement an agencywide in-10 formation security program, which shall be reviewed under 11 section 3553(b)(2), to provide information security for the 12 information and information systems that support the op-13 erations and assets of the agency, including those provided 14 or managed by another agency, contractor, or other 15 source, which shall include— "(1) the development, execution, and mainte-16 17 nance of a risk management strategy for information 18 security that— 19 "(A) considers information security 20 threats, vulnerabilities, and consequences;

21 "(B) includes periodic assessments and re-22 porting of risk, with a frequency commensurate 23 with risk and impact;

"(2) policies and procedures that— 24

1	"(A) are based on the risk management
2	strategy and assessment results required under
3	paragraph (1);
4	"(B) reduce information security risks to
5	an acceptable level in a cost-effective manner;
6	"(C) ensure that cost-effective and ade-
7	quate information security is addressed
8	throughout the life cycle of each agency infor-
9	mation system; and
10	"(D) ensure compliance with—
11	"(i) this subchapter;
12	"(ii) the information security policies
13	and directives issued under section
14	3553(b); and
15	"(iii) any other applicable require-
16	ments;
17	"(3) subordinate plans for providing adequate
18	information security for networks, facilities, and sys-
19	tems or groups of information systems;
20	"(4) security awareness training developed in
21	accordance with the requirements issued under sec-
22	tion 3553(b) to inform individuals with access to
23	agency information systems, including information
24	security employees, contractors, and other users of

1	information systems that support the operations and
2	assets of the agency, of—
3	"(A) information security risks associated
4	with their activities;
5	"(B) their responsibilities in complying
6	with agency policies and procedures designed to
7	reduce those risks;
8	"(C) requirements for fulfilling privacy,
9	civil rights, civil liberties, and other information
10	oversight responsibilities; and
11	"(D) methods for individuals to report
12	risks and incidents to relevant Offices of In-
13	spectors General and the Secretary under sec-
14	tion 106 of the Cybersecurity Act of 2012;
15	"(5) security testing and evaluation commensu-
16	rate with risk and impact that includes—
17	"(A) risk-based continuous monitoring of
18	the operational status and security of agency
19	information systems to enable evaluation of the
20	effectiveness of and compliance with informa-
21	tion security policies, procedures, and practices,
22	including a relevant and appropriate selection of
23	management, operational, and technical controls
24	of information systems identified in the inven-
25	tory required under section 3505(c);

	12
1	"(B) penetration testing exercises and
2	operational evaluations in accordance with the
3	requirements issued under section 3553(b) to
4	evaluate whether the agency adequately protects
5	against, detects, and responds to incidents;
6	"(C) vulnerability scanning, intrusion de-
7	tection and prevention, and penetration testing,
8	in accordance with the requirements issued
9	under section 3553(b); and
10	"(D) any other periodic testing and evalua-
11	tion, in accordance with the requirements
12	issued under section 3553(b);
13	"(6) a process for ensuring that remedial ac-
14	tions are taken to mitigate information security
15	vulnerabilities commensurate with risk and impact,
16	and otherwise address any deficiencies in the infor-
17	mation security policies, procedures, and practices of
18	the agency;
19	((7) policies and procedures to ensure detec-
20	tion, mitigation, reporting, and responses to infor-
21	mation security incidents, in accordance with the
22	policies and directives issued under section 3553(b),
23	including—
24	"(A) ensuring timely internal reporting of
25	information security incidents;

	15
1	"(B) establishing and maintaining appro-
2	priate technical capabilities to detect and miti-
3	gate risks associated with information security
4	incidents;
5	"(C) notifying and consulting with the en-
6	tity designated by the Secretary under section
7	3553(b)(6); and
8	"(D) notifying and consulting with—
9	"(i) law enforcement agencies and rel-
10	evant Offices of Inspectors General;
11	"(ii) relevant committees of Congress,
12	as appropriate; and
13	"(iii) any other entity, in accordance
14	with law and as directed by the President;
15	and
16	"(8) plans and procedures to ensure continuity
17	of operations for information systems that support
18	the operations and assets of the agency.
19	"(c) ANNUAL AGENCY REPORTING.—The head of
20	each agency shall—
21	"(1) report annually to the Committee on Gov-
22	ernment Reform and the Committee on Science,
23	Space, and Technology of the House of Representa-
24	tives, the Committee on Homeland Security and
25	Governmental Affairs and the Committee on Com-

1	merce, Science, and Transportation of the Senate,
2	any other appropriate committees of Congress, and
3	the Secretary on the adequacy and effectiveness of
4	information security policies, procedures, and prac-
5	tices, including—
6	"(A) a description of each major informa-
7	tion security incident, or set of related inci-
8	dents, resulting in significant compromise of in-
9	formation security, including a summary of—
10	"(i) the threats, vulnerabilities, and
11	impact of the incident;
12	"(ii) the system risk assessment con-
13	ducted before the incident and required
14	under section $3554(a)(2)$ ; and
15	"(iii) the detection and response ac-
16	tions taken;
17	"(B) the number of information security
18	incidents within the agency resulting in signifi-
19	cant compromise of information security, pre-
20	sented by system impact level, type of incident,
21	and location;
22	"(C) the total number of information secu-
23	rity incidents within the agency, presented by
24	system impact level, type of incident, and loca-
25	tion;

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1 "(D) an identification and analysis of, in-2 cluding actions and plans to address, any sig-3 nificant deficiencies identified in such policies, 4 procedures and practices; "(E) any information or evaluation re-5 6 quired under the reporting requirements issued under section 3553(b); and 7 8 "(2) address the adequacy and effectiveness of 9 the information security policies, procedures, and 10 practices of the agency as required for management 11 and budget plans and reports, as appropriate. 12 "(d) Communications and System Traffic.— 13 Notwithstanding any other provision of law, the head of each agency is authorized to allow the Secretary, or a pri-14 15 vate entity providing assistance to the Secretary under section 3553, to acquire, intercept, retain, use, and dis-16 17 close communications, system traffic, records, or other in-18 formation transiting to or from or stored on an agency information system for the purpose of protecting agency 19

20 information and information systems from information se-

21 curity threats or mitigating the threats in connection with

22 the implementation of the information security capabilities

23 authorized by paragraph (3) or (4) of section 3553(b).

#### 1 "§ 3555. Annual assessments

"(a) IN GENERAL.—Except as provided in subsection
(c), the Secretary shall conduct periodic assessments of
the information security programs and practices of agencies based on the annual agency reports required under
section 3554(c), the annual independent evaluations required under section 3556, the results of any continuous
monitoring, and other available information.

9 "(b) CONTENTS.—Each assessment conducted under
10 subsection (a) shall—

11 "(1) assess the effectiveness of agency informa12 tion security policies, procedures, and practices;

"(2) provide an assessment of the status of
agency information system security for the Federal
Government as a whole; and

"(3) include recommendations for improving information system security for an agency or the Federal Government as a whole.

19 "(c) Certain Information Systems.—

20 "(1) NATIONAL SECURITY SYSTEMS.—A peri21 odic assessment conducted under subsection (a) re22 lating to a national security system shall be pre23 pared as directed by the President.

24 "(2) SPECIFIC AGENCIES.—Periodic assess25 ments conducted under subsection (a) shall be pre-

1	pared in accordance with governmentwide reporting
2	requirements by—
3	"(A) the Secretary of Defense for informa-
4	tion systems under the control of the Depart-
5	ment of Defense;
6	"(B) the Director of the Central Intel-
7	ligence Agency for information systems under
8	the control of the Central Intelligence Agency;
9	and
10	"(C) the Director of National Intelligence
11	for information systems under the control of
12	the Office of the Director of National Intel-
13	ligence.
14	"(d) Agency-specific Assessments.—Each as-
15	sessment conducted under subsection (a) that relates, in
16	whole or in part, to the information systems of an agency
17	shall be made available to the head of the agency.
18	"(e) PROTECTION OF INFORMATION.—In conducting
19	assessments under subsection (a), the Secretary shall take
20	appropriate actions to ensure the protection of information
21	which, if disclosed, may adversely affect information secu-
22	rity. Such protections shall be commensurate with the risk
23	and comply with all applicable laws and policies.
24	"(f) REPORT TO CONGRESS.—The Secretary, in co-
25	ordination with the Secretary of Defense, the Director of

the Central Intelligence Agency, and the Director of Na tional Intelligence, shall evaluate and submit to Congress
 an annual report on the adequacy and effectiveness of the
 information security programs and practices assessed
 under this section.

#### 6 "§ 3556. Independent evaluations

7 "(a) IN GENERAL.—Not less than annually, an inde8 pendent evaluation of the information security program
9 and practices of each agency shall be performed to assess
10 the effectiveness of the programs and practices.

11 "(b) CONTENTS.—Each evaluation performed under12 subsection (a) shall include—

"(1) testing of the effectiveness of information
security policies, procedures, and practices of a representative subset of the information systems of the
agency; and

17 "(2) an assessment of the effectiveness of the
18 information security policies, procedures, and prac19 tices of the agency.

20 "(c) CONDUCT OF INDEPENDENT EVALUATIONS.—
21 Except as provided in subsection (f), an evaluation of an
22 agency under subsection (a) shall be performed by—

23 "(1) the Inspector General of the agency;
24 "(2) at the discretion of the Inspector General
25 of the agency, an independent entity entering a con-

tract with the Inspector General to perform the eval uation; or

3 "(3) if the agency does not have an Inspector
4 General, an independent entity selected by the head
5 of the agency, in consultation with the Secretary.

6 "(d) PREVIOUSLY CONDUCTED EVALUATIONS.—The 7 evaluation required by this section may be based in whole 8 or in part on a previously conducted audit, evaluation, or 9 report relating to programs or practices of the applicable 10 agency.

11 "(e) REPORTS.—The official or entity performing an 12 evaluation of an agency under subsection (a) shall submit 13 to Congress, the agency, and the Comptroller General of 14 the United States a report regarding the evaluation. The 15 head of the agency shall provide to the Secretary a report 16 received under this subsection.

17 "(f) NATIONAL SECURITY SYSTEMS.—An evaluation
18 under subsection (a) of a national security system shall
19 be performed as directed by the President.

20 "(g) COMPTROLLER GENERAL.—The Comptroller
21 General of the United States shall periodically evaluate
22 and submit to Congress reports on—

23 "(1) the adequacy and effectiveness of the in24 formation security policies and practices of agencies;
25 and

1 "(2) implementation of this subchapter.

#### 2 "§ 3557. National security systems

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

6 "(1) provides information security protections 7 commensurate with the risk and magnitude of the 8 harm resulting from the unauthorized use, disclo-9 sure, disruption, modification, or destruction of the 10 information contained in the national security sys-11 tem;

"(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 this subchapter.

#### 17 "§ 3558. Effect on existing law

18 "Nothing in this subchapter shall be construed to19 alter or amend any law regarding the authority of any20 head of an agency over the agency.".

(b) TECHNICAL AND CONFORMING AMENDMENT.—
The table of sections for chapter 35 of title 44 is amended
by striking the matter relating to subchapters II and III
and inserting the following:

"SUBCHAPTER II—INFORMATION SECURITY

	<ul> <li>"Sec. 3552. Definitions.</li> <li>"Sec. 3553. Federal information security authority and coordination.</li> <li>"Sec. 3554. Agency responsibilities.</li> <li>"Sec. 3555. Annual assessments.</li> <li>"Sec. 3556. Independent evaluations.</li> <li>"Sec. 3557. National security systems.</li> <li>"Sec. 3558. Effect on existing law.".</li> </ul>
1	SEC. 202. MANAGEMENT OF INFORMATION TECHNOLOGY.
2	(a) IN GENERAL.—Section 11331 of title 40, United
3	States Code, is amended to read as follows:
4	"§11331. Responsibilities for Federal information sys-
5	tems standards
6	"(a) DEFINITIONS.—In this section:
7	"(1) Federal information system.—The
8	term 'Federal information system' means an infor-
9	mation system used or operated by an executive
10	agency, by a contractor of an executive agency, or by
11	another entity on behalf of an executive agency.
12	"(2) INFORMATION SECURITY.—The term 'in-
13	formation security' has the meaning given that term
14	in section 3552 of title 44.
15	"(3) NATIONAL SECURITY SYSTEM.—The term
16	'national security system' has the meaning given
17	that term in section 3552 of title 44.
18	"(b) Standards and Guidelines.—
19	"(1) AUTHORITY TO PRESCRIBE.—Except as
20	provided under paragraph (2), and based on the
21	standards and guidelines developed by the National
22	Institute of Standards and Technology under para-

1	graphs $(2)$ and $(3)$ of section $20(a)$ of the National
2	Institute of Standards and Technology Act (15
3	U.S.C. 278g-3(a)), the Secretary of Commerce, in
4	consultation with the Secretary of Homeland Secu-
5	rity, shall prescribe standards and guidelines relat-
6	ing to Federal information systems.
7	"(2) NATIONAL SECURITY SYSTEMS.—Stand-
8	ards and guidelines for national security systems
9	shall be developed, prescribed, enforced, and over-
10	seen as otherwise authorized by law and as directed
11	by the President.
12	"(c) Mandatory Requirements.—
13	"(1) AUTHORITY TO MAKE MANDATORY.—The
14	Secretary of Commerce may require executive agen-
15	cies to comply with the standards prescribed under
16	subsection $(b)(1)$ to the extent determined necessary
17	by the Secretary of Commerce to improve the effi-
18	ciency of operation or security of Federal informa-
19	tion systems.
20	"(2) Required mandatory standards.—
21	"(A) IN GENERAL.—The Secretary of
22	Commerce shall require executive agencies to
23	comply with the standards described in sub-
24	paragraph (B).

1	"(B) CONTENTS.—The standards de-
2	scribed in this subparagraph are information
3	security standards that—
4	"(i) provide minimum information se-
5	curity requirements as determined under
6	section 20(b) of the National Institute of
7	Standards and Technology Act (15 U.S.C.
8	278g–3(b)); and
9	"(ii) are otherwise necessary to im-
10	prove the security of Federal information
11	and Federal information systems.
12	"(d) Authority To Disapprove or Modify.—The
13	President may disapprove or modify the standards and
14	guidelines prescribed under subsection $(b)(1)$ if the Presi-
15	dent determines such action to be in the public interest.
16	The authority of the President to disapprove or modify
17	the standards and guidelines may be delegated to the Di-
18	rector of the Office of Management and Budget. Notice
19	of a disapproval or modification under this subsection
20	shall be published promptly in the Federal Register. Upon
21	receiving notice of a disapproval or modification, the Sec-
22	retary of Commerce shall immediately rescind or modify
23	the standards or guidelines as directed by the President
24	or the Director of the Office of Management and Budget.

"(e) EXERCISE OF AUTHORITY.—To ensure fiscal
 and policy consistency, the Secretary of Commerce shall
 exercise the authority under this section subject to direc tion by the President and in coordination with the Direc tor of the Office of Management and Budget.

6 "(f) APPLICATION OF MORE STRINGENT STAND-7 ARDS.—The head of an executive agency may employ 8 standards for the cost-effective information security for 9 Federal information systems of that agency that are more 10 stringent than the standards prescribed by the Secretary 11 of Commerce under subsection (b)(1) if the more stringent 12 standards—

"(1) contain any standards with which the Secretary of Commerce has required the agency to comply; and

16 "(2) are otherwise consistent with the policies
17 and directives issued under section 3553(b) of title
18 44.

19 "(g) DECISIONS ON PROMULGATION OF STAND-20 ARDS.—The decision by the Secretary of Commerce re-21 garding the promulgation of any standard under this sec-22 tion shall occur not later than 6 months after the submis-23 sion of the proposed standard to the Secretary of Com-24 merce by the National Institute of Standards and Tech-25 nology, as provided under section 20 of the National Insti-

1	tute of Standards and Technology Act (15 U.S.C. 278g–
2	3).''.
3	(b) Technical and Conforming Amendments.—
4	(1) Section 3502(8)) of title 44, United States
5	Code, is amended by inserting "hosting," after "col-
6	lection,".
7	(2) The National Institute of Standards and
8	Technology Act (15 U.S.C. 271 et seq.) is amend-
9	ed—
10	(A) in section 20(a)(2) (15 U.S.C. 278g-
11	3(a)(2)), by striking "section $3532(b)(2)$ " and
12	inserting "section 3552(b)"; and
13	(B) in section 21(b) (15 U.S.C. 278g-
14	4(b))—
15	(i) in paragraph (2), by inserting ",
16	the Secretary of Homeland Security," after
17	"the Institute"; and
18	(ii) in paragraph (3), by inserting
19	"the Secretary of Homeland Security,"
20	after "the Secretary of Commerce,".
21	(3) Section $1001(c)(1)(A)$ of the Homeland Se-
22	curity Act of 2002 (6 U.S.C. $511(c)(1)(A)$ ) is
23	amended by striking "section 3532(3)" and insert-
24	ing "section 3552(b)".

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1	(4) Part IV of title 10, United States Code, is
2	amended—
3	(A) in section $2222(j)(5)$ , by striking "sec-
4	tion $3542(b)(2)$ " and inserting "section
5	3552(b)";
6	(B) in section 2223(c)(3), by striking "sec-
7	tion $3542(b)(2)$ " and inserting "section
8	3552(b)"; and
9	(C) in section 2315, by striking "section
10	3542(b)(2)" and inserting "section 3552(b)".
11	(5) Section $8(d)(1)$ of the Cyber Security Re-
12	search and Development Act $(15 \text{ U.S.C. } 7406(d)(1))$
13	is amended by striking "section 3534(b)" and in-
14	serting "section 3554(b)".
15	SEC. 203. SAVINGS PROVISIONS.
16	(a) IN GENERAL.—Policies and compliance guidance
17	issued by the Director of the Office of Management and
18	Budget before the date of enactment of this Act under
19	section $3543(a)(1)$ of title 44 (as in effect on the day be-
20	fore the date of enactment of this Act) shall continue in
21	effect, according to their terms, until modified, termi-
22	nated, superseded, or repealed under section $3553(b)(1)$
23	of title 44, as added by this Act.
24	(b) Other Standards and Guidelines.—Stand-
25	ards and guidelines issued by the Secretary of Commerce

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or by the Director of the Office of Management and Budg et before the date of enactment of this Act under section
 11331(b)(1) of title 40 (as in effect on the day before the
 date of enactment of this Act) shall continue in effect, ac cording to their terms, until modified, terminated, super seded, or repealed under section 11331(b)(1), as added by
 this Act.

