## Calendar No. 470

112TH CONGRESS 2D SESSION

# S. 3414

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

#### IN THE SENATE OF THE UNITED STATES

July 19, 2012

Mr. Lieberman (for himself, Ms. Collins, Mr. Rockefeller, Mrs. Feinstein, and Mr. Carper) introduced the following bill; which was read the first time

July 23, 2012

Read the second time and placed on the calendar

## 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 infra-
- 4 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 tech-
- 10 nology product" means a commercial item that orga-
- 11 nizes or communicates information electronically.
- 12 (3) COMMERCIAL ITEM.—The term "commer-
- cial item" has the meaning given the term in section
- 14 103 of title 41, United States Code.

- 1 (4) COUNCIL.—The term "Council" means the 2 National Cybersecurity Council established under 3 section 101.
  - (5) CRITICAL CYBER INFRASTRUCTURE.—The term "critical cyber infrastructure" means critical infrastructure identified by the Council under section 102(b)(3)(A).
    - (6) CRITICAL INFRASTRUCTURE.—The term "critical infrastructure" has the meaning given that term in section 1016(e) of the USA PATRIOT Act (42 U.S.C. 5195c(e)).
  - (7) CRITICAL INFRASTRUCTURE PARTNERSHIP ADVISORY COUNCIL.—The term "Critical Infrastructure Partnership Advisory Council" means the Critical Infrastructure Partnership Advisory Council established by the Department under section 871 of the Homeland Security Act of 2002 (6 U.S.C. 451) to coordinate critical infrastructure protection activities within the Federal Government and with the private sector and State, local, territorial, and tribal governments.
  - (8) DEPARTMENT.—The term "Department" means the Department of Homeland Security.

1	(9) FEDERAL AGENCY.—The term "Federal
2	agency" has the meaning given the term "agency"
3	in section 3502 of title 44, United States Code.
4	(10) Federal information infrastruc-
5	TURE.—The term "Federal information infrastruc-
6	ture''—
7	(A) means information and information
8	systems that are owned, operated, controlled, or
9	licensed for use by, or on behalf of, any Federal
10	agency, including information systems used or
11	operated by another entity on behalf of a Fed-
12	eral agency; and
13	(B) does not include—
14	(i) a national security system; or
15	(ii) information and information sys-
16	tems that are owned, operated, controlled,
17	or licensed solely for use by, or on behalf
18	of, the Department of Defense, a military
19	department, or an element of the intel-
20	ligence community.
21	(11) Incident.—The term "incident" has the
22	meaning given that term in section 3552 of title 44,
23	United States Code, as added by section 201 of this
24	Act.

- (12)Information INFRASTRUCTURE.—The term "information infrastructure" means the under-lying framework that information systems and assets rely on to process, transmit, receive, or store infor-mation electronically, including programmable elec-tronic devices, communications networks, and indus-trial or supervisory control systems and any associ-ated hardware, software, or data.
  - (13) Information Sharing and Analysis Organization" has the meaning given that term in section 212 of the Homeland Security Act of 2002 (6 U.S.C. 131).
  - (14) Information system.—The term "information system" has the meaning given that term in section 3502 of title 44, United States Code.
  - (15) Institution of Higher Education.—
    The term "institution of higher education" has the meaning given that term in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002).
  - (16) INTELLIGENCE COMMUNITY.—The term "intelligence community" has the meaning given that term under section 3(4) of the National Security Act of 1947 (50 U.S.C. 401a(4)).

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

1	information technology product or service that
2	is used or incorporated into that critical infra-
3	structure.
4	(22) OPERATOR.—The term "operator"—
5	(A) means an entity that manages, runs,
6	or operates, in whole or in part, the day-to-day
7	operations of critical infrastructure; and
8	(B) may include the owner of critical infra-
9	structure.
10	(23) Secretary.—The term "Secretary"
11	means the Secretary of Homeland Security.
12	(24) Significant Cyber incident.—The term
13	"significant cyber incident" means an incident re-
14	sulting in, or an attempted to cause an incident
15	that, if successful, would have resulted in—
16	(A) the exfiltration of data that is essential
17	to the operation of critical cyber infrastructure;
18	or
19	(B) the defeat of an operational control or
20	technical control, as those terms are defined in
21	section 708, essential to the security or oper-
22	ation of critical cyber infrastructure.

### TITLE I—PUBLIC-PRIVATE PART-

### 2 NERSHIP TO PROTECT CRIT-

### 3 ICAL INFRASTRUCTURE

- 4 SEC. 101. NATIONAL CYBERSECURITY COUNCIL.
- 5 (a) In General.—There is established a National6 Cybersecurity Council.
- 7 (b) Responsibilities.—The Council shall—
  - (1) conduct sector-by-sector risk assessments in partnership with owners and operators, private sector entities, relevant Federal agencies, and appropriate non-governmental entities and institutions of higher education;
    - (2) identify categories of critical cyber infrastructure, in partnership with relevant Federal agencies, owners and operators, other appropriate private sector entities, and appropriate non-governmental entities and institutions of higher education;
    - (3) coordinate the adoption of private-sector recommended voluntary outcome-based cybersecurity practices with owners and operators, private sector entities, relevant Federal agencies, the Critical Infrastructure Partnership Advisory Council, institutions of higher education, and appropriate non-governmental cybersecurity experts, in accordance with this title;

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1	(4) establish an incentives-based voluntary cy-
2	bersecurity program for critical infrastructure to en-
3	courage owners to adopt voluntary outcome-based
4	cybersecurity practices under section 103;
5	(5) develop procedures to inform owners and
6	operators of cyber threats, vulnerabilities, and con-
7	sequences; and
8	(6) upon request and to the maximum extent
9	possible, provide any technical guidance or assist-
10	ance to owners and operators consistent with this
11	title.
12	(c) Procedures.—The President shall establish pro-
13	cedures, consistent with this section, for the operation of
14	the Council, which shall include procedures that—
15	(1) prescribe the responsibilities of the Council
16	and the member agencies;
17	(2) ensure the timely implementation of deci-
18	sions of the Council;
19	(3) delegate authority to the Chairperson to
20	take action to fulfill the responsibilities of the Coun-
21	eil if—
22	(A) the Council is not fulfilling the respon-
23	sibilities of the Council in a timely fashion; or
24	(B) necessary to prevent or mitigate an
25	imminent cybersecurity threat.