## 8 SEC. 204. CONSOLIDATION OF EXISTING DEPARTMENTAL 9 CYBER RESOURCES AND AUTHORITIES.

10 (a) IN GENERAL.—Title II of the Homeland Security
11 Act of 2002 (6 U.S.C. 121 et seq.) is amended by adding
12 at the end the following:

### 13 **"Subtitle E—Cybersecurity**

#### 14 "SEC. 241. DEFINITIONS.

#### 15 "In this subtitle:

16 "(1) AGENCY INFORMATION INFRASTRUC17 TURE.—The term 'agency information infrastruc18 ture' means the Federal information infrastructure
19 of a particular Federal agency.

20 "(2) CENTER.—The term 'Center' means the
21 National Center for Cybersecurity and Communica22 tions established under section 242.

23 "(3) DAMAGE.—The term 'damage' has the
24 meaning given that term in section 1030(e) of title
25 18, United States Code.

1	"(4) FEDERAL AGENCY.—The term 'Federal
2	agency' has the meaning given the term 'agency' in
3	section 3502 of title 44, United States Code.
4	"(5) Federal cybersecurity center.—The
5	term 'Federal cybersecurity center' has the meaning
6	given that term in section 708 of the Cybersecurity
7	Act of 2012.
8	"(6) FEDERAL ENTITY.—The term 'Federal en-
9	tity' has the meaning given that term in section 708
10	of the Cybersecurity Act of 2012.
11	"(7) FEDERAL INFORMATION INFRASTRUC-
12	TURE.—The term 'Federal information infrastruc-
13	ture'—
14	"(A) means information and information
15	systems that are owned, operated, controlled, or
16	licensed solely for use by, or on behalf of, any
17	Federal agency, including information systems
18	used or operated by another entity on behalf of
19	a Federal agency; and
20	"(B) does not include—
21	"(i) a national security system; or
22	"(ii) information and information sys-
23	tems that are owned, operated, controlled,
24	or licensed for use solely by, or on behalf
25	of, the Department of Defense, a military

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1	department, or another element of the in-
2	telligence community.
3	"(8) INCIDENT.—The term 'incident' has the
4	meaning given that term in section 3552 of title 44,
5	United States Code.
6	"(9) INFORMATION SECURITY.—The term 'in-
7	formation security' has the meaning given that term
8	in section 3552 of title 44, United States Code.
9	"(10) INFORMATION SYSTEM.—The term 'infor-
10	mation system' has the meaning given that term in
11	section 3502 of title 44, United States Code.
12	"(11) INTELLIGENCE COMMUNITY.—The term
13	'intelligence community' has the meaning given that
14	term in section 3(4) of the National Security Act of
15	1947 (50 U.S.C. 401a(4)).
16	((12) National security and emergency
17	PREPAREDNESS COMMUNICATIONS INFRASTRUC-
18	TURE.—The term 'national security and emergency
19	preparedness communications infrastructure' means
20	the systems supported or covered by the Office of
21	Emergency Communications and the National Com-
22	munications System on the date of enactment of the
23	Cybersecurity Act of 2012 or otherwise described in
24	Executive Order 12472, or any successor thereto, re-

1	lating to national security and emergency prepared-
2	ness communications functions.
3	"(13) NATIONAL INFORMATION INFRASTRUC-
4	TURE.—The term 'national information infrastruc-
5	ture' means information and information systems—
6	"(A) that are owned, operated, or con-
7	trolled, in whole or in part, within or from the
8	United States; and
9	"(B) that are not owned, operated, con-
10	trolled, or licensed for use by a Federal agency.
11	"(14) NATIONAL SECURITY SYSTEM.—The term
12	'national security system' has the meaning given
13	that term in section 3552 of title 44, United States
14	Code.
15	"(15) Non-federal entity.—The term 'non-
16	Federal entity' has the meaning given that term in
17	section 708 of the Cybersecurity Act of 2012.
18	"SEC. 242. CONSOLIDATION OF EXISTING RESOURCES.
19	"(a) ESTABLISHMENT.—There is established within
20	the Department a National Center for Cybersecurity and
21	Communications.
22	"(b) TRANSFER OF FUNCTIONS.—There are trans-
23	ferred to the Center the National Cyber Security Division,
24	the Office of Emergency Communications, and the Na-
25	tional Communications System, including all the func-

tions, personnel, assets, authorities, and liabilities of the
 National Cyber Security Division, the Office of Emergency
 Communications, and the National Communications Sys tem.

5 "(c) DIRECTOR.—The Center shall be headed by a
6 Director, who shall be appointed by the President, by and
7 with the advice and consent of the Senate, and who shall
8 report directly to the Secretary.

9 "(d) DUTIES.—The Director of the Center shall—

"(1) manage Federal efforts to secure, protect,
and ensure the resiliency of the Federal information
infrastructure, national information infrastructure,
and national security and emergency preparedness
communications infrastructure of the United States,
working cooperatively with appropriate government
agencies and the private sector;

17 "(2) support private sector efforts to secure,
18 protect, and ensure the resiliency of the national in19 formation infrastructure;

20 "(3) prioritize the efforts of the Center to address the most significant risks and incidents that have caused or are likely to cause damage to the Federal information infrastructure, the national information infrastructure, and national security and

emergency preparedness communications infrastruc ture of the United States;

"(4) ensure, in coordination with the privacy of-3 4 ficer designated under subsection (j), the privacy of-5 ficer appointed under section 222, and the Director 6 of the Office of Civil Rights and Civil Liberties ap-7 pointed under section 705, that the activities of the 8 Center comply with all policies, regulations, and laws 9 protecting the privacy and civil liberties of United 10 States persons; and

11 "(5) perform such other duties as the Secretary 12 may require relating to the security and resiliency of 13 the Federal information infrastructure, national in-14 formation infrastructure, and the national security 15 and emergency preparedness communications infra-16 structure of the United States.

17 "(e) AUTHORITIES AND RESPONSIBILITIES OF CEN18 TER.—The Center shall—

"(1) engage in activities and otherwise coordinate Federal efforts to identify, protect against, remediate, and mitigate, respond to, and recover from
cybersecurity threats, consequences, vulnerabilities
and incidents impacting the Federal information infrastructure and the national information infrastructure, including by providing support to entities that

own or operate national information infrastructure,
 at their request;

3 "(2) conduct risk-based assessments of the Fed4 eral information infrastructure, and risk assessments
5 of critical infrastructure;

6 "(3) develop, oversee the implementation of, 7 and enforce policies, principles, and guidelines on in-8 formation security for the Federal information infra-9 structure, including exercise of the authorities under 10 the Federal Information Security Management Act 11 of 2002 (title III of Public Law 107–347; 116 Stat. 12 2946);

13 "(4) evaluate and facilitate the adoption of 14 technologies designed to enhance the protection of 15 information infrastructure, including making such 16 technologies available to entities that own or operate 17 national information infrastructure, with or without 18 reimbursement, as necessary to accomplish the pur-19 poses of this section;

"(5) oversee the responsibilities related to national security and emergency preparedness communications infrastructure, including the functions of
the Office of Emergency Communications and the
National Communications System;

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"(6)(A) maintain comprehensive situational
 awareness of the security of the Federal information
 infrastructure and the national information infra structure for the purpose of enabling and supporting
 activities under subparagraph (e)(1); and

6 "(B) receive and distribute classified and un-7 classified information from and to entities that own 8 or operate national information infrastructure to 9 support efforts by such entities to secure such infra-10 structure and for enhancing overall situational 11 awareness;

"(7) serve as the focal point for, and foster collaboration between, the Federal Government, State
and local governments, and private entities on matters relating to the security of the national information infrastructure;

"(8) develop, in coordination with the Assistant
Secretary for Infrastructure Protection, other Federal agencies, the private sector, and State and local
governments a national incident response plan that
details the roles of Federal agencies, State and local
governments, and the private sector, and coordinate
national cyber incident response efforts;

24 "(9) consult, in coordination with the Secretary25 of State, with appropriate international partners to

1	enhance the security of the Federal information in-
2	frastructure, national information infrastructure,
3	and information infrastructure located outside the
4	United States the disruption of which could result in
5	national or regional catastrophic damage in the
6	United States;
7	((10)) coordinate the activities undertaken by
8	Federal agencies to—
9	"(A) protect Federal information infra-
10	structure and national information infrastruc-
11	ture; and
12	"(B) prepare the Nation to respond to, re-
13	cover from, and mitigate against risks of inci-
14	dents involving such infrastructure; and
15	"(11) perform such other duties as the Sec-
16	retary may require relating to the security and resil-
17	iency of the Federal information infrastructure, na-
18	tional information infrastructure, and national secu-
19	rity and emergency preparedness communications in-
20	frastructure of the United States.
21	"(f) Use of Existing Mechanisms for Collabo-
22	RATION.—To avoid unnecessary duplication or waste, in
23	carrying out the authorities and responsibilities of the
24	Center under this subtitle, to the maximum extent prac-
25	ticable, the Director of the Center shall make use of exist-

1	ing mechanisms for collaboration and information sharing,
2	including mechanisms relating to the identification and
3	communication of cybersecurity threats, vulnerabilities,
4	and associated consequences, established by other compo-
5	nents of the Department or other Federal agencies and
6	the information sharing mechanisms established under
7	title VII of the Cybersecurity Act of 2012.
8	"(g) DEPUTY DIRECTORS.—
9	"(1) IN GENERAL.—There shall be a Deputy
10	Director appointed by the Secretary, who shall—
11	"(A) have expertise in infrastructure pro-
12	tection; and
13	"(B) ensure that the operations of the
14	Center and the Office of Infrastructure Protec-
15	tion avoid duplication and use, to the maximum
16	extent practicable, joint mechanisms for infor-
17	mation sharing and coordination with the pri-
18	vate sector.
19	"(2) INTELLIGENCE COMMUNITY.—The Direc-
20	tor of National Intelligence, with the concurrence of
21	the Secretary, shall identify an employee of an ele-
22	ment of the intelligence community to serve as a
23	Deputy Director of the Center. The employee shall
24	be detailed to the Center on a reimbursable basis for
25	such period as is agreed to by the Director of the

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1 Center and the Director of National Intelligence, 2 and, while serving as Deputy Director, shall report 3 directly to the Director of the Center. 4 "(h) Cybersecurity Exercise Program.—The 5 Director of the Center shall develop and implement a national cybersecurity exercise program with the participa-6 7 tion of State and local governments, international partners 8 of the United States, and the private sector. 9 "(i) LIAISON OFFICERS.— 10 "(1) REQUIRED DETAIL OF LIAISON OFFI-11 CERS.—The Secretary of Defense, the Attorney Gen-12 eral, the Secretary of Commerce, and the Director of 13 National Intelligence shall assign personnel to the 14 Center to act as full-time liaisons. 15 "(2) Optional detail of liaison offi-16 CERS.—The head of any Federal agency not de-17 scribed in paragraph (1), with the concurrence of 18 the Director of the Center, may assign personnel to 19 the Center to act as liaisons. 20 "(3) PRIVATE SECTOR LIAISON.—The Director 21 of the Center shall designate not less than 1 em-22 ployee of the Center to serve as a liaison with the 23 private sector.

"(j) PRIVACY OFFICER.—The Director of the Center,
 in consultation with the Secretary, shall designate a full time privacy officer.

4 "(k) Sufficiency of Resources Plan.—

5 "(1) REPORT.—Not later than 120 days after 6 the date of enactment of the Cybersecurity Act of 7 2012, the Director of the Office of Management and 8 Budget shall submit to the appropriate committees 9 of Congress and the Comptroller General of the 10 United States a report on the resources and staff 11 necessary to carry out fully the responsibilities under 12 this subtitle, including the availability of existing re-13 sources and staff.

14 "(2) COMPTROLLER GENERAL REVIEW.—The
15 Comptroller General of the United States shall
16 evaluate the reasonableness and adequacy of the re17 port submitted by the Director of the Office of Man18 agement and Budget under paragraph (1) and sub19 mit to the appropriate committees of Congress a re20 port regarding the same.

"(1) NO RIGHT OR BENEFIT.—The provision of assistance or information under this section to governmental
or private entities that own or operate critical infrastructure shall be at the discretion of the Secretary. The provision of certain assistance or information to a governmental

or private entity pursuant to this section shall not create
 a right or benefit, substantive or procedural, to similar
 assistance or information for any other governmental or
 private entity.

### 5 "SEC. 243. DEPARTMENT OF HOMELAND SECURITY INFOR6 MATION SHARING.

7 "(a) INFORMATION SHARING.—The Director of the8 Center shall establish procedures to—

9 "(1) ensure the appropriate, regular, and timely 10 sharing of classified and unclassified cybersecurity 11 including information information, relating to 12 threats, vulnerabilities, traffic, trends, incidents, and 13 other anomalous activities that affect the Federal in-14 formation infrastructure, national information infra-15 structure, or information systems between and 16 among appropriate Federal and non-Federal entities, 17 including Federal cybersecurity centers, Federal and 18 non-Federal network and security operations cen-19 ters, cybersecurity exchanges, and non-Federal enti-20 ties responsible for such information systems;

21 "(2) expand and enhance the sharing of timely
22 and actionable cybersecurity threat and vulnerability
23 information by the Federal Government with owners
24 and operators of the national information infrastruc25 ture;

"(3) establish a method of accessing classified 1 2 or unclassified information, as appropriate and in 3 accordance with applicable laws protecting trade se-4 crets, that will provide situational awareness of the 5 security of the Federal information infrastructure 6 and the national information infrastructure relating 7 to cybersecurity threats, and vulnerabilities, includ-8 ing traffic, trends, incidents, damage, and other 9 anomalous activities affecting the Federal informa-10 tion infrastructure or the national information infra-11 structure; 12 "(4) develop, in consultation with the Attorney 13 General, the Director of National Intelligence, and 14 the privacy officer established under section 242(j), 15 guidelines to protect the privacy and civil liberties of 16 United States persons and intelligence sources and

17 methods, while carrying out this subsection; and

"(5) ensure, to the extent necessary, that any
information sharing under this section is consistent
with title VII of the Cybersecurity Act of 2012.

21 "(b) VOLUNTARILY SHARED INFORMATION.—

"(1) IN GENERAL.—The Director of the Center
shall ensure that information submitted in accordance with this section by States and units of local
governments, private entities, and international part-

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1	ners of the United States regarding threats,
2	vulnerabilities, incidents, and anomalous activities
3	affecting the national information infrastructure,
4	Federal information infrastructure, or information
5	infrastructure that is owned, operated, controlled, or
6	licensed solely for use by, or on behalf of, the De-
7	partment of Defense, a military department, or an-
8	other element of the intelligence community is treat-
9	ed as voluntarily shared critical infrastructure infor-
10	mation under section 214 as requested by submit-
11	ting entities.
12	"(2) LIMITATION.—Paragraph (1) shall not
13	apply to information that is submitted to—
14	"(A) conceal violations of law, inefficiency,
15	or administrative error;
16	"(B) prevent embarrassment to a person,
17	organization, or agency; or
18	"(C) interfere with competition in the pri-
19	vate sector.
20	"(c) Limitation on Use of Voluntarily Sub-
21	MITTED INFORMATION FOR REGULATORY ENFORCEMENT
22	ACTIONS.—A Federal entity may not use information sub-
23	mitted under this subtitle as evidence in a regulatory en-
24	forcement action against the individual or entity that law-
25	fully submitted the information.

1 "(d) FEDERAL AGENCIES.—

2 "(1) INFORMATION SHARING PROGRAM.—The 3 Director of the Center, in consultation with the 4 members of the Chief Information Officers Council 5 established under section 3603 of title 44. United 6 States Code, shall establish a program for sharing 7 information with and between the Center and other 8 Federal agencies that includes processes and proce-9 dures—

10 "(A) under which the Director of the Cen-11 ter regularly shares with each Federal agency 12 analyses and reports regarding the security of 13 such agency information infrastructure and on 14 the overall security of the Federal information 15 infrastructure and information infrastructure 16 that is owned, operated, controlled, or licensed 17 for use by, or on behalf of, the Department of 18 Defense, a military department, or another ele-19 ment of the intelligence community, which shall 20 include means and methods of preventing, re-21 sponding to, mitigating, and remediating cyber-22 security threats and vulnerabilities; and

23 "(B) under which Federal agencies provide
24 the Director of the Center, upon request, with
25 information concerning the security of the Fed-

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eral information infrastructure, information in-
frastructure that is owned, operated, controlled,
or licensed for use by, or on behalf of, the De-
partment of Defense, a military department, or
another element of the intelligence community,
or the national information infrastructure nec-
essary to carry out the duties of the Director of
the Center under this subtitle or any other pro-
vision of law.
"(2) Access to information.—
"(A) IN GENERAL.—The Director of the
Center shall ensure—
"(i) that the head of each Federal
agency has timely access to data, including
appropriate raw and processed data, re-
garding the information infrastructure of
the Federal agency; and
"(ii) to the greatest extent possible,
that the head of each Federal agency is
kept apprised of common trends in security
kept apprised of common trends in security compliance as well as the likelihood that a
compliance as well as the likelihood that a

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1	"(B) COMPLIANCE.—The head of a Fed-
2	eral agency shall comply with all processes and
3	procedures established under this subsection re-
4	garding notification to the Director of the Cen-
5	ter relating to incidents.
6	"(C) Immediate notification re-
7	QUIRED.—Unless otherwise directed by the
8	President, any Federal agency with a national
9	security system shall, consistent with the level
10	of the risk, immediately notify the Director of
11	the Center regarding any incident affecting the
12	security of a national security system.
13	<b>"SEC. 244. PROHIBITED CONDUCT.</b>
13 14	<b>"SEC. 244. PROHIBITED CONDUCT.</b> "None of the authorities provided under this subtitle
14	"None of the authorities provided under this subtitle
14 15	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the
14 15 16	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to—
14 15 16 17	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to— "(1) compel the disclosure of information from
14 15 16 17 18	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to— "(1) compel the disclosure of information from a private entity relating to an incident unless other-
14 15 16 17 18 19	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to— "(1) compel the disclosure of information from a private entity relating to an incident unless other- wise authorized by law; or
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to— "(1) compel the disclosure of information from a private entity relating to an incident unless other- wise authorized by law; or "(2) intercept a wire, oral, or electronic commu-
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to— "(1) compel the disclosure of information from a private entity relating to an incident unless other- wise authorized by law; or "(2) intercept a wire, oral, or electronic commu- nication (as those terms are defined in section 2510
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	"None of the authorities provided under this subtitle shall authorize the Director of the Center, the Center, the Department, or any other Federal entity to— "(1) compel the disclosure of information from a private entity relating to an incident unless other- wise authorized by law; or "(2) intercept a wire, oral, or electronic commu- nication (as those terms are defined in section 2510 of title 18, United States Code), access a stored

1 the Foreign Intelligence Surveillance Act of 1978 2 (50 U.S.C.1801)) relating to an incident unless oth-3 erwise authorized under chapter 119, chapter 121, 4 or chapter 206 of title 18, United States Code, or 5 the Foreign Intelligence Surveillance Act of 1978 6 (50 U.S.C. 1801 et seq.).". 7 (b) TECHNICAL AND CONFORMING AMENDMENT.— 8 The table of contents in section 1(b) of the Homeland Se-

9 curity Act of 2002 (6 U.S.C. 101 et seq.) is amended by

10 inserting after the item relating to section 237 the fol-

11 lowing:

#### "Subtitle E—Cybersecurity

"Sec. 241. Definitions.

"Sec. 242. Consolidation of existing resources.

"Sec. 243. Department of Homeland Security information sharing.

"Sec. 244. Prohibited conduct.".

# 12 TITLE III—RESEARCH AND 13 DEVELOPMENT

14 SEC. 301. FEDERAL CYBERSECURITY RESEARCH AND DE-

15 **VELOPMENT.** 

(a) FUNDAMENTAL CYBERSECURITY RESEARCH.—
The Director of the Office of Science and Technology Policy (referred to in this section as the "Director"), in coordination with the Secretary and the head of any relevant
Federal agency, shall build upon programs and plans in
effect as of the date of enactment of this Act to develop

a national cybersecurity research and development plan,
 which shall be updated biennially.

3 (b) REQUIREMENTS.—The plan required to be devel4 oped under subsection (a) shall encourage computer and
5 information science and engineering research to meet chal6 lenges in cybersecurity, including—

7 (1) how to design and build complex software8 intensive systems that are secure and reliable when
9 first deployed;

10 (2) how to test and verify that software, wheth11 er developed locally or obtained from a third party,
12 is free of significant known security flaws;

(3) how to test and verify that software obtained from a third party correctly implements stated functionality, and only that functionality;

16 (4) how to guarantee the privacy of the iden17 tity, information, or lawful transactions of an indi18 vidual when stored in distributed systems or trans19 mitted over networks;

20 (5) how to build new protocols to enable the
21 Internet to have robust security as one of the key
22 capabilities of the Internet;

23 (6) how to determine the origin of a message24 transmitted over the Internet;

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1	(7) how to support privacy in conjunction with
2	improved security;
3	(8) how to address the growing problem of in-
4	sider threat;
5	(9) how improved consumer education and dig-
6	ital literacy initiatives can address human factors
7	that contribute to cybersecurity;
8	(10) how to protect information stored through
9	cloud computing or transmitted through wireless
10	services;
11	(11) conducting research in the areas described
12	in section $4(a)(1)$ of the Cyber Security Research
13	and Development Act $(15 \text{ U.S.C. } 7403(a)(1))$ , as
14	amended by subsection (f); and
15	(12) any additional objectives the Director or
16	Secretary determines appropriate.
17	(c) Cybersecurity Practices Research.—The
18	Director of the National Science Foundation shall support
19	research—
20	(1) that develops, evaluates, disseminates, and
21	integrates new cybersecurity practices and concepts
22	into the core curriculum of computer science pro-
23	grams and of other programs where graduates of
24	such programs have a substantial probability of de-
25	veloping software after graduation, including new

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1	practices and concepts relating to secure coding edu-
2	cation and improvement programs; and
3	(2) that develops new models for professional
4	development of faculty in cybersecurity education,
5	including secure coding development.
6	(d) Cybersecurity Modeling and Test Beds.—
7	(1) REVIEW.—Not later than 1 year after the
8	date of enactment of this Act, the Director shall
9	conduct a review of cybersecurity test beds in exist-
10	ence on the date of enactment of this Act to inform
11	the program established under paragraph (2).
12	(2) Establishment of program.—
13	(A) IN GENERAL.—The Director of the
14	National Science Foundation, the Secretary,
15	and the Secretary of Commerce shall establish
16	a program for the appropriate Federal agencies
17	to award grants to institutions of higher edu-
18	cation or research and development non-profit
19	institutions to establish cybersecurity test beds
20	capable of realistic modeling of real-time cyber
21	attacks and defenses.
22	(B) REQUIREMENT.—The test beds estab-
23	lished under subparagraph (A) shall be suffi-
24	ciently large in order to model the scale and

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1 complexity of real world networks and environ-2 ments. 3 (3) PURPOSE.—The purpose of the program es-4 tablished under paragraph (2) shall be to support 5 the rapid development of new cybersecurity defenses, 6 techniques, and processes by improving under-7 standing and assessing the latest technologies in a 8 real-world environment. 9 (e) COORDINATION WITH OTHER RESEARCH INITIA-

10 TIVES.—The Director shall to the extent practicable, co11 ordinate research and development activities under this
12 section with other ongoing research and development secu13 rity-related initiatives, including research being conducted
14 by—

15 (1) the National Institute of Standards and16 Technology;

17 (2) the Department;

18 (3) other Federal agencies;

(4) other Federal and private research laboratories, research entities, and universities and institutions of higher education, and relevant nonprofit organizations; and

(5) international partners of the United States.
(6) NSF COMPUTER AND NETWORK SECURITY RESEARCH GRANT AREAS.—Section 4(a)(1) of the Cyber Se-

1	curity Research and Development Act (15 U.S.C.
2	7403(a)(1)) is amended—
3	(1) in subparagraph (H), by striking "and" at
4	the end;
5	(2) in subparagraph (I), by striking the period
6	at the end and inserting a semicolon; and
7	(3) by adding at the end the following:
8	"(J) secure fundamental protocols that are
9	at the heart of inter-network communications
10	and data exchange;
11	"(K) secure software engineering and soft-
12	ware assurance, including—
13	"(i) programming languages and sys-
14	tems that include fundamental security
15	features;
16	"(ii) portable or reusable code that re-
17	mains secure when deployed in various en-
18	vironments;
19	"(iii) verification and validation tech-
20	nologies to ensure that requirements and
21	specifications have been implemented; and
22	"(iv) models for comparison and
23	metrics to assure that required standards
24	have been met;
25	"(L) holistic system security that—

1	"(i) addresses the building of secure
2	systems from trusted and untrusted com-
3	ponents;
4	"(ii) proactively reduces
5	vulnerabilities;
6	"(iii) addresses insider threats; and
7	"(iv) supports privacy in conjunction
8	with improved security;
9	"(M) monitoring and detection;
10	"(N) mitigation and rapid recovery meth-
11	ods;
12	"(O) security of wireless networks and mo-
13	bile devices; and
14	"(P) security of cloud infrastructure and
15	services.".
16	(g) Cybersecurity Faculty Development
17	TRAINEESHIP PROGRAM.—Section $5(e)(9)$ of the Cyber
18	Security Research and Development Act (15 U.S.C.
19	7404(e)(9)) is amended by striking "2003 through 2007"
20	and inserting "2012 through 2014".
21	(h) Networking and Information Technology
22	RESEARCH AND DEVELOPMENT PROGRAM.—Section
23	204(a)(1) of the High-Performance Computing Act of
24	1991 (15 U.S.C. 5524(a)(1)) is amended—

1	(1) in subparagraph (B), by striking "and" at
2	the end; and
3	(2) by adding at the end the following:
4	"(D) develop and propose standards and
5	guidelines, and develop measurement techniques
6	and test methods, for enhanced cybersecurity
7	for computer networks and common user inter-
8	faces to systems; and".
9	SEC. 302. HOMELAND SECURITY CYBERSECURITY RE-
10	SEARCH AND DEVELOPMENT.
11	(a) IN GENERAL.—Subtitle D of title II of the Home-
12	land Security Act of 2002 (6 U.S.C. 161 et seq.) is amend-
13	ed by adding at the end the following:
14	"SEC. 238. CYBERSECURITY RESEARCH AND DEVELOP-
15	MENT.
16	"(a) Establishment of Research and Develop-
17	MENT PROGRAM.—The Under Secretary for Science and
18	Technology, in coordination with the Director of the Na-
19	tional Center for Cybersecurity and Communications, shall
20	carry out a research and development program for the
21	purpose of improving the security of information infra-
22	structure.
23	"(b) ELIGIBLE PROJECTS.—The research and devel-
24	opment program carried out under subsection (a) may in-

25 clude projects to—

1	((1)) advance the development and accelerate
2	the deployment of more secure versions of funda-
3	mental Internet protocols and architectures, includ-
4	ing for the secure domain name addressing system
5	and routing security;
6	"(2) improve and create technologies for detect-
7	ing and analyzing attacks or intrusions, including
8	analysis of malicious software;
9	"(3) improve and create mitigation and recov-
10	ery methodologies, including techniques for contain-
11	ment of attacks and development of resilient net-
12	works and systems;
13	"(4) develop and support infrastructure and
14	tools to support cybersecurity research and develop-
15	ment efforts, including modeling, test beds, and data
16	sets for assessment of new cybersecurity tech-
17	nologies;
18	((5) assist the development and support of
19	technologies to reduce vulnerabilities in process con-
20	trol systems;
21	"(6) understand human behavioral factors that
22	can affect cybersecurity technology and practices;
23	"(7) test, evaluate, and facilitate, with appro-
24	priate protections for any proprietary information
25	concerning the technologies, the transfer of tech-

1	nologies associated with the engineering of less vul-
2	nerable software and securing the information tech-
3	nology software development lifecycle;
4	"(8) assist the development of identity manage-
5	ment and attribution technologies;
6	"(9) assist the development of technologies de-
7	signed to increase the security and resiliency of tele-
8	communications networks;
9	((10)) advance the protection of privacy and
10	civil liberties in cybersecurity technology and prac-
11	tices; and
12	"(11) address other risks identified by the Di-
13	rector of the National Center for Cybersecurity and
14	Communications.
15	"(c) Coordination With Other Research Ini-
16	TIATIVES.—The Under Secretary for Science and Tech-
17	nology—
18	((1) shall ensure that the research and develop-
19	ment program carried out under subsection (a) is
20	consistent with any strategy to increase the security
21	and resilience of cyberspace;
22	((2) shall, to the extent practicable, coordinate
23	the research and development activities of the De-
24	partment with other ongoing research and develop-

1	ment security-related initiatives, including research
2	being conducted by—
3	"(A) the National Institute of Standards
4	and Technology;
5	"(B) the National Science Foundation;
6	"(C) the National Academy of Sciences;
7	"(D) other Federal agencies;
8	"(E) other Federal and private research
9	laboratories, research entities, and universities
10	and institutions of higher education, and rel-
11	evant nonprofit organizations; and
12	"(F) international partners of the United
13	States;
14	"(3) shall carry out any research and develop-
15	ment project under subsection (a) through a reim-
16	bursable agreement with an appropriate Federal
17	agency, if the Federal agency—
18	"(A) is sponsoring a research and develop-
19	ment project in a similar area; or
20	"(B) has a unique facility or capability
21	that would be useful in carrying out the project;
22	"(4) may make grants to, or enter into coopera-
23	tive agreements, contracts, other transactions, or re-
24	imbursable agreements with, the entities described in
25	paragraph (2); and

"(5) shall submit a report to the appropriate
committees of Congress on a review of the cybersecurity activities, and the capacity, of the national
laboratories and other research entities available to
the Department to determine if the establishment of
a national laboratory dedicated to cybersecurity research and development is necessary.".

8 (b) TECHNICAL AND CONFORMING AMENDMENT.— 9 The table of contents in section 1(b) of the Homeland Se-10 curity Act of 2002 (6 U.S.C. 101 et seq.), as amended 11 by section 204, is amended by inserting after the item re-12 lating to section 237 the following:

"Sec. 238. Cybersecurity research and development.".

#### 13 SEC. 303. RESEARCH CENTERS FOR CYBERSECURITY.

14 (a) ESTABLISHMENT.—Not later than 1 year after 15 the date of enactment of this Act, the Director of the National Science Foundation, in coordination with the Sec-16 17 retary, shall establish cybersecurity research centers based at institutions of higher education and other entities that 18 19 meet the criteria described in subsection (b) to develop so-20 lutions and strategies that support the efforts of the Fed-21eral government under this Act in—

- (1) improving the security and resilience of in-formation infrastructure;
- 24 (2) reducing cyber vulnerabilities; and

(3) mitigating the consequences of cyber at-1 2 tacks on critical infrastructure. 3 (b) CRITERIA FOR SELECTION.—In selecting an insti-4 tution of higher education or other entity to serve as a 5 Research Center for Cybersecurity, the Director of the National Science Foundation shall consider— 6 7 (1) demonstrated expertise in systems security, 8 wireless security, networking and protocols, formal

9 methods and high-performance computing, nanotech-10 nology, and industrial control systems;

(2) demonstrated capability to conduct high
performance computation integral to complex cybersecurity research, whether through on-site or off-site
computing;

(3) demonstrated expertise in interdisciplinarycybersecurity research;

(4) affiliation with private sector entities involved with industrial research described in paragraph (1) and ready access to testable commercial
data;

(5) prior formal research collaboration arrangements with institutions of higher education and Federal research laboratories;

24 (6) capability to conduct research in a secure25 environment; and

(7) affiliation with existing research programs
 of the Federal Government.

#### **3 SEC. 304. CENTERS OF EXCELLENCE.**

4 The Secretary and the Secretary of Defense may 5 jointly establish academic and professional Centers of Excellence in cybersecurity for the protection of critical infra-6 7 structure in conjunction with international academic and 8 professional partners from countries that may include al-9 lies of the United States, as determined to be appropriate 10 under title XIX of the Implementing Recommendations of the 9/11 Commission Act of 2007 (Public Law 110–53; 11 12 121 Stat. 505) in order to research and develop tech-13 nologies, best practices, and other means to defend critical 14 infrastructure.

## 15 **TITLE IV—EDUCATION,**

### 16 WORKFORCE, AND AWARENESS

#### 17 SEC. 401. DEFINITIONS.

18 In this title:

(1) CYBERSECURITY MISSION.—The term "cybersecurity mission" means activities that encompass the full range of threat reduction, vulnerability
reduction, deterrence, international engagement, incident response, resiliency, and recovery policies and
activities, including computer network operations, information assurance, law enforcement, diplomacy,

military, and intelligence missions as such activities
 relate to the security and stability of cyberspace.

3 (2) CYBERSECURITY MISSION OF A FEDERAL
4 AGENCY.—The term "cybersecurity mission of a
5 Federal agency" means the portion of a cybersecu6 rity mission that is the responsibility of a Federal
7 agency.

#### 8 SEC. 402. EDUCATION AND AWARENESS.

9 (a) ASSESSMENT OF CYBERSECURITY EDUCATION IN
10 COLLEGES AND UNIVERSITIES.—

11 (1) REPORT.—Not later than 1 year after the 12 date of enactment of this Act, the Director of the 13 National Science Foundation shall submit to the 14 Committee on Commerce, Science, and Transpor-15 tation of the Senate and the Committee on Science, 16 Space, and Technology of the House of Representa-17 tives a report on the state of cybersecurity education 18 in institutions of higher education in the United 19 States.

20 (2) CONTENTS OF REPORT.—The report re21 quired under paragraph (1) shall include baseline
22 data on—

23 (A) the state of cybersecurity education in
24 the United States;

1	(B) the extent of professional development
2	opportunities for faculty in cybersecurity prin-
3	ciples and practices;
4	(C) descriptions of the content of cyberse-
5	curity courses in undergraduate computer
6	science curriculum;
7	(D) the extent of the partnerships and col-
8	laborative cybersecurity curriculum development
9	activities that leverage industry and government
10	needs, resources, and tools; and
11	(E) proposed metrics to assess progress to-
12	ward improving cybersecurity education.
13	(b) ENRICHMENT PROGRAMS.—The Director of the
14	National Science Foundation shall—
15	(1) encourage and support programming, in-
16	cluding summer enrichment programs, to be pro-
17	vided by nonprofit organizations, in math, computer
18	programming, science, technology, and engineering,
19	with a goal of increasing cybersecurity skills in stu-
20	dents enrolled in kindergarten through grade 12;
21	and
22	(2) when appropriate, provide opportunities for
23	top-achieving students to participate in the pro-
24	grams described in paragraph (1) at no cost.

1 (c) NATIONAL EDUCATION AND AWARENESS CAM-2 PAIGN.—The Secretary, in consultation with appropriate 3 Federal agencies shall develop and implement outreach 4 and awareness programs on cybersecurity, including— 5 (1) in consultation with the Director of the Na-6 tional Institute of Standards and Technology— 7 (A) a public education campaign to in-8 crease the awareness of cybersecurity, cyber 9 safety, and cyber ethics, which shall include the 10 use of the Internet, social media, entertainment, 11 and other media to reach the public; and 12 (B) an education campaign to increase the 13 understanding of State and local governments 14 and private sector entities of the benefits of en-15 suring effective risk management of the infor-16 mation infrastructure versus the costs of failure 17 to do so and methods to mitigate and remediate 18 vulnerabilities; 19 (2) in coordination with the Secretary of Com-20 merce, development of a program to publicly recog-21 nize or identify products, services, and companies, 22 including owners and operators, that meet the high-23 est standards of cybersecurity; and 24 (3) in accordance with subsection (d), a pro-25 gram for carrying out collaborative education and

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1	training activities for cybersecurity through a con-
2	sortium or other appropriate entity.
3	(d) Collaborative Education and Training.—
4	(1) IN GENERAL.—The consortium or other en-
5	tity established under subsection (c)(3) shall—
6	(A) provide training to State and local first
7	responders and officials specifically for pre-
8	paring and responding to cyber attacks;
9	(B) develop and update a curriculum and
10	training models for State and local first re-
11	sponders and officials;
12	(C) provide technical assistance services to
13	build and sustain capabilities in support of cy-
14	bersecurity preparedness and response; and
15	(D) conduct cybersecurity training and
16	simulation exercises to defend from and respond
17	to cyber attacks.
18	(2) Members.—The Consortium or other enti-
19	ty established under subsection $(c)(3)$ shall consist
20	of academic, nonprofit, Federal Government, and
21	State and local government partners that develop,
22	update, and deliver cybersecurity training in support
23	of homeland security.
24	(e) Considerations.—In carrying out the authority
25	described in subsection (c), the Secretary of Commerce,

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the Secretary, and the Director of the National Institute
 of Standards and Technology shall leverage existing pro grams designed to inform the public of safety and security
 of products or services, including self-certifications and
 independently-verified assessments regarding the quan tification and valuation of information security risk.