1	(d) Membership.—The Council shall be comprised
2	of appropriate representatives appointed by the President
3	from—
4	(1) the Department of Commerce;
5	(2) the Department of Defense;
6	(3) the Department of Justice;
7	(4) the intelligence community;
8	(5) sector-specific Federal agencies, as appro-
9	priate;
10	(6) Federal agencies with responsibility for reg-
11	ulating the security of critical cyber infrastructure,
12	as appropriate; and
13	(7) the Department.
14	(e) Coordination.—The Council shall coordinate
15	the activities of the Council with—
16	(1) appropriate representatives of the private
17	sector; and
18	(2) owners and operators.
19	(f) Chairperson.—
20	(1) IN GENERAL.—The Secretary shall serve as
21	Chairperson of the Council (referred to in this sec-
22	tion as the "Chairperson").
23	(2) Responsibilities of the chair-
24	PERSON.—The Chairperson shall—

1	(A) ensure the responsibilities of the Coun-
2	cil are expeditiously fulfilled;
3	(B) provide expertise and support to the
4	Council; and
5	(C) provide recommendations to the Coun-
6	cil.
7	(g) Participation of Sector-specific Federal
8	AGENCIES AND FEDERAL REGULATORY AGENCIES.—A
9	sector-specific Federal agency and a Federal agency with
10	responsibility for regulating the security of critical cyber
11	infrastructure shall participate on the Council on matters
12	directly relating to the sector of critical infrastructure for
13	which the Federal agency has responsibility to ensure that
14	any cybersecurity practice adopted by the Council under
15	section 103—
16	(1) does not contradict any regulation or com-
17	pulsory standard in effect before the adoption of the
18	cybersecurity practice; and
19	(2) to the extent possible, complements or oth-
20	erwise improves the regulation or compulsory stand-
21	ard described in paragraph (1).
22	SEC. 102. INVENTORY OF CRITICAL INFRASTRUCTURE.
23	(a) Risk Assessments.—
24	(1) In general.—

- 1 (A) Designation of Member agency.—
  2 The Council shall designate a member agency
  3 to conduct top-level cybersecurity assessments
  4 of cyber risks to critical infrastructure with voluntary participation from private sector entities.
  6 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.
  - (2) RESPONSIBILITY.—The member agency designated under paragraph (1), in consultation with owners and operators, the Critical Infrastructure Partnership Advisory Council, and appropriate Information Sharing and Analysis Organizations, and in coordination with other member agencies, the intelligence community, and the Department of Commerce, shall—
    - (A) not later than 180 days after the date of enactment of this Act, conduct a top-level assessment of the cybersecurity threats, vulnerabilities, and consequences and the probability of a catastrophic incident and associated risk across all critical infrastructure sectors to

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

1	under paragraph (3) shall be protected in accord-
2	ance with section 106.
3	(5) Submission of risk assessments.—The
4	Council shall submit each risk assessment conducted
5	under this section, in a classified or unclassified
6	form as necessary, to—
7	(A) the President;
8	(B) appropriate Federal agencies; and
9	(C) appropriate congressional committees.
10	(b) Identification of Critical Cyber Infra-
11	STRUCTURE CATEGORIES.—
12	(1) In General.—The Council, in consultation
13	with owners and operators, the Critical Infrastruc-
14	ture Partnership Advisory Council, appropriate In-
15	formation Sharing and Analysis Organizations, and
16	other appropriate representatives of State and local
17	governments, shall establish procedures to identify
18	categories of critical cyber infrastructure within each
19	sector of critical infrastructure for the purposes of
20	this Act.
21	(2) Duties.—In establishing the procedure
22	under paragraph (1), the Council shall—
23	(A) prioritize efforts based on the
24	prioritization established under subsection (a):

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

1	(A) identify categories of critical cyber in-
2	frastructure within each sector of critical infra-
3	structure and identify owners of critical infra-
4	structure within each category of critical cyber
5	infrastructure;
6	(B) only identify a category of critical in-
7	frastructure as critical cyber infrastructure if
8	damage to or unauthorized access to such crit-
9	ical infrastructure could reasonably result in—
10	(i) the interruption of life-sustaining
11	services, including energy, water, transpor-
12	tation, emergency services, or food, suffi-
13	cient to cause—
14	(I) a mass casualty event; or
15	(II) mass evacuations;
16	(ii) catastrophic economic damage to
17	the United States including—
18	(I) failure or substantial disrup-
19	tion of a financial market of the
20	United States;
21	(II) incapacitation or sustained
22	disruption of a transportation system;
23	or

1	(III) other systemic, long-term
2	damage to the economy of the United
3	States; or
4	(iii) severe degradation of national se-
5	curity or national security capabilities, in-
6	cluding intelligence and defense functions;
7	and
8	(C) consider the sector-by-sector risk as-
9	sessments developed in accordance with sub-
10	section (a).
11	(4) Incident reporting.—The Council shall
12	establish procedures under which each owner of crit