### 7 SEC. 403. NATIONAL CYBERSECURITY COMPETITION AND 8 CHALLENGE.

9 (a) TALENT COMPETITION AND CHALLENGE.—

10 (1) IN GENERAL.—The Secretary and the Sec-11 retary of Commerce shall establish a program to 12 conduct competitions and challenges and ensure the 13 effective operation of national and statewide com-14 petitions and challenges that seek to identify, de-15 velop, and recruit talented individuals to work in 16 Federal agencies, State and local government agen-17 cies, and the private sector to perform duties relat-18 ing to the security of the Federal information infra-19 structure or the national information infrastructure.

20 (2) PARTICIPATION.—Participants in the com21 petitions and challenges of the program established
22 under paragraph (1) shall include—

23 (A) students enrolled in grades 9 through
24 12;

1	(B) students enrolled in a postsecondary
2	program of study leading to a baccalaureate de-
3	gree at an institution of higher education;
4	(C) students enrolled in a
5	postbaccalaureate program of study at an insti-
6	tution of higher education;
7	(D) institutions of higher education and
8	research institutions;
9	(E) veterans; and
10	(F) other groups or individuals as the Sec-
11	retary and the Secretary of Commerce deter-
12	mine appropriate.
13	(3) Support of other competitions and
14	CHALLENGES.—The program established under
15	paragraph (1) may support other competitions and
16	challenges not established under this subsection
17	through affiliation and cooperative agreements
18	with—
19	(A) Federal agencies;
20	(B) regional, State, or school programs
21	supporting the development of cyber profes-
22	sionals;
23	(C) State, local, and tribal governments; or
24	(D) other private sector organizations.

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1	(4) Areas of Talent.—The program estab-
2	lished under paragraph (1) shall seek to identify, de-
3	velop, and recruit exceptional talent relating to—
4	(A) ethical hacking;
5	(B) penetration testing;
6	(C) vulnerability assessment;
7	(D) continuity of system operations;
8	(E) cyber forensics;
9	(F) offensive and defensive cyber oper-
10	ations; and
11	(G) other areas to fulfill the cybersecurity
12	mission as the Secretary determines appro-
13	priate.
14	(5) INTERNSHIPS.—The Director of the Office
15	of Personnel Management shall establish, in coordi-
16	nation with the Director of the National Center for
17	Cybersecurity and Communications, a program to
18	provide, where appropriate, internships or other
19	work experience in the Federal government to the
20	winners of the competitions and challenges.
21	(b) NATIONAL RESEARCH AND DEVELOPMENT COM-
22	PETITION AND CHALLENGE.—
23	(1) IN GENERAL.—The Director of the National
24	Science Foundation, in consultation with appropriate
25	Federal agencies, shall establish a program of cyber-

1	security competitions and challenges to stimulate in-
2	novation in basic and applied cybersecurity research,
3	technology development, and prototype demonstra-
4	tion that has the potential for application to the in-
5	formation technology activities of the Federal Gov-
6	ernment.
7	(2) PARTICIPATION.—Participants in the com-
8	petitions and challenges of the program established
9	under paragraph (1) shall include—
10	(A) students enrolled in grades 9 through
11	12;
12	(B) students enrolled in a postsecondary
13	program of study leading to a baccalaureate de-
14	gree at an institution of higher education;
15	(C) students enrolled in a
16	postbaccalaureate program of study at an insti-
17	tution of higher education;
18	(D) institutions of higher education and
19	research institutions;
20	(E) veterans; and
21	(F) other groups or individuals as the Di-
22	rector of the National Science Foundation de-
23	termines appropriate.

1	(3) TOPICS.—In selecting topics for competi-
2	tions and challenges held as part of the program es-
3	tablished under paragraph (1), the Director—
4	(A) shall consult widely both within and
5	outside the Federal Government; and
6	(B) may empanel advisory committees.
7	(4) INTERNSHIPS.—The Director of the Office
8	of Personnel Management shall establish, in coordi-
9	nation with the Director of the National Science
10	Foundation, a program to provide, where appro-
11	priate, internships or other work experience in the
12	Federal government to the winners of the competi-
13	tions and challenges held as part of the program es-
13 14	tions and challenges held as part of the program es- tablished under paragraph (1).
14	tablished under paragraph (1).
14 15	tablished under paragraph (1). SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE
14 15 16	tablished under paragraph (1). SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE PROGRAM.
14 15 16 17	tablished under paragraph (1). <b>SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE</b> <b>PROGRAM.</b> (a) IN GENERAL.—The Director of the National
14 15 16 17 18	tablished under paragraph (1). <b>SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE</b> <b>PROGRAM.</b> (a) IN GENERAL.—The Director of the National Science Foundation, in coordination with the Secretary,
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	<ul> <li>tablished under paragraph (1).</li> <li>SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE PROGRAM.</li> <li>(a) IN GENERAL.—The Director of the National Science Foundation, in coordination with the Secretary, shall establish a Federal Cyber Scholarship-for-Service</li> </ul>
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	<ul> <li>tablished under paragraph (1).</li> <li>SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE PROGRAM.</li> <li>(a) IN GENERAL.—The Director of the National Science Foundation, in coordination with the Secretary, shall establish a Federal Cyber Scholarship-for-Service program to recruit and train the next generation of infor-</li> </ul>
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	tablished under paragraph (1). <b>SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE</b> <b>PROGRAM.</b> (a) IN GENERAL.—The Director of the National Science Foundation, in coordination with the Secretary, shall establish a Federal Cyber Scholarship-for-Service program to recruit and train the next generation of infor- mation technology professionals, industrial control system

(b) PROGRAM DESCRIPTION AND COMPONENTS.—
 The program established under subsection (a) shall—

3 (1) incorporate findings from the assessment 4 and development of the strategy under section 405; 5 (2) provide not more than 1,000 scholarships 6 per year, to students who are enrolled in a program 7 of study at an institution of higher education leading 8 to a degree or specialized program certification in 9 the cybersecurity field, in an amount that covers 10 each student's tuition and fees at the institution and 11 provides the student with an additional stipend;

12 (3) require each scholarship recipient, as a con-13 dition of receiving a scholarship under the program, 14 to enter into an agreement under which the recipient 15 agrees to work in the cybersecurity mission of a 16 Federal, State, local, or tribal agency for a period 17 equal to the length of the scholarship following re-18 ceipt of the student's degree if offered employment 19 in that field by a Federal, State, local, or tribal 20 agency;

(4) provide a procedure by which the National
Science Foundation or a Federal agency may, consistent with regulations of the Office of Personnel
Management, request and fund security clearances
for scholarship recipients, including providing for

1	clearances during summer internships and after the
2	recipient receives the degree; and
3	(5) provide opportunities for students to receive
4	temporary appointments for meaningful employment
5	in the cybersecurity mission of a Federal agency
6	during school vacation periods and for internships.
7	(c) HIRING AUTHORITY.—
8	(1) IN GENERAL.—For purposes of any law or
9	regulation governing the appointment of individuals
10	in the Federal civil service, upon receiving a degree
11	for which an individual received a scholarship under
12	this section, the individual shall be—
13	(A) hired under the authority provided for
14	in section 213.3102(r) of title 5, Code of Fed-
15	eral Regulations; and
16	(B) exempt from competitive service.
17	(2) Competitive service position.—Upon
18	satisfactory fulfillment of the service term of an in-
19	dividual hired under paragraph (1), the individual
20	may be converted to a competitive service position
21	without competition if the individual meets the re-
22	quirements for that position.
23	(d) ELIGIBILITY.—To be eligible to receive a scholar-
24	ship under this section, an individual shall—

(1) be a citizen or lawful permanent resident of
 the United States;

3 (2) demonstrate a commitment to a career in
4 improving the security of information infrastructure;
5 and

6 (3) have demonstrated a high level of pro7 ficiency in mathematics, engineering, or computer
8 sciences.

9 (e) REPAYMENT.—If a recipient of a scholarship 10 under this section does not meet the terms of the scholar-11 ship program, the recipient shall refund the scholarship 12 payments in accordance with rules established by the Di-13 rector of the National Science Foundation, in coordination 14 with the Secretary.

(f) EVALUATION AND REPORT.—The Director of the
National Science Foundation shall evaluate and report periodically to Congress on the success of recruiting individuals for the scholarships and on hiring and retaining those
individuals in the public sector workforce.

20 SEC. 405. ASSESSMENT OF CYBERSECURITY FEDERAL 21 WORKFORCE.

(a) IN GENERAL.—The Director of the Office of Personnel Management and the Secretary, in coordination
with the Director of National Intelligence, the Secretary
of Defense, and the Chief Information Officers Council es-

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tablished under section 3603 of title 44, United States
 Code, shall assess the readiness and capacity of the Fed eral workforce to meet the needs of the cybersecurity mis sion of the Federal Government.

5 (b) STRATEGY.—

6 (1) IN GENERAL.—Not later than 180 days 7 after the date of enactment of this Act, the Director 8 of the Office of Personnel Management, in consulta-9 tion with the Director of the National Center for Cy-10 bersecurity and Communications and the Director of 11 the Office of Management and Budget, shall develop 12 a comprehensive workforce strategy that enhances 13 the readiness, capacity, training, and recruitment 14 and retention of cybersecurity personnel of the Fed-15 eral Government.

16 (2) CONTENTS.—The strategy developed under
17 paragraph (1) shall include—

18 (A) a 5-year plan on recruitment of per-19 sonnel for the Federal workforce; and

20 (B) a 10-year projections of Federal work-21 force needs.

(c) UPDATES.—The Director of the Office of Personnel Management, in consultation with the Director of
the National Center for Cybersecurity and Communications and the Director of the Office of Management and

Budget, shall update the strategy developed under sub section (b) as needed.

# 3 SEC. 406. FEDERAL CYBERSECURITY OCCUPATION CLASSI4 FICATIONS.

5 (a) IN GENERAL.—Not later than 1 year after the 6 date of enactment of this Act, the Director of the Office 7 of Personnel Management, in coordination with the Direc-8 tor of the National Center for Cybersecurity and Commu-9 nications, shall develop and issue comprehensive occupa-10 tion classifications for Federal employees engaged in cy-11 bersecurity missions.

(b) APPLICABILITY OF CLASSIFICATIONS.—The Director of the Office of Personnel Management shall ensure
that the comprehensive occupation classifications issued
under subsection (a) may be used throughout the Federal
Government.

## 17 SEC. 407. TRAINING AND EDUCATION OF FEDERAL EM-18 PLOYEES.

(a) DEFINITION.—In this section, the term "agency
information infrastructure" means the Federal information infrastructure of a Federal agency.

22 (b) TRAINING.—

(1) FEDERAL GOVERNMENT EMPLOYEES AND
FEDERAL CONTRACTORS.—The Director of the Office of Personnel Management, in coordination with

1	the Secretary, the Director of National Intelligence,
2	the Secretary of Defense, and the Chief Information
3	Officers Council established under section 3603 of
4	title 44, United States Code, shall establish a cyber-
5	security awareness and education curriculum that
6	shall be required for all Federal employees and con-
7	tractors engaged in the design, development, or op-
8	eration of an agency information infrastructure or
9	the Federal information infrastructure.
10	(2) CONTENTS.—The curriculum established
11	under paragraph (1) shall include, at a minimum—
12	(A) role-based security awareness training;
13	(B) recommended cybersecurity practices;
14	(C) cybersecurity recommendations for
15	traveling abroad;
16	(D) unclassified counterintelligence infor-
17	mation;
18	(E) information regarding industrial espio-
19	nage;
20	(F) information regarding malicious activ-
21	ity online;
22	(G) information regarding cybersecurity
23	and law enforcement;
24	(H) identity management information;

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134 1 (I) information regarding supply chain se-2 curity; 3 (J) information security risks associated with the activities of Federal employees and 4 5 contractors; and 6 (K) the responsibilities of Federal employ-7 ees and contractors in complying with policies 8 and procedures designed to reduce information 9 security risks identified under subparagraph 10 (J). 11 (3)FEDERAL CYBERSECURITY PROFES-12 SIONALS.—The Director of the Office of Personnel 13 Management in conjunction with the Secretary, the

14 Director of National Intelligence, the Secretary of 15 Defense, the Director of the Office of Management 16 and Budget, and, as appropriate, colleges, univer-17 sities, and nonprofit organizations with cybersecurity 18 training expertise, shall develop a program to pro-19 vide training to improve and enhance the skills and 20 capabilities of Federal employees engaged in the cy-21 bersecurity mission, including training specific to the 22 acquisition workforce.

(4) HEADS OF FEDERAL AGENCIES.—Not later
than 30 days after the date on which an individual
is appointed to a position at level I or II of the Ex-

ecutive Schedule, the Secretary and the Director of
 National Intelligence shall provide that individual
 with a cybersecurity threat briefing.

4 (5) CERTIFICATION.—The head of each Federal 5 agency shall include in the annual report required 6 under section 3554(c) of title 44, United States 7 Code, as amended by this Act, a certification regard-8 ing whether all employees and contractors of the 9 Federal agency have completed the training required 10 under this subsection.

11 (c) RECRUITMENT.—The Director of the Office of 12 Personnel Management, in coordination with the Director 13 of the National Center for Cybersecurity and Communica-14 tions, shall develop strategies and programs to recruit stu-15 dents enrolled in institutions of higher education and students enrolled in career and technical institutions in the 16 17 United States to serve as Federal employees engaged in 18 cybersecurity missions.

(d) LEADERSHIP IN CYBERSECURITY.—The head of
each Federal agency shall adopt best practices, developed
by the Office of Personnel Management, regarding effective ways to educate and motivate employees of the Federal Government to demonstrate leadership in cybersecurity, including—

1	(1) promotions and other nonmonetary awards;
2	and
3	(2) publicizing information sharing accomplish-
4	ments by individual employees and, if appropriate,
5	the tangible benefits that resulted.
6	SEC. 408. NATIONAL CENTER FOR CYBERSECURITY AND
7	COMMUNICATIONS ACQUISITION AUTHORI-
8	TIES.
9	(a) IN GENERAL.—Subtitle E of title II of the Home-
10	land Security Act of 2002, as added by section 204, is
11	amended by adding at the end the following:
12	"SEC. 245. NATIONAL CENTER FOR CYBERSECURITY AND
13	COMMUNICATIONS ACQUISITION AUTHORI-
13 14	COMMUNICATIONS ACQUISITION AUTHORI- TIES.
14	TIES.
14 15	<b>TIES.</b> "(a) IN GENERAL.—The National Center for Cyber-
14 15 16 17	TIES. "(a) IN GENERAL.—The National Center for Cyber- security and Communications is authorized to use the au-
14 15 16 17	TIES. "(a) IN GENERAL.—The National Center for Cyber- security and Communications is authorized to use the au- thorities under subsections (c)(1) and (d)(1)(B) of section
14 15 16 17 18	TIES. "(a) IN GENERAL.—The National Center for Cyber- security and Communications is authorized to use the au- thorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the au-
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	TIES. "(a) IN GENERAL.—The National Center for Cyber- security and Communications is authorized to use the au- thorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the au- thorities under subsections (a)(1) and (b)(2) of section
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	TIES. "(a) IN GENERAL.—The National Center for Cyber- security and Communications is authorized to use the au- thorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the au- thorities under subsections (a)(1) and (b)(2) of section 3304 of title 41, United States Code, subject to all other
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	TIES. "(a) IN GENERAL.—The National Center for Cyber- security and Communications is authorized to use the au- thorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the au- thorities under subsections (a)(1) and (b)(2) of section 3304 of title 41, United States Code, subject to all other requirements of sections 3301 and 3304 of title 41, United

1	chief procurement officer of the Department shall issue
2	guidelines for use of the authority under subsection (a).
3	"(c) TERMINATION.—The National Center for Cyber-
4	security and Communications may not use the authority
5	under subsection (a) on and after the date that is 3 years
6	after the date of enactment of this Act.
7	"(d) REPORTING.—
8	"(1) IN GENERAL.—On a semiannual basis, the
9	Director of the Center shall submit a report on use
10	of the authority granted by subsection (a) to—
11	"(A) the Committee on Homeland Security
12	and Governmental Affairs of the Senate; and
13	"(B) the Committee on Homeland Security
14	of the House of Representatives.
15	"(2) CONTENTS.—Each report submitted under
16	paragraph (1) shall include, at a minimum—
17	"(A) the number of contract actions taken
18	under the authority under subsection (a) during
19	the period covered by the report; and
20	"(B) for each contract action described in
21	subparagraph (A)—
22	"(i) the total dollar value of the con-
23	tract action;
24	"(ii) a summary of the market re-
25	search conducted by the National Center

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1	for Cybersecurity and Communications, in-
2	cluding a list of all offerors who were con-
3	sidered and those who actually submitted
4	bids, in order to determine that use of the
5	authority was appropriate; and
6	"(iii) a copy of the justification and
7	approval documents required by section
8	3304(e) of title 41, United States Code.
9	"(3) Classified Annex.—A report submitted
10	under this subsection shall be submitted in an un-
11	classified form, but may include a classified annex,
12	if necessary.
13	"SEC. 246. RECRUITMENT AND RETENTION PROGRAM FOR
13 14	"SEC. 246. RECRUITMENT AND RETENTION PROGRAM FOR THE NATIONAL CENTER FOR CYBERSECU-
14	THE NATIONAL CENTER FOR CYBERSECU-
14 15	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS.
14 15 16	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section:
14 15 16 17	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.—
14 15 16 17 18	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.— The term 'collective bargaining agreement' has the
14 15 16 17 18 19	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.— The term 'collective bargaining agreement' has the meaning given that term in section 7103(a)(8) of
14 15 16 17 18 19 20	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.— The term 'collective bargaining agreement' has the meaning given that term in section 7103(a)(8) of title 5, United States Code.
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.— The term 'collective bargaining agreement' has the meaning given that term in section 7103(a)(8) of title 5, United States Code. "(2) QUALIFIED EMPLOYEE.—The term 'quali-
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.— The term 'collective bargaining agreement' has the meaning given that term in section 7103(a)(8) of title 5, United States Code. "(2) QUALIFIED EMPLOYEE.—The term 'quali- fied employee' means an employee who performs
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> </ol>	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS. "(a) DEFINITIONS.—In this section: "(1) COLLECTIVE BARGAINING AGREEMENT.— The term 'collective bargaining agreement' has the meaning given that term in section 7103(a)(8) of title 5, United States Code. "(2) QUALIFIED EMPLOYEE.—The term 'quali- fied employee' means an employee who performs functions relating to the security of Federal systems

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"(1) ESTABLISH POSITIONS, APPOINT 1 PER-2 SONNEL, AND FIX RATES OF PAY.—The Secretary 3 may exercise with respect to qualified employees of the Department the same authority of that the Sec-4 5 retary of Defense has with respect to civilian intel-6 ligence personnel under sections 1601, 1602, and 7 1603 of title 10, United States Code, to establish as 8 positions in the excepted service, to appoint individ-9 uals to those positions, and fix pay. Such authority 10 shall be exercised subject to the same conditions and 11 limitations applicable to the Secretary of Defense 12 with respect to civilian intelligence personnel of the 13 Department of Defense.

14 "(2) SCHOLARSHIP PROGRAM.—The Secretary 15 may exercise with respect to qualified employees of 16 the Department the same authority of the Secretary 17 of Defense has with respect to civilian personnel 18 under section 2200a of title 10, United States Code, 19 to the same extent, and subject to the same condi-20 tions and limitations, that the Secretary of Defense 21 may exercise such authority with respect to civilian 22 personnel of the Department of Defense.

23 "(3) PLAN FOR EXECUTION OF AUTHORI24 TIES.—Not later than 120 days after the date of en25 actment of this subtitle, the Secretary shall submit

a report to the appropriate committees of Congress
 with a plan for the use of the authorities provided
 under this subsection.

4 "(4) Collective bargaining agreements.— 5 Nothing in paragraph (1) may be construed to im-6 pair the continued effectiveness of a collective bar-7 gaining agreement with respect to an office, compo-8 nent, subcomponent, or equivalent of the Depart-9 ment that is a successor to an office, component, 10 subcomponent, or equivalent of the Department cov-11 ered by the agreement before the succession.

"(5) REQUIRED REGULATIONS.—The Secretary,
in coordination with the Director of the Center and
the Director of the Office of Personnel Management,
shall prescribe regulations for the administration of
this section.

17 "(c) MERIT SYSTEM PRINCIPLES AND CIVIL SERVICE18 PROTECTIONS: APPLICABILITY.—

"(1) APPLICABILITY OF MERIT SYSTEM PRINCIPLES.—The Secretary shall exercise the authority
under subsection (b) in a manner consistent with the
merit system principles set forth in section 2301 of
title 5, United States Code.

24 "(2) CIVIL SERVICE PROTECTIONS.—Section
25 1221, section 2302, and chapter 75 of title 5,

United States Code, shall apply to the positions es tablished under subsection (b)(1).

3 "(d) REQUIREMENTS.—Before the initial exercise of
4 any authority authorized under subsection (b)(1) the Sec5 retary shall—

6 "(1) seek input from affected employees, and 7 the union representatives of affected employees as 8 applicable, and Federal manager and professional 9 associations into the design and implementation of a 10 fair, credible, and transparent system for exercising 11 any authority under subsection (b)(1);

"(2) make a good faith attempt to resolve any
employee concerns regarding proposed changes in
conditions of employment through discussions with
the groups described in paragraph (1);

"(3) develop a program to provide training to
supervisors of cybersecurity employees at the Department on the use of the new authorities, including actions, options, and strategies a supervisor may
use in—

21 "(A) developing and discussing relevant
22 goals and objectives with the employee, commu23 nicating and discussing progress relative to per24 formance goals and objectives, and conducting
25 performance appraisals;

1	"(B) mentoring and motivating employees,
2	and improving employee performance and pro-
3	ductivity;
4	"(C) fostering a work environment charac-
5	terized by fairness, respect, equal opportunity,
6	and attention to the quality of work of the em-
7	ployees;
8	"(D) effectively managing employees with
9	unacceptable performance;
10	"(E) addressing reports of a hostile work
11	environment, reprisal, or harassment of or by
12	another supervisor or employee; and
13	"(F) otherwise carrying out the duties and
14	responsibilities of a supervisor;
15	"(4) develop a program to provide training to
16	supervisors of cybersecurity employees at the De-
17	partment on the prohibited personnel practices
18	under section 2302 of title 5, United States Code,
19	(particularly with respect to the practices described
20	in paragraphs (1) and (8) of section 2302(b) of title
21	5, United States Code), employee collective bar-
22	gaining and union participation rights, and the pro-
23	cedures and processes used to enforce employee
24	rights; and

1	"(5) develop a program under which experi-
2	enced supervisors mentor new supervisors by—
3	"(A) sharing knowledge and advice in
4	areas such as communication, critical thinking,
5	responsibility, flexibility, motivating employees,
6	teamwork, leadership, and professional develop-
7	ment; and
8	"(B) pointing out strengths and areas for
9	development.
10	"(e) Supervisor Requirement.—
11	"(1) IN GENERAL.—Except as provided in para-
12	graph (2), not later than 1 year after the date of en-
13	actment of the Cybersecurity Act of 2012 and every
14	3 years thereafter, every supervisor of cybersecurity
15	employees at the Department shall complete the pro-
16	grams established under paragraphs $(3)$ and $(4)$ of
17	subsection (d).
18	"(2) EXCEPTION.—A supervisor of cybersecu-
19	rity employees at the Department who is appointed
20	after the date of enactment of the Cybersecurity Act
21	of 2012 shall complete the programs established
22	under paragraphs $(3)$ and $(4)$ of subsection $(d)$ not
23	later than 1 year after the date on which the super-
24	visor is appointed to the position, and every 3 years
25	thereafter.

"(3) ONGOING PARTICIPATION.—Participation
 by supervisors of cybersecurity employees at the De partment in the program established under sub section (d)(5) shall be ongoing.

5 "(f) CONVERSION TO COMPETITIVE SERVICE.—In 6 consultation with the Director of the Center, the Secretary 7 may grant competitive civil service status to a qualified 8 employee appointed to the excepted service under sub-9 section (b) if that employee is employed in the Center or 10 is transferring to the Center.

11 "(g) ANNUAL REPORT.—Not later than 1 year after 12 the date of enactment of this subtitle, and every year 13 thereafter for 4 years, the Secretary shall submit to the 14 appropriate committees of Congress a detailed report 15 that—

"(1) discusses the process used by the Secretary in accepting applications, assessing candidates, ensuring adherence to veterans' preference,
and selecting applicants for vacancies to be filled by
a qualified employee;

21 "(2) describes—

22 "(A) how the Secretary plans to fulfill the
23 critical need of the Department to recruit and
24 retain qualified employees;

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1	"(B) the measures that will be used to
2	measure progress; and
3	"(C) any actions taken during the report-
4	ing period to fulfill such critical need;
5	"(3) discusses how the planning and actions
6	taken under paragraph (2) are integrated into the
7	strategic workforce planning of the Department;
8	"(4) provides metrics on actions occurring dur-
9	ing the reporting period, including—
10	"(A) the number of qualified employees
11	hired by occupation and grade and level or pay
12	band;
13	"(B) the total number of veterans hired;
14	"(C) the number of separations of qualified
15	employees by occupation and grade and level or
16	pay band;
17	"(D) the number of retirements of quali-
18	fied employees by occupation and grade and
19	level or pay band; and
20	"(E) the number and amounts of recruit-
21	ment, relocation, and retention incentives paid
22	to qualified employees by occupation and grade
23	and level or pay band.".
24	(b) Technical and Conforming Amendment.—
25	The table of contents in section 1(b) of the Homeland Se-

- 1 curity Act of 2002 (6 U.S.C. 101 et seq.), as amended
- 2 by section 204, is amended by inserting after the item re-
- 3 lating to section 244 the following:
  - "Sec. 245. National Center for Cybersecurity and Communications acquisition authorities.

"Sec. 246. Recruitment and retention program for the national center for cybersecurity and communications.".

### 4 SEC. 409. REPORTS ON CYBER INCIDENTS AGAINST GOV-5 ERNMENT NETWORKS.

6 (a) DEPARTMENT OF HOMELAND SECURITY.—Not
7 later than 180 days after the date of enactment of this
8 Act, and annually thereafter, the Secretary shall submit
9 to Congress a report that—

10 (1) summarizes major cyber incidents involving
11 networks of Executive agencies (as defined in section
12 105 of title 5, United States Code), except for the
13 Department of Defense;

(2) provides aggregate statistics on the number
of breaches of networks of Executive agencies, the
volume of data exfiltrated, and the estimated cost of
remedying the breaches; and

18 (3) discusses the risk of cyber sabotage.

(b) DEPARTMENT OF DEFENSE.—Not later than 180
days after the date of enactment of this Act, and annually
thereafter, the Secretary of Defense shall submit to Congress a report that—

(1) summarizes major cyber incidents against 1 2 networks of the Department of Defense and the 3 military departments; 4 (2) provides aggregate statistics on the number 5 of breaches against networks of the Department of 6 Defense and the military departments, the volume of 7 data exfiltrated, and the estimated cost of remedying 8 the breaches; and 9 (3) discusses the risk of cyber sabotage. 10 (c) FORM OF REPORTS.—Each report submitted 11 under this section shall be in unclassified form, but may 12 include a classified annex as necessary to protect sources, 13 methods, and national security. 14 (d) CONTENTS OF REPORTS.—Each report submitted 15 under this section may be based in whole or in part on the reporting requirements under section 3553 of chapter 16 17 35 of title 44, United States Code, as amended by this 18 Act. 19 SEC. 410. REPORTS ON PROSECUTION FOR CYBERCRIME. 20 (a) IN GENERAL.—Not later than 180 days after the 21 date of enactment of this Act, the Attorney General and 22 the Directors of the Federal Bureau of Investigation and 23 the United States Secret Service shall submit to Congress 24 reports-

1	(1) describing investigations and prosecutions
2	relating to cyber intrusions or other cybercrimes the
-3	preceding year, including—
4	(A) the number of investigations initiated
5	relating to such crimes;
6	(B) the number of arrests relating to such
7	crimes;
8	(C) the number and description of in-
9	stances in which investigations or prosecutions
10	relating to such crimes have been delayed or
11	prevented because of an inability to extradite a
12	criminal defendant in a timely manner; and
13	(D) the number of prosecutions for such
14	crimes, including—
15	(i) the number of defendants pros-
16	ecuted;
17	(ii) whether the prosecutions resulted
18	in a conviction;
19	(iii) the sentence imposed and the
20	statutory maximum for each such crime
21	for which a defendant was convicted; and
22	(iv) the average sentence imposed for
23	a conviction of such crimes;
24	(2) identifying the number of employees, finan-
25	cial resources, and other resources (such as tech-

1 nology and training) devoted to the enforcement, in-2 vestigation, and prosecution of cyber intrusions or 3 other cybercrimes, including the number of inves-4 tigators, prosecutors, and forensic specialists dedi-5 cated to investigating and prosecuting cyber intru-6 sions or other cybercrimes; and 7 (3) discussing any impediments under the laws 8 of the United States or international law to prosecu-9 tions for cyber intrusions or other cybercrimes. 10 (b) UPDATES.—The Attorney General and the Directors of the Federal Bureau of Investigation and the 11 12 United States Secret Service shall annually submit to Con-13 gress reports updating the reports submitted under sub-14 section (a) at the same time the Attorney General and 15 the Directors submit annual reports under section 404 of the Prioritizing Resources and Organization for Intellec-16 17 tual Property Act of 2008 (42 U.S.C. 3713d).

### 18 SEC. 411. REPORT ON RESEARCH RELATING TO SECURE 19 DOMAIN.

(a) IN GENERAL.—The Secretary shall enter into a
contract with the National Research Council, or another
federally funded research and development corporation,
under which the Council or corporation shall submit to
Congress reports on available technical options, consistent
with constitutional and statutory privacy rights, for en-

hancing the security of the information networks of enti-1 2 ties that own or manage critical infrastructure through— 3 (1) technical improvements, including devel-4 oping a secure domain; or 5 (2) increased notice of and consent to the use 6 of technologies to scan for, detect, and defeat cyber 7 security threats, such as technologies used in a se-8 cure domain. 9 (b) TIMING.—The contract entered into under sub-10 section (a) shall require that the report described in sub-11 section (a) be submitted— 12 (1) not later than 180 days after the date of 13 enactment of this Act; 14 (2) annually, after the first report submitted 15 under subsection (a), for 3 years; and 16 (3) more frequently, as determined appropriate 17 by the Secretary in response to new risks or tech-18 nologies that emerge. 19 SEC. 412. REPORT ON PREPAREDNESS OF FEDERAL 20 COURTS TO PROMOTE CYBERSECURITY. 21 Not later than 180 days after the date of enactment 22 of this Act, the Attorney General, in coordination with the 23 Administrative Office of the United States Courts, shall 24 submit to Congress a report—

1	(1) on whether Federal courts have granted
2	timely relief in matters relating to botnets and other
3	cybercrime and cyber security threats; and
4	(2) that includes, as appropriate, recommenda-
5	tions on changes or improvements to—
6	(A) the Federal Rules of Civil Procedure
7	or the Federal Rules of Criminal Procedure;
8	(B) the training and other resources avail-
9	able to support the Federal judiciary;
10	(C) the capabilities and specialization of
11	courts to which such cases may be assigned;
12	and
13	(D) Federal civil and criminal laws.
13 14	(D) Federal civil and criminal laws. SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE-
14	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE-
14 15	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS.
14 15 16	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment
14 15 16 17	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment of this Act, and annually thereafter for 3 years (or more
14 15 16 17 18	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment of this Act, and annually thereafter for 3 years (or more frequently if determined appropriate by the Secretary) the
14 15 16 17 18 19	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment of this Act, and annually thereafter for 3 years (or more frequently if determined appropriate by the Secretary) the Secretary shall submit to Congress a report on—
14 15 16 17 18 19 20	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment of this Act, and annually thereafter for 3 years (or more frequently if determined appropriate by the Secretary) the Secretary shall submit to Congress a report on— (1) legal or other impediments to appropriate
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment of this Act, and annually thereafter for 3 years (or more frequently if determined appropriate by the Secretary) the Secretary shall submit to Congress a report on— (1) legal or other impediments to appropriate public awareness of—
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE- NESS. Not later than 180 days after the date of enactment of this Act, and annually thereafter for 3 years (or more frequently if determined appropriate by the Secretary) the Secretary shall submit to Congress a report on— <ul> <li>(1) legal or other impediments to appropriate public awareness of— <ul> <li>(A) the nature of, methods of propagation</li> </ul> </li> </ul>

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1 (B) the minimal standards of computer se-2 curity necessary for responsible Internet use; 3 and 4 (C) the availability of commercial off the 5 shelf technology that allows consumers to meet 6 such levels of computer security; 7 (2) a summary of the plans of the Secretary to 8 enhance public awareness of common cyber security 9 threats, including a description of the metrics used 10 by the Department for evaluating the efficacy of 11 public awareness campaigns; and 12 (3) recommendations for congressional actions 13 to address these impediments to appropriate public 14 awareness of common cyber security threats. 15 SEC. 414. REPORT ON PROTECTING THE ELECTRICAL GRID 16 OF THE UNITED STATES. 17 Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Sec-18 retary of Defense and the Director of National Intel-19 20 ligence, shall submit to Congress a report on— 21 (1) the threat of a cyber attack disrupting the 22 electrical grid of the United States; 23 (2) the implications for the national security of 24 the United States if the electrical grid is disrupted;

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1 (3) the options available to the United States 2 and private sector entities to quickly reconstitute 3 electrical service to provide for the national security 4 of the United States, and, within a reasonable time 5 frame, the reconstitution of all electrical service 6 within the United States; and 7 (4) a plan to prevent disruption of the electric 8 grid of the United States caused by a cyber attack. 9 **SEC. 415. MARKETPLACE INFORMATION.** 10 (a) SENSE OF CONGRESS.—It is the sense of Con-11 gress that— 12 (1) registrants that file reports with the Securi-13 ties and Exchange Commission have an obligation to 14 disclose material risks to investors; and 15 (2) as with longstanding rules regarding other 16 material risks, information security risks and related 17 events that are material to investors should be dis-18 closed on a regular basis to provide quality informa-19 tion to the marketplace and enable informed investor 20 decisions. 21 (b) DEFINITION OF INFORMATION SECURITY RISK.— 22 In this section, the term "information security risk and 23 related events" means the risk to a registrant's business

25 tive positioning, and reputation, due to the potential for

operations, assets, financial condition, strategy, competi-

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unauthorized access, use, disclosure, disruption, modifica tion, or destruction of registrant information, information
 of third parties collected by the registrant, or information
 systems of the registrant.

5 (c) GUIDANCE.—Not later than 1 year after the date of enactment of this Act, the Securities and Exchange 6 7 Commission (referred to in this section as the "Commis-8 sion") shall evaluate existing guidance to registrants re-9 lated to disclosures by registrants of information security 10 risks and related events (including Securities and Exchange Commission Division of Corporation Finance, CF 11 Disclosure Guidance: Topic No. 2, Cybersecurity) to deter-12 13 mine whether such guidance, in light of the evaluation, 14 should be—

15 (1) updated by the Division of Corporation Fi-16 nance; or

(2) issued as Commission interpretive guidance.
(d) ANNUAL REPORTS.—For 5 years following the
evaluation under subsection (b), the Commission shall submit to Congress, on an annual basis, a report that reviews—

(1) the types of information security risks and
related events that registrants disclosed in the previous year;

1 (2) whether the staff of the Commission has re-2 quested registrants to provide additional information 3 on the disclosures under paragraph (1); 4 (3) any awareness or education activities for 5 registrants or investors, on the subject of informa-6 tion security risks and related events disclosure re-7 quirements, sponsored by the Commission or at-8 tended by a Commissioner or staff of the Commis-9 sion; and 10 (4) any public actions commenced by the Com-11 mission relating to the enforcement of disclosure re-12 quirements pertaining to the information security 13 risks and related events. **ACQUISI-**TITLE V—FEDERAL 14 MANAGEMENT TION RISK 15 STRATEGY 16 SEC. 501. FEDERAL ACQUISITION RISK MANAGEMENT 17 18 STRATEGY. 19 (a) IN GENERAL.—The Secretary, in coordination with relevant private sector and academic experts and each 20 21 Federal entity described in paragraphs (1) through (9) of 22 subsection (b), shall develop and periodically update an ac-23 quisition risk management strategy designed to ensure,

24 based on mission criticality and cost effectiveness, the se-

25 curity of the Federal information infrastructure.

1	(b) COORDINATION.—In developing the acquisition
2	risk management strategy required under subsection (a),
3	the Secretary shall coordinate with—
4	(1) the Secretary of Defense;
5	(2) the Secretary of Commerce;
6	(3) the Secretary of State;
7	(4) the Director of National Intelligence;
8	(5) the Administrator of General Services;
9	(6) the Administrator for Federal Procurement
10	Policy;
11	(7) the members of the Chief Information Offi-
12	cers Council established under section 3603 of title
13	44, United States Code;
14	(8) the Chief Acquisition Officers Council estab-
15	lished under section 1311 of title 41, United States
16	Code; and
17	(9) the Chief Financial Officers Council estab-
18	lished under section 302 of the Chief Financial Offi-
19	cers Act of 1990 (31 U.S.C. 901 note).
20	(c) ELEMENTS.—The risk management strategy de-
21	veloped under subsection (a) shall—
22	(1) address risks in the acquisition of any part
23	of the Federal information infrastructure; and
24	(2) include developing processes that—

(A) incorporate all-source intelligence anal-1 2 ysis into assessments of the integrity of the 3 supply chain for the Federal information infra-4 structure; 5 (B) incorporate internationally recognized 6 standards, guidelines, and best practices, in-7 cluding those developed by the private sector, 8 for supply chain integrity; 9 (C) enhance capabilities to test and evalu-10 ate software and hardware within or for use in 11 the Federal information infrastructure, and, 12 where appropriate, make the capabilities avail-13 able for use by the private sector; 14 (D) protect the intellectual property and 15 trade secrets of suppliers of information and 16 communications technology products and serv-17 ices; 18 (E) share with the private sector, to the 19 fullest extent possible, the risks identified in the 20 supply chain and working with the private sec-21 tor to mitigate those threats as identified; 22 (F) identify specific acquisition practices of 23 Federal agencies that increase risks to the sup-24 ply chain and develop a process to provide rec-

1	ommendations for revisions to those processes;
2	and
3	(G) to the maximum extent practicable,
4	promote the ability of Federal agencies to pro-
5	cure authentic commercial off-the-shelf informa-
6	tion and communications technology products
7	and services from a diverse pool of suppliers,
8	consistent with the preferences for the acquisi-
9	tion of commercial items under section 2377 of
10	title 10, United States Code, and section 3307
11	of title 41, United States Code.
12	SEC. 502. AMENDMENTS TO CLINGER-COHEN PROVISIONS
12 13	SEC. 502. AMENDMENTS TO CLINGER-COHEN PROVISIONS TO ENHANCE AGENCY PLANNING FOR INFOR-
13	TO ENHANCE AGENCY PLANNING FOR INFOR-
13 14	TO ENHANCE AGENCY PLANNING FOR INFOR- MATION SECURITY NEEDS.
13 14 15	<b>TO ENHANCE AGENCY PLANNING FOR INFOR-</b> <b>MATION SECURITY NEEDS.</b> Chapter 113 of title 40, United States Code, is
13 14 15 16	<b>TO ENHANCE AGENCY PLANNING FOR INFOR-</b> <b>MATION SECURITY NEEDS.</b> Chapter 113 of title 40, United States Code, is amended—
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>	TO ENHANCE AGENCY PLANNING FOR INFOR- MATION SECURITY NEEDS. Chapter 113 of title 40, United States Code, is amended— (1) in section 11302—
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	TO ENHANCE AGENCY PLANNING FOR INFOR- MATION SECURITY NEEDS. Chapter 113 of title 40, United States Code, is amended— (1) in section 11302— (A) in subsection (f), by striking "tech-
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	TO ENHANCE AGENCY PLANNING FOR INFOR- MATION SECURITY NEEDS. Chapter 113 of title 40, United States Code, is amended— (1) in section 11302— (A) in subsection (f), by striking "tech- nology." and inserting "technology, including

(i) by inserting ", including information security requirements," after "information resources management"; and

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1	(ii) by adding at the end the fol-
2	lowing: "The Administrator for Federal
3	Procurement Policy, in coordination with
4	the Chief Information Officers Council and
5	the Federal Acquisition Institute, shall en-
6	sure that contracting officers and the indi-
7	viduals preparing descriptions of the Gov-
8	ernment requirements and statements of
9	work have adequate training in informa-
10	tion security requirements, including in in-
11	formation technology security contracts.";
12	(C) in subsection (j), by adding at the end
13	the following: "The Director shall review and
14	report on possible impediments in the acquisi-
15	tion process or elsewhere that are acting to slow
16	agency uptake of the newest, most secure tech-
17	nologies."; and
18	(D) by adding at the end the following:
19	"(1) Multiple Award Schedule for Informa-
20	TION SECURITY.—The Administrator of General Services
21	shall develop a special item number under Schedule 70
22	for information security products and services and consoli-
23	date those products and services under that special item
24	number to promote acquisition.

"(m) REDUCING THE USE OF COUNTERFEIT PROD UCTS.—Not later than 180 days after the date of enact ment of the Cybersecurity Act of 2012, the Director shall
 issue guidance requiring, to the extent practicable, Federal
 agencies to purchase information technology products only
 through the authorized channels or distributors of a sup plier."; and

8 (2) in section 11312(b)(3), by inserting ", in9 formation security improvement," after "risk-ad10 justed return on investment".

## 11 **TITLE VI—INTERNATIONAL** 12 **COOPERATION**

13 SEC. 601. DEFINITIONS.

14 In this title:

15 (1) COMPUTER SYSTEM; COMPUTER DATA.—
16 The terms "computer system" and "computer data"
17 have the meanings given those terms in chapter I of
18 the Convention on Cybercrime.

(2) CONVENTION ON CYBERCRIME.—The term
"Convention on Cybercrime" means the Council of
Europe's Convention on Cybercrime, done at Budapest November 23, 2001 as ratified by the United
States Senate on August 3, 2006 (Treaty 108–11)
with any relevant reservations of declarations.

1 (3) CYBER ISSUES.—The term "cyber issues" 2 means the full range of international policies de-3 signed to ensure an open, interoperable, secure, and 4 reliable global information and communications in-5 frastructure. 6 (4) CYBERCRIME.—The term "cybercrime" re-7 fers to criminal offenses relating to computer sys-8 tems of computer data described in the Convention 9 of Cybercrime. 10 (5) Relevant federal agencies.—The term 11 "relevant Federal agencies" means any Federal 12 agency that has responsibility for combating 13 cybercrime globally, including the Department of 14 Commerce, the Department of Homeland Security, 15 the Department of Justice, the Department of State, 16 the Department of the Treasury, and the Office of 17 the United States Trade Representative. 18 SEC. 602. FINDINGS. 19 Congress finds the following: 20 (1) On February 2, 2010, Admiral Dennis C. 21 Blair, the Director of National Intelligence, testified 22 before the Select Committee on Intelligence of the 23 Senate regarding the Annual Threat Assessment of 24 the U.S. Intelligence Community, stating "The na-25 tional security of the United States, our economic

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1 prosperity, and the daily functioning of our govern-2 ment are dependent on a dynamic public and private 3 information infrastructure, which includes tele-com-4 munications, computer networks and systems, and 5 the information residing within. This critical infra-6 structure is severely threatened. . . . We cannot pro-7 tect cyberspace without a coordinated and collabo-8 rative effort that incorporates both the US private 9 sector and our international partners."

10 (2) In a January 2010 speech on Internet free-11 dom, Secretary of State Hillary Clinton stated: 12 "Those who disrupt the free flow of information in 13 our society, or any other, pose a threat to our econ-14 omy, our government, and our civil society. Coun-15 tries or individuals that engage in cyber attacks 16 should face consequences and international con-17 demnation. In an Internet-connected world, an at-18 tack on one nation's networks can be an attack on 19 all. And by reinforcing that message, we can create 20 norms of behavior among states and encourage re-21 spect for the global networked commons."

(3) November 2011 marked the tenth anniversary of the Convention on Cybercrime, the only multilateral agreement on cybercrime, to which the Sen-

ate provided advice and consent on August 3, 2006,
 and is currently ratified by over 30 countries.

3 (4) The May 2009 White House Cyberspace 4 Policy Review asserts "[t]he Nation also needs a 5 strategy for cybersecurity designed to shape the 6 international environment and bring like-minded na-7 tions together on a host of issues, such as technical 8 standards and acceptable legal norms regarding ter-9 ritorial jurisdiction, sovereign responsibility, and use 10 of force. International norms are critical to estab-11 lishing a secure and thriving digital infrastructure." 12 SEC. 603. SENSE OF CONGRESS.

13 It is the sense of Congress that—

(1) engagement with other countries to advance
the cyberspace objectives of the United States should
be an integral part of the conduct of United States
foreign relations and diplomacy;

(2) the cyberspace objectives of the United
States include the full range of cyber issues, including issues related to governance, standards, cybersecurity, cybercrime, international security, human
rights, and the free flow of information;

(3) it is in the interest of the United States to
work with other countries to build consensus on
principles and standards of conduct that protect

computer systems and users that rely on them, pre vent and punish acts of cybercrime, and promote the
 free flow of information;

4 (4) a comprehensive national cyberspace strat5 egy must include tools for addressing threats to
6 computer systems and acts of cybercrime from
7 sources and by persons outside the United States;

8 (5) developing effective solutions to inter-9 national cyberspace threats requires engagement 10 with foreign countries on a bilateral basis and 11 through relevant regional and multilateral fora;

(6) it is in the interest of the United States to
encourage the development of effective frameworks
for international cooperation to combat cyberthreats,
and the development of foreign government capabilities to combat cyberthreats; and

(7) the Secretary of State, in consultation with
other relevant Federal agencies, should develop and
lead Federal Government efforts to engage with
other countries to advance the cyberspace objectives
of the United States, including efforts to bolster an
international framework of cyber norms, governance
and deterrence.

## 1SEC. 604. COORDINATION OF INTERNATIONAL CYBER2ISSUES WITHIN THE UNITED STATES GOV-3ERNMENT.

4 The Secretary of State is authorized to designate a
5 senior level official at the Department of State, to carry
6 out the Secretary's responsibilities to—

7 (1) coordinate the United States global diplo8 matic engagement on the full range of international
9 cyber issues, including building multilateral coopera10 tion and developing international norms, common
11 policies, and responses to secure the integrity of
12 cyberspace;

(2) provide strategic direction and coordination
for United States Government policy and programs
aimed at addressing and responding to cyber issues
overseas, especially in relation to issues that affect
United States foreign policy and related national security concerns;

(3) coordinate with relevant Federal agencies,
including the Department, the Department of Defense, the Department of the Treasury, the Department of Justice, the Department of Commerce, and
the intelligence community to develop interagency
plans regarding international cyberspace, cybersecurity, and cybercrime issues; and

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1	(4) ensure that cyber issues, including cyberse-
2	curity and cybercrime, are included in the respon-
3	sibilities of overseas Embassies and consulates of the
4	United States, as appropriate.
5	SEC. 605. CONSIDERATION OF CYBERCRIME IN FOREIGN
6	POLICY AND FOREIGN ASSISTANCE PRO-
7	GRAMS.
8	(a) Briefing.—
9	(1) IN GENERAL.—Not later than 1 year after
10	the date of enactment of this Act, the Secretary of
11	State, after consultation with the heads of the rel-
12	evant Federal agencies, shall provide a comprehen-
13	sive briefing to relevant congressional committees—
14	(A) assessing global issues, trends, and ac-
15	tors considered to be significant with respect to
16	cybercrime;
17	(B) assessing, after consultation with pri-
18	vate industry groups, civil society organizations,
19	and other relevant domestic or multilateral or-
20	ganizations, which shall be selected by the
21	President based on an interest in combating
22	cybercrime, means of enhancing multilateral or
23	bilateral efforts in areas of significance—
24	(i) to prevent and investigate
25	cybercrime;

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1	(ii) to develop and share best prac-
2	tices with respect to directly or indirectly
3	combating cybercrime; and
4	(iii) to cooperate and take action with
5	respect to the prevention, investigation,
6	and prosecution of cybercrime; and
7	(C) describing the steps taken by the
8	United States to promote the multilateral or bi-
9	lateral efforts described in subparagraph (B).
10	(2) Contributions from relevant federal
11	AGENCIES.—Not later than 30 days before the date
12	on which the briefing is to be provided under para-
13	graph (1), the head of each relevant Federal agency
14	shall consult with and provide to the Secretary of
15	State relevant information appropriate for the brief-
16	ing.
17	(b) PERIODIC UPDATES.—The Secretary of State
18	shall provide updated information highlighting significant
19	developments relating to the issues described in subsection
20	(a), through periodic briefings to Congress.
21	(c) Use of Foreign Assistance Programs.—
22	(1) FOREIGN ASSISTANCE PROGRAMS TO COM-
23	BAT CYBERCRIME.—The Secretary of State is au-
24	thorized to accord priority in foreign assistance to
25	programs designed to combat cybercrime in a region

or program of significance in order to better combat
 cybercrime by, among other things, improving the
 effectiveness and capacity of the legal and judicial
 systems and the capabilities of law enforcement
 agencies with respect to cybercrime.

6 (2) SENSE OF THE CONGRESS WITH RESPECT 7 TO BILATERAL AND MULTILATERAL ASSISTANCE.— 8 It is the sense of Congress that the Secretary of 9 State should include programs designed to combat 10 cybercrime in relevant bilateral or multilateral as-11 sistance programs administered or supported by the 12 United States Government.

## 13 TITLE VII—INFORMATION 14 SHARING

15 SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DE-

16

#### FEND AGAINST CYBERSECURITY THREATS.

(a) IN GENERAL.—Notwithstanding chapter 119,
121, or 206 of title 18, United States Code, the Foreign
19 Intelligence Surveillance Act of 1978 (50 U.S.C. 1801 et
20 seq.), and sections 222 and 705 of the Communications
21 Act of 1934 (47 U.S.C. 222 and 605), any private entity
22 may—

(1) monitor its information systems and information that is stored on, processed by, or transiting
such information systems for—

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1	(A) malicious reconnaissance;
2	(B) efforts to defeat a technical control or
3	an operational control;
4	(C) technical vulnerabilities;
5	(D) efforts to cause a user with legitimate
6	access to an information system or information
7	that is stored on, processed by, or transiting an
8	information system to unwittingly enable the
9	defeat of a technical control or an operational
10	control;
11	(E) malicious cyber command and control;
12	(F) information exfiltrated as a result of
13	defeating a technical control or an operational
14	control;
15	(G) any other attribute of a cybersecurity
16	threat, if monitoring for such attribute is not
17	otherwise prohibited by law; or
18	(H) any combination of subparagraphs (A)
19	through (G);
20	(2) operate countermeasures on its information
21	systems to protect its rights or property from cyber-
22	security threats;
23	(3) consent to another private entity monitoring
24	or operating countermeasures on its information sys-
25	tems and information that is stored on, processed

1	by, or transiting such information systems in accord-
2	ance with this section;
3	(4) monitor a third party's information systems
4	and information that is stored on, processed by, or
5	transiting such information systems for the informa-
6	tion listed in subparagraphs (A) through (H) of
7	paragraph (1), if—
8	(A) the third party provides express prior
9	consent to such monitoring; and
10	(B) such monitoring would be lawful under
11	paragraph (1) or under any other provision of
12	law if the third party were to perform such
13	monitoring of its own networks; and
14	(5) operate countermeasures on a third party's
15	information systems to protect the third party's
16	rights or property from cybersecurity threats, if—
17	(A) the third party provides express prior
18	consent to such countermeasures; and
19	(B) operating such countermeasures would
20	be lawful under paragraph $(2)$ or under any
21	other provision of law if the third party were to
22	operate such countermeasures on its own infor-
23	mation systems to protect its own rights or
24	property.

(b) USE AND PROTECTION OF INFORMATION.—A pri vate entity performing monitoring or operating counter measures under subsection (a)—

4 (1) may use cybersecurity threat indicators ac5 quired under this title, provided such use is solely
6 for the purpose of protecting an information system
7 or information that is stored on, processed by, or
8 transiting an information system from cybersecurity
9 threats or mitigating such threats;

10 (2) shall make reasonable efforts to safeguard
11 communications, records, system traffic, or other in12 formation that may be used to identify specific per13 sons acquired in the course of such monitoring from
14 unauthorized access or acquisition;

(3) shall comply with any lawful restrictions
placed on the use of cybersecurity threat indicators,
including, if requested, the removal or destruction of
information that can be used to identify specific persons from such indicators;

(4) may not use cybersecurity threat indicators
to gain an unfair competitive advantage to the detriment of the entity that authorized such monitoring
or operation of countermeasures; and

24 (5) may use information obtained under any25 other provision of law.

# 1SEC. 702. VOLUNTARY DISCLOSURE OF CYBERSECURITY2THREAT INDICATORS AMONG PRIVATE ENTI-3TIES.

4 (a) AUTHORITY TO DISCLOSE.—Notwithstanding any
5 other provision of law, any private entity may disclose law6 fully obtained cybersecurity threat indicators to any other
7 private entity in accordance with this section.

8 (b) USE AND PROTECTION OF INFORMATION.—A pri9 vate entity disclosing or receiving cybersecurity threat in10 dicators pursuant to subsection (a)—

(1) may use, retain, or further disclose such cybersecurity threat indicators solely for the purpose
of protecting an information system or information
that is stored on, processed by, or transiting an information system from cybersecurity threats or mitigating such threats;

17 (2) shall make reasonable efforts to safeguard
18 communications, records, system traffic, or other in19 formation that can be used to identify specific per20 sons from unauthorized access or acquisition;

(3) shall comply with any lawful restrictions
placed on the disclosure or use of cybersecurity
threat indicators, including, if requested, the removal of information that may be used to identify
specific persons from such indicators; and

(4) may not use the cybersecurity threat indica tors to gain an unfair competitive advantage to the
 detriment of the entity that authorized such sharing.
 (c) TRANSFERS TO UNRELIABLE PRIVATE ENTITIES
 PROHIBITED.—A private entity may not disclose cyberse curity threat indicators to another private entity that the
 disclosing entity knows—

8 (1) has intentionally or willfully violated the re-9 quirements of subsection (b); and

10 (2) is reasonably likely to violate such require-11 ments.

#### 12 SEC. 703. CYBERSECURITY EXCHANGES.

(a) DESIGNATION OF CYBERSECURITY EX14 CHANGES.—The Secretary of Homeland Security, in con15 sultation with the Director of National Intelligence, the
16 Attorney General, and the Secretary of Defense, shall es17 tablish—

(1) a process for designating one or more appropriate civilian Federal entities or non-Federal entities to serve as cybersecurity exchanges to receive
and distribute cybersecurity threat indicators;

(2) procedures to facilitate and ensure the sharing of classified and unclassified cybersecurity threat
indicators in as close to real time as possible with

appropriate Federal entities and non-Federal entities
 in accordance with this title; and

3 (3) a process for identifying certified entities to
4 receive classified cybersecurity threat indicators in
5 accordance with paragraph (2).

6 (b) PURPOSE.—The purpose of a cybersecurity ex7 change is to receive and distribute, in as close to real time
8 as possible, cybersecurity threat indicators, and to thereby
9 avoid unnecessary and duplicative Federal bureaucracy for
10 information sharing as provided in this title.

11 (c) REQUIREMENT FOR A LEAD FEDERAL CIVILIAN12 CYBERSECURITY EXCHANGE.—

13 (1) IN GENERAL.—The Secretary, in consulta-14 tion with the Director of National Intelligence, the 15 Attorney General, and the Secretary of Defense, 16 shall designate a civilian Federal entity as the lead 17 cybersecurity exchange to serve as a focal point 18 within the Federal Government for cybersecurity in-19 formation sharing among Federal entities and with 20 non-Federal entities.

(2) RESPONSIBILITIES.—The lead Federal civilian cybersecurity exchange designated under paragraph (1) shall—

1	(A) receive and distribute, in as close to
2	real time as possible, cybersecurity threat indi-
3	cators in accordance with this title;
4	(B) facilitate information sharing, inter-
5	action, and collaboration among and between—
6	(i) Federal entities;
7	(ii) State, local, tribal, and territorial
8	governments;
9	(iii) private entities;
10	(iv) academia;
11	(v) international partners, in consulta-
12	tion with the Secretary of State; and
13	(vi) other cybersecurity exchanges;
14	(C) disseminate timely and actionable cy-
15	bersecurity threat, vulnerability, mitigation, and
16	warning information lawfully obtained from any
17	source, including alerts, advisories, indicators,
18	signatures, and mitigation and response meas-
19	ures, to appropriate Federal and non-Federal
20	entities in as close to real time as possible, to
21	improve the security and protection of informa-
22	tion systems;
23	(D) coordinate with other Federal and
24	non-Federal entities, as appropriate, to inte-
25	grate information from Federal and non-Fed-

ble laws.

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1 eral entities, including Federal cybersecurity 2 centers, non-Federal network or security oper-3 ation centers, other cybersecurity exchanges, 4 and non-Federal entities that disclose cyberse-5 curity threat indicators under section 704(a), in 6 as close to real time as possible, to provide situ-7 ational awareness of the United States informa-8 tion security posture and foster information se-9 curity collaboration among information system 10 owners and operators; 11 (E) conduct, in consultation with private 12 entities and relevant Federal and other govern-13 mental entities, regular assessments of existing 14 and proposed information sharing models to 15 eliminate bureaucratic obstacles to information 16 sharing and identify best practices for such 17 sharing; and 18 (F) coordinate with other Federal entities, 19 as appropriate, to compile and analyze informa-20 tion about risks and incidents that threaten in-21 formation systems, including information volun-22 tarily submitted in accordance with section 23 704(a) or otherwise in accordance with applica-

(3) SCHEDULE FOR DESIGNATION.—The des ignation of a lead Federal civilian cybersecurity ex change under paragraph (1) shall be made concur rently with the issuance of the interim policies and
 procedures under section 704(g)(3)(D).

6 (d) Additional Civilian Federal Cybersecu-7 RITY EXCHANGES.—In accordance with the process and 8 procedures established in subsection (a), the Secretary, in 9 consultation with the Director of National Intelligence, the 10 Attorney General, and the Secretary of Defense, may designate additional civilian Federal entities to receive and 11 12 distribute cybersecurity threat indicators, if such entities 13 are subject to the requirements for use, retention, and dis-14 closure of information by a cybersecurity exchange under 15 section 704(b) and the special requirements for Federal entities under section 704(g). 16

17 (e) REQUIREMENTS FOR NON-FEDERAL CYBERSECU-18 RITY EXCHANGES.—

(1) IN GENERAL.—In considering whether to
designate a private entity or any other non-Federal
entity as a cybersecurity exchange to receive and distribute cybersecurity threat indicators under section
704, and what entity to designate, the Secretary
shall consider the following factors:

1 (A) The net effect that such designation 2 would have on the overall cybersecurity of the 3 United States. 4 (B) Whether such designation could sub-5 stantially improve such overall cybersecurity by 6 serving as a hub for receiving and sharing cy-7 bersecurity threat indicators in as close to real 8 time as possible, including the capacity of the 9 non-Federal entity for performing those func-10 tions. 11 (C) The capacity of such non-Federal enti-12 ty to safeguard cybersecurity threat indicators 13 from unauthorized disclosure and use. 14 (D) The adequacy of the policies and pro-15 cedures of such non-Federal entity to protect 16 personally identifiable information from unau-17 thorized disclosure and use. 18 (E) The ability of the non-Federal entity 19 to sustain operations using entirely non-Federal 20 sources of funding. 21 (2) REGULATIONS.—The Secretary may pro-22 mulgate regulations as may be necessary to carry 23 out this subsection. 24 (f) CONSTRUCTION WITH OTHER AUTHORITIES.— 25 Nothing in this section may be construed to alter the au-

thorities of a Federal cybersecurity center, unless such cy bersecurity center is acting in its capacity as a designated
 cybersecurity exchange.

4 (g) CONGRESSIONAL NOTIFICATION OF DESIGNA5 TION OF CYBERSECURITY EXCHANGES.—

6 (1) IN GENERAL.—The Secretary, in coordina-7 tion with the Director of National Intelligence, the 8 Attorney General, and the Secretary of Defense, 9 shall promptly notify Congress, in writing, of any 10 designation of a cybersecurity exchange under this 11 title.

12 (2) REQUIREMENT.—Written notification under
13 paragraph (1) shall include a description of the cri14 teria and processes used to make the designation.

15 SEC. 704. VOLUNTARY DISCLOSURE OF CYBERSECURITY 16 THREAT INDICATORS TO A CYBERSECURITY

17 EXCHANGE.

(a) AUTHORITY TO DISCLOSE.—Notwithstanding any
other provision of law, a non-Federal entity may disclose
lawfully obtained cybersecurity threat indicators to a cybersecurity exchange in accordance with this section.

(b) USE, RETENTION, AND DISCLOSURE OF INFORMATION BY A CYBERSECURITY EXCHANGE.—A cybersecurity exchange may only use, retain, or further disclose information provided pursuant to subsection (a)—

(1) in order to protect information systems
 from cybersecurity threats and to mitigate cyberse curity threats; or

4 (2) to law enforcement pursuant to subsection
5 (g)(2).

6 (c) USE AND PROTECTION OF INFORMATION RE7 CEIVED FROM A CYBERSECURITY EXCHANGE.—A non8 Federal entity receiving cybersecurity threat indicators
9 from a cybersecurity exchange—

(1) may use, retain, or further disclose such cybersecurity threat indicators solely for the purpose
of protecting an information system or information
that is stored on, processed by, or transiting an information system from cybersecurity threats or mitigating such threats;

16 (2) shall make reasonable efforts to safeguard
17 communications, records, system traffic, or other in18 formation that can be used to identify specific per19 sons from unauthorized access or acquisition;

(3) shall comply with any lawful restrictions
placed on the disclosure or use of cybersecurity
threat indicators by the cybersecurity exchange or a
third party, if the cybersecurity exchange received
such information from the third party, including, if
requested, the removal of information that can be

used to identify specific persons from such indica tors; and

3 (4) may not use the cybersecurity threat indica4 tors to gain an unfair competitive advantage to the
5 detriment of the third party that authorized such
6 sharing.

7 (d) EXEMPTION FROM PUBLIC DISCLOSURE.—Any
8 cybersecurity threat indicator disclosed by a non-Federal
9 entity to a cybersecurity exchange pursuant to subsection
10 (a) shall be—

(1) exempt from disclosure under section
552(b)(3) of title 5, United States Code, or any
comparable State law; and

14 (2) treated as voluntarily shared information
15 under section 552 of title 5, United States Code, or
16 any comparable State law.

(e) EXEMPTION FROM EX PARTE LIMITATIONS.—
Any cybersecurity threat indicator disclosed by a non-Federal entity to a cybersecurity exchange pursuant to subsection (a) shall not be subject to the rules of any governmental entity or judicial doctrine regarding ex parte communications with a decision making official.

(f) EXEMPTION FROM WAIVER OF PRIVILEGE.—Any
cybersecurity threat indicator disclosed by a non-Federal
entity to a cybersecurity exchange pursuant to subsection

(a) may not be construed to be a waiver of any applicable 1 privilege or protection provided under Federal, State, trib-2 3 al, or territorial law, including any trade secret protection. 4 (g) Special Requirements for Federal and 5 LAW ENFORCEMENT ENTITIES.— 6 (1) RECEIPT, DISCLOSURE AND USE OF CYBER-7 SECURITY THREAT INDICATORS BY A FEDERAL EN-8 TITY.— 9 (A) AUTHORITY TO RECEIVE AND USE CY-10 BERSECURITY THREAT INDICATORS.—A Fed-11 eral entity that is not a cybersecurity exchange 12 may receive, retain, and use cybersecurity 13 threat indicators from a cybersecurity exchange 14 in order— 15 (i) to protect information systems 16 from cybersecurity threats and to mitigate 17 cybersecurity threats; and 18 (ii) to disclose such cybersecurity 19 threat indicators to law enforcement in ac-20 cordance with paragraph (2). 21 (B) AUTHORITY TO DISCLOSE CYBERSECU-22 RITY THREAT INDICATORS.—A Federal entity 23 that is not a cybersecurity exchange shall en-24 sure that if disclosing cybersecurity threat indi-25 cators to a non-Federal entity under this sec-

1	tion, such non-Federal entity shall use or retain
2	such cybersecurity threat indicators in a man-
3	ner that is consistent with the requirements
4	in—
5	(i) subsection (b) on the use and pro-
6	tection of information; and
7	(ii) paragraph (2).
8	(2) LAW ENFORCEMENT ACCESS AND USE OF
9	CYBERSECURITY THREAT INDICATORS.—
10	(A) DISCLOSURE TO LAW ENFORCE-
11	MENT.—A Federal entity may disclose cyberse-
12	curity threat indicators received under this title
13	to a law enforcement entity if—
14	(i) the disclosure is permitted under
15	the procedures developed by the Secretary
16	and approved by the Attorney General
17	under paragraph (3); and
18	(ii) the information appears to per-
19	tain—
20	(I) to a cybersecurity crime
21	which has been, is being, or is about
22	to be committed;
23	(II) to an imminent threat of
24	death or serious bodily harm; or

1	(III) to a serious threat to mi-
2	nors, including sexual exploitation and
3	threats to physical safety.
4	(B) USE BY LAW ENFORCEMENT.—A law
5	enforcement entity may only use cybersecurity
6	threat indicators received by a Federal entity
7	under paragraph (A) in order—
8	(i) to protect information systems
9	from a cybersecurity threat or investigate,
10	prosecute, or disrupt a cybersecurity crime;
11	(ii) to protect individuals from an im-
12	minent threat of death or serious bodily
13	harm; or
14	(iii) to protect minors from any seri-
15	ous threat, including sexual exploitation
16	and threats to physical safety.
17	(3) PRIVACY AND CIVIL LIBERTIES.—
18	(A) REQUIREMENT FOR POLICIES AND
19	PROCEDURES.—The Secretary, in consultation
20	with privacy and civil liberties experts, the Di-
21	rector of National Intelligence, and the Sec-
22	retary of Defense, shall develop and periodically
23	review policies and procedures governing the re-
24	ceipt, retention, use, and disclosure of cyberse-
25	curity threat indicators by a Federal entity ob-

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1 tained in connection with activities authorized in this title. Such policies and procedures 2 shall-3 4 (i) minimize the impact on privacy 5 and civil liberties, consistent with the need 6 to protect information systems from cyber-7 security threats and mitigate cybersecurity 8 threats; 9 (ii) reasonably limit the receipt, reten-10 tion, use and disclosure of cybersecurity 11 threat indicators associated with specific 12 persons consistent with the need to carry 13 out the responsibilities of this title, includ-14 ing establishing a process for the timely 15 destruction of cybersecurity threat indica-16 tors that are received pursuant to this sec-17 tion that do not reasonably appear to be 18 related to the purposes identified in para-19 graph (1)(A); 20 (iii) include requirements to safeguard 21 cybersecurity threat indicators that may be

used to identify specific persons from unauthorized access or acquisition;

24 (iv) include procedures for notifying25 entities, as appropriate, if information re-

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1	ceived pursuant to this section is not a cy-
2	bersecurity threat indicator; and
3	(v) protect the confidentiality of cy-
4	bersecurity threat indicators associated
5	with specific persons to the greatest extent
6	practicable and require recipients to be in-
7	formed that such indicators may only be
8	used for the purposes identified in para-
9	graph $(1)(A)$ .
10	(B) Adoption of policies and proce-
11	DURES.—The head of an agency responsible for
12	a Federal entity designated as a cybersecurity
13	exchange under section 703 shall adopt and
14	comply with the policies and procedures devel-
15	oped under this paragraph.
16	(C) REVIEW BY THE ATTORNEY GEN-
17	ERAL.—The policies and procedures developed
18	under this subsection shall be provided to the
19	Attorney General for review not later than 1
20	year after the date of the enactment of this
21	title, and shall not be issued without the Attor-
22	ney General's approval.
23	(D) Requirement for interim policies
24	AND PROCEDURES.—The Secretary shall issue
25	interim policies and procedures not later than

1	60 days after the date of the enactment of this
2	title.
3	(E) Provision to congress.—The poli-
4	cies and procedures issued under this title and
5	any amendments to such policies and proce-
6	dures shall be provided to Congress in an un-
7	classified form and be made public, but may in-
8	clude a classified annex.
9	(4) Oversight.—
10	(A) REQUIREMENT FOR OVERSIGHT.—The
11	Secretary and the Attorney General shall estab-
12	lish a mandatory program to monitor and over-
13	see compliance with the policies and procedures
14	issued under this subsection.
15	(B) NOTIFICATION OF THE ATTORNEY
16	GENERAL.—The head of each Federal entity
17	that receives information under this title
18	shall—
19	(i) comply with the policies and proce-
20	dures developed by the Secretary and ap-
21	proved by the Attorney General under
22	paragraph (3);
23	(ii) promptly notify the Attorney Gen-
24	eral of significant violations of such poli-
25	cies and procedures; and

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1	(iii) provide to the Attorney General
2	any information relevant to the violation
3	that the Attorney General requires.
4	(C) ANNUAL REPORT.—On an annual
5	basis, the Chief Privacy and Civil Liberties Of-
6	ficer of the Department of Justice and the
7	Chief Privacy Officer of the Department, in
8	consultation with the most senior privacy and
9	civil liberties officer or officers of any appro-
10	priate agencies, shall jointly submit to Congress
11	a report assessing the privacy and civil liberties
12	impact of the governmental activities conducted
13	pursuant to this title.
14	(5) Reports on information sharing.—
15	(A) PRIVACY AND CIVIL LIBERTIES OVER-
16	SIGHT BOARD REPORT.—Not later than 2 years
17	after the date of the enactment of this title, and
18	every 2 years thereafter, the Privacy and Civil
19	Liberties Oversight Board shall submit to Con-
20	gress and the President a report providing—
21	(i) an analysis of the practices of pri-

(i) an analysis of the practices of private entities that are performing, monitoring, operating countermeasures, or disclosing cybersecurity threat indicators pursuant to this title;

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1	(ii) an assessment of the privacy and
2	civil liberties impact of the activities car-
3	ried out by the Federal entities under this
4	title; and
5	(iii) recommendations for improve-
6	ments to or modifications of the law and
7	the policies and procedures established
8	pursuant to paragraph (3) in order to ad-
9	dress privacy and civil liberties concerns.
10	(B) INSPECTORS GENERAL ANNUAL RE-
11	PORT.—The Inspector General of the Depart-
12	ment, the Inspector General of the Intelligence
13	Community, the Inspector General of the De-
14	partment of Justice, and the Inspector General
15	of the Department of Defense shall, on an an-
16	nual basis, jointly submit to Congress a report
17	on the receipt, use and disclosure of informa-
18	tion shared with a Federal cybersecurity ex-
19	change under this title, including—
20	(i) a review of the use by Federal en-
21	tities of such information for a purpose
22	other than to protect information systems
23	from cybersecurity threats and to mitigate
24	cybersecurity threats, including law en-

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1	forcement access and use pursuant to
2	paragraph (2);
3	(ii) a review of the type of information
4	shared with a Federal cybersecurity ex-
5	change;
6	(iii) a review of the actions taken by
7	Federal entities based on such information;
8	(iv) appropriate metrics to determine
9	the impact of the sharing of such informa-
10	tion with a Federal cybersecurity exchange
11	on privacy and civil liberties;
12	(v) a list of Federal entities receiving
13	such information;
14	(vi) a review of the sharing of such in-
15	formation among Federal entities to iden-
16	tify inappropriate stovepiping of shared in-
17	formation; and
18	(vii) any recommendations of the in-
19	spectors general for improvements or modi-
20	fications to the authorities under this title.
21	(C) FORM.—Each report required under
22	this paragraph shall be submitted in unclassi-
23	fied form, but may include a classified annex.
24	(6) SANCTIONS.—The head of each Federal en-
25	tity that conducts activities under this title shall de-

1	velop and enforce appropriate sanctions for officers,
2	employees, or agents of such entities who conducts
3	such activities—
4	(A) outside the normal course of their
5	specified duties;
6	(B) in a manner inconsistent with the dis-
7	charge of the responsibilities of such entity; or
8	(C) in contravention of the requirements,
9	policies, and procedures required by this sub-
10	section.
11	(7) FEDERAL GOVERNMENT LIABILITY FOR
12	VIOLATIONS OF THIS TITLE.—
13	(A) IN GENERAL.—If a Federal entity in-
14	tentionally or willfully violates a provision of
15	this title or a regulation promulgated under this
16	title, the United States shall be liable to a per-
17	son adversely affected by such violation in an
18	amount equal to the sum of—
19	(i) the actual damages sustained by
20	the person as a result of the violation or
21	\$1,000, whichever is greater; and
22	(ii) the costs of the action together
23	with reasonable attorney fees as deter-
24	mined by the court.

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1	(B) VENUE.—An action to enforce liability
2	created under this subsection may be brought
3	in the district court of the United States in—
4	(i) the district in which the complain-
5	ant resides;
6	(ii) the district in which the principal
7	place of business of the complainant is lo-
8	cated;
9	(iii) the district in which the Federal
10	entity that disclosed the information is lo-
11	cated; or
12	(iv) the District of Columbia.
13	(C) STATUTE OF LIMITATIONS.—No action
14	shall lie under this subsection unless such ac-
15	tion is commenced not later than 2 years after
16	the date of the violation that is the basis for the
17	action.
18	(D) EXCLUSIVE CAUSE OF ACTION.—A
19	cause of action under this subsection shall be
20	the exclusive means available to a complainant
21	seeking a remedy for a disclosure of informa-
22	tion in violation of this title by a Federal entity.

## 1SEC.705.SHARING OFCLASSIFIEDCYBERSECURITY2THREAT INDICATORS.

3 (a) SHARING OF CLASSIFIED CYBERSECURITY
4 THREAT INDICATORS.—The procedures established under
5 section 703(a)(2) shall provide that classified cybersecu6 rity threat indicators may only be—

7 (1) shared with certified entities;

8 (2) shared in a manner that is consistent with
9 the need to protect the national security of the
10 United States;

(3) shared with a person with an appropriate
security clearance to receive such cybersecurity
threat indicators; and

(4) used by a certified entity in a manner that
protects such cybersecurity threat indicators from
unauthorized disclosure.

(b) REQUIREMENT FOR GUIDELINES.—Not later
than 60 days after the date of the enactment of this title,
the Director of National Intelligence shall issue guidelines
providing that appropriate Federal officials may, as the
Director considers necessary to carry out this title—

(1) grant a security clearance on a temporary
or permanent basis to an employee of a certified entity;

(2) grant a security clearance on a temporary
 or permanent basis to a certified entity and approval
 to use appropriate facilities; or

4 (3) expedite the security clearance process for
5 such an employee or entity, if appropriate, in a manner consistent with the need to protect the national
7 security of the United States.

8 (c) DISTRIBUTION OF PROCEDURES AND GUIDE-9 LINES.—Following the establishment of the procedures 10 under section 703(a)(2) and the issuance of the guidelines 11 under subsection (b), the Secretary and the Director of 12 National Intelligence shall expeditiously distribute such 13 procedures and guidelines to—

14 (1) appropriate governmental entities and pri-15 vate entities;

16 (2) the Committee on Armed Services, the
17 Committee on Commerce, Science, and Transpor18 tation, the Committee on Homeland Security and
19 Governmental Affairs, the Committee on the Judici20 ary, and the Select Committee on Intelligence of the
21 Senate; and

(3) the Committee on Armed Services, the
Committee on Energy and Commerce, the Committee on Homeland Security, the Committee on the

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1	Judiciary, and the Permanent Select Committee on
2	Intelligence of the House of Representatives.
3	SEC. 706. LIMITATION ON LIABILITY AND GOOD FAITH DE-
4	FENSE FOR CYBERSECURITY ACTIVITIES.
5	(a) IN GENERAL.—No civil or criminal cause of ac-
6	tion shall lie or be maintained in any Federal or State
7	court against any entity acting as authorized by this title,
8	and any such action shall be dismissed promptly for activi-
9	ties authorized by this title consisting of—
10	(1) the cybersecurity monitoring activities au-
11	thorized by paragraph $(1)$ , $(3)$ or $(4)$ of section
12	701(a); or
13	(2) the voluntary disclosure of a lawfully ob-
14	tained cybersecurity threat indicator—
15	(A) to a cybersecurity exchange pursuant
16	to section 704(a);
17	(B) by a provider of cybersecurity services
18	to a customer of that provider;
19	(C) to a private entity or governmental en-
20	tity that provides or manages critical infra-
21	structure (as that term is used in section 1016
22	of the Critical Infrastructures Protection Act of
23	2001 (42 U.S.C. 5195c)); or
24	(D) to any other private entity under sec-
25	tion 702(a), if the cybersecurity threat indicator

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is also disclosed within a reasonable time to a cybersecurity exchange.

3 (b) GOOD FAITH DEFENSE.—If a civil or criminal 4 cause of action is not barred under subsection (a), a rea-5 sonable good faith reliance that this title permitted the 6 conduct complained of is a complete defense against any 7 civil or criminal action brought under this title or any 8 other law.

9 (c)LIMITATION ON USE OF CYBERSECURITY 10 THREAT INDICATORS FOR REGULATORY ENFORCEMENT ACTIONS.—No Federal entity may use a cybersecurity 11 12 threat indicator received pursuant to this title as evidence in a regulatory enforcement action against the entity that 13 lawfully shared the cybersecurity threat indicator with a 14 15 cybersecurity exchange that is a Federal entity.

(d) DELAY OF NOTIFICATION AUTHORIZED FOR LAW
17 ENFORCEMENT, NATIONAL SECURITY, OR HOMELAND
18 SECURITY PURPOSES.—No civil or criminal cause of ac19 tion shall lie or be maintained in any Federal or State
20 court against any entity, and any such action shall be dis21 missed promptly, for a failure to disclose a cybersecurity
22 threat indicator if—

(1) the Attorney General or the Secretary determines that disclosure of a cybersecurity threat indicator would impede a civil or criminal investigation

and submits a written request to delay notification
 for up to 30 days, except that the Attorney General
 or the Secretary may, by a subsequent written re quest, revoke such delay or extend the period of time
 set forth in the original request made under this
 paragraph if further delay is necessary; or

7 (2) the Secretary, the Attorney General, or the 8 Director of National Intelligence determines that 9 disclosure of a cybersecurity threat indicator would 10 threaten national or homeland security and submits 11 a written request to delay notification, except that 12 the Secretary, the Attorney General, or the Director, 13 may, by a subsequent written request, revoke such 14 delay or extend the period of time set forth in the 15 original request made under this paragraph if fur-16 ther delay is necessary.

(e) LIMITATION ON LIABILITY FOR FAILURE TO
18 ACT.—No civil or criminal cause of action shall lie or be
19 maintained in any Federal or State court against any pri20 vate entity, or any officer, employee, or agent of such an
21 entity, and any such action shall be dismissed promptly,
22 for the reasonable failure to act on information received
23 under this title.

24 (f) DEFENSE FOR BREACH OF CONTRACT.—Compli-25 ance with lawful restrictions placed on the disclosure or

use of cybersecurity threat indicators is a complete defense
 to any tort or breach of contract claim originating in a
 failure to disclose cybersecurity threat indicators to a third
 party.

5 (g) LIMITATION ON LIABILITY PROTECTIONS.—Any
6 person who, knowingly or acting in gross negligence, vio7 lates a provision of this title or a regulation promulgated
8 under this title shall—

9 (1) not receive the protections of this title; and
10 (2) be subject to any criminal or civil cause of
11 action that may arise under any other State or Fed12 eral law prohibiting the conduct in question.

13 SEC. 707. CONSTRUCTION AND FEDERAL PREEMPTION.

14 (a) CONSTRUCTION.—Nothing in this title may be15 construed—

(1) to limit any other existing authority or lawful requirement to monitor information systems and
information that is stored on, processed by, or
transiting such information systems, operate countermeasures, and retain, use or disclose lawfully obtained information;

(2) to permit the unauthorized disclosure of—
(A) information that has been determined
by the Federal Government pursuant to an Executive order or statute to require protection

1	against unauthorized disclosure for reasons of
2	national defense or foreign relations;
3	(B) any restricted data (as that term is de-
4	fined in paragraph (y) of section 11 of the
5	Atomic Energy Act of 1954 (42 U.S.C. 2014));
6	(C) information related to intelligence
7	sources and methods; or
8	(D) information that is specifically subject
9	to a court order or a certification, directive, or
10	other authorization by the Attorney General
11	precluding such disclosure;
12	(3) to provide additional authority to, or modify
13	an existing authority of, the Department of Defense
14	or the National Security Agency or any other ele-
15	ment of the intelligence community to control, mod-
16	ify, require, or otherwise direct the cybersecurity ef-
17	forts of a non-Federal entity or a Federal entity;
18	(4) to limit or modify an existing information
19	sharing relationship;
20	(5) to prohibit a new information sharing rela-
21	tionship;
22	(6) to require a new information sharing rela-
23	tionship between a Federal entity and a private enti-
24	ty;

(7) to limit the ability of a non-Federal entity 1 2 or a Federal entity to receive data about its informa-3 tion systems, including lawfully obtained cybersecu-4 rity threat indicators; 5 (8) to authorize or prohibit any law enforce-6 ment, homeland security, or intelligence activities 7 not otherwise authorized or prohibited under another 8 provision of law; 9 (9) to permit price-fixing, allocating a market 10 between competitors, monopolizing or attempting to

monopolize a market, boycotting, or exchanges of
price or cost information, customer lists, or information regarding future competitive planning;

(10) to authorize or limit liability for actions
that would violate the regulations adopted by the
Federal Communications Commission on preserving
the open Internet, or any successor regulations
thereto, nor to modify or alter the obligations of private entities under such regulations; or

20 (11) to prevent a governmental entity from
21 using information not acquired through a cybersecu22 rity exchange for regulatory purposes.

(b) FEDERAL PREEMPTION.—This title supersedes
any law or requirement of a State or political subdivision
of a State that restricts or otherwise expressly regulates

the provision of cybersecurity services or the acquisition,
 interception, retention, use or disclosure of communica tions, records, or other information by private entities to
 the extent such law contains requirements inconsistent
 with this title.

6 (c) PRESERVATION OF OTHER STATE LAW.—Except
7 as expressly provided, nothing in this title shall be con8 strued to preempt the applicability of any other State law
9 or requirement.

(d) NO CREATION OF A RIGHT TO INFORMATION.—
11 The provision of information to a non-Federal entity
12 under this title does not create a right or benefit to similar
13 information by any other non-Federal entity.

(e) PROHIBITION ON REQUIREMENT TO PROVIDE IN15 FORMATION TO THE FEDERAL GOVERNMENT.—Nothing
16 in this title may be construed to permit a Federal entity—

17 (1) to require a non-Federal entity to share in-18 formation with the Federal Government;

(2) to condition the disclosure of unclassified or
classified cybersecurity threat indicators pursuant to
this title with a non-Federal entity on the provision
of cybersecurity threat information to the Federal
Government; or

24 (3) to condition the award of any Federal25 grant, contract or purchase on the provision of cy-

bersecurity threat indicators to a Federal entity, if
 the provision of such indicators does not reasonably
 relate to the nature of activities, goods, or services
 covered by the award.

(f) LIMITATION ON USE OF INFORMATION.—No cybersecurity threat indicators obtained pursuant to this
title may be used, retained, or disclosed by a Federal entity or non-Federal entity, except as authorized under this
title.

10 (g) Declassification and Sharing of Informa-11 TION.—Consistent with the exemptions from public disclo-12 sure of section 704(d), the Director of National Intelligence, in consultation with the Secretary and the head 13 14 of the Federal entity in possession of the information, 15 shall facilitate the declassification and sharing of information in the possession of a Federal entity that is related 16 17 to cybersecurity threats, as the Director deems appro-18 priate.

(h) REPORT ON IMPLEMENTATION.—Not later than
2 years after the date of the enactment of this title, the
2 Secretary, the Director of National Intelligence, the Attorney General, and the Secretary of Defense shall jointly
submit to Congress a report that—

(1) describes the extent to which the authoritiesconferred by this title have enabled the Federal Gov-

ernment and the private sector to mitigate cyberse curity threats;

3 (2) discloses any significant acts of noncompli4 ance by a non-Federal entity with this title, with
5 special emphasis on privacy and civil liberties, and
6 any measures taken by the Federal Government to
7 uncover such noncompliance;

8 (3) describes in general terms the nature and
9 quantity of information disclosed and received by
10 governmental entities and private entities under this
11 title; and

12 (4) identifies the emergence of new threats or 13 technologies that challenge the adequacy of the law, 14 including the definitions, authorities and require-15 ments of this title, for keeping pace with the threat. 16 (i) REQUIREMENT FOR ANNUAL REPORT.—On an 17 annual basis, the Director of National Intelligence shall provide a report to the Select Committee on Intelligence 18 of the Senate and the Permanent Select Committee on In-19 20 telligence of the House of Representatives on the imple-21 mentation of section 705. Such report, which shall be sub-22 mitted in a classified and in an unclassified form, shall 23 include a list of private entities that receive classified cy-24 bersecurity threat indicators under this title, except that 25 the unclassified report shall not contain information that may be used to identify specific private entities unless
 such private entities consent to such identification.

## 3 SEC. 708. DEFINITIONS.

4 In this title:

5 (1) CERTIFIED ENTITY.—The term "certified
6 entity" means a protected entity, a self-protected en7 tity, or a provider of cybersecurity services that—

8 (A) possesses or is eligible to obtain a se9 curity clearance, as determined by the Director
10 of National Intelligence; and

(B) is able to demonstrate to the Director
of National Intelligence that such provider or
such entity can appropriately protect and use
classified cybersecurity threat indicators.

15 (2) COUNTERMEASURE.—The term "counter-16 measure" means automated or manual actions to 17 modify, redirect, or block information that is stored 18 on, processed by, or transiting an information sys-19 tem that is known or suspected to contain cybersecu-20 rity threat indicators for the purpose of protecting 21 an information system from cybersecurity threats, 22 conducted on an information system owned or oper-23 ated by or on behalf of the party to be protected or 24 operated by a private entity acting as a provider of 25 electronic communication services, remote computing

services, or cybersecurity services to the party to be
 protected.

3 (3) CYBERSECURITY CRIME.—The term "cyber4 security crime" means the violation of a provision of
5 State or Federal law relating to computer crimes, in6 cluding a violation of any provision of title 18,
7 United States Code, enacted or amended by the
8 Computer Fraud and Abuse Act of 1986 (Public
9 Law 99–474; 100 Stat. 1213).

10 (4) CYBERSECURITY EXCHANGE.—The term 11 "cybersecurity exchange" means any governmental 12 entity or private entity designated by the Secretary 13 of Homeland Security, in consultation with the Di-14 rector of National Intelligence, the Attorney Gen-15 eral, and the Secretary of Defense, to receive and 16 distribute cybersecurity threat indicators under sec-17 tion 703(a).

18 (5) CYBERSECURITY SERVICES.—The term "cy19 bersecurity services" means products, goods, or serv20 ices intended to detect, mitigate, or prevent cyberse21 curity threats.

(6) CYBERSECURITY THREAT.—The term "cybersecurity threat" means any action that may result in unauthorized access to, exfiltration of, manipulation of, harm of, or impairment to the integrity,

1	confidentiality, or availability of an information sys-
2	tem or information that is stored on, processed by,
3	or transiting an information system, except that
4	none of the following shall be considered a cyberse-
5	curity threat—
6	(A) actions protected by the first amend-
7	ment to the Constitution of the United States;
8	and
9	(B) exceeding authorized access of an in-
10	formation system, if such access solely involves
11	a violation of consumer terms of service or con-
12	sumer licensing agreements.
13	(7) Cybersecurity threat indicator.—The
14	term "cybersecurity threat indicator" means infor-
15	mation—
16	(A) that is reasonably necessary to de-
17	scribe—
18	(i) malicious reconnaissance, including
19	anomalous patterns of communications
20	that reasonably appear to be transmitted
21	for the purpose of gathering technical in-
22	formation related to a cybersecurity threat;
23	(ii) a method of defeating a technical
24	control;
25	(iii) a technical vulnerability;

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(iv) a method of defeating an oper-
ational control;
(v) a method of causing a user with
legitimate access to an information system
or information that is stored on, processed
by, or transiting an information system to
unwittingly enable the defeat of a technical
control or an operational control;
(vi) malicious cyber command and
$\operatorname{control};$
(vii) the actual or potential harm
caused by an incident, including informa-
tion exfiltrated as a result of defeating a
technical control or an operational control
when it is necessary in order to identify or
describe a cybersecurity threat;
(viii) any other attribute of a cyberse-
curity threat, if disclosure of such attribute
is not otherwise prohibited by law; or
(ix) any combination thereof; and
(B) from which reasonable efforts have
been made to remove information that can be
used to identify specific persons unrelated to
the cybersecurity threat.

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1 (8) FEDERAL CYBERSECURITY CENTER.—The 2 term "Federal cybersecurity center" means the De-3 partment of Defense Cyber Crime Center, the Intel-4 ligence Community Incident Response Center, the 5 United States Cyber Command Joint Operations 6 Center, the National Cyber Investigative Joint Task 7 Force, the National Security Agency/Central Secu-8 rity Service Threat Operations Center, the United 9 States Computer Emergency Readiness Team, or 10 successors to such centers.

(9) FEDERAL ENTITY.—The term "Federal entity" means an agency or department of the United
States, or any component, officer, employee, or
agent of such an agency or department.

(10) GOVERNMENTAL ENTITY.—The term "governmental entity" means any Federal entity and
agency or department of a State, local, tribal, or territorial government other than an educational institution, or any component, officer, employee, or agent
of such an agency or department.

(11) INFORMATION SYSTEM.—The term "information system" means a discrete set of information
resources organized for the collection, processing,
maintenance, use, sharing, dissemination, or disposition of information, including communications with,

or commands to, specialized systems such as indus trial and process control systems, telephone switch ing and private branch exchanges, and environ mental control systems.

5 (12) MALICIOUS CYBER COMMAND AND CON-6 TROL.—The term "malicious cyber command and 7 control" means a method for remote identification 8 of, access to, or use of, an information system or in-9 formation that is stored on, processed by, or 10 transiting an information system associated with a 11 known or suspected cybersecurity threat.

(13) MALICIOUS RECONNAISSANCE.—The term
"malicious reconnaissance" means a method for actively probing or passively monitoring an information
system for the purpose of discerning technical
vulnerabilities of the information system, if such
method is associated with a known or suspected cybersecurity threat.

19 (14) MONITOR.—The term "monitor" means
20 the interception, acquisition, or collection of informa21 tion that is stored on, processed by, or transiting an
22 information system for the purpose of identifying cy23 bersecurity threats.

1 (15) NON-FEDERAL ENTITY.—The term "non-2 Federal entity" means a private entity or a govern-3 mental entity other than a Federal entity. 4 (16)Operational CONTROL.—The term "operational control" means a security control for 5 6 an information system that primarily is implemented 7 and executed by people. 8 (17) PRIVATE ENTITY.—The term "private en-9 tity" has the meaning given the term "person" in 10 section 1 of title 1, United States Code, and does 11 not include a governmental entity. (18) PROTECT.—The term "protect" means ac-12 13 tions undertaken to secure, defend, or reduce the 14 vulnerabilities of an information system, mitigate cy-15 bersecurity threats, or otherwise enhance informa-16 tion security or the resiliency of information systems 17 or assets. 18 (19) TECHNICAL CONTROL.—The term "tech-19 nical control" means a hardware or software restric-20 tion on, or audit of, access or use of an information

21 system or information that is stored on, processed
22 by, or transiting an information system that is in23 tended to ensure the confidentiality, integrity, or
24 availability of that system.

(20) TECHNICAL VULNERABILITY.—The term
 "technical vulnerability" means any attribute of
 hardware or software that could enable or facilitate
 the defeat of a technical control.
 (21) THIRD PARTY.—The term "third party"

6 includes Federal entities and non-Federal entities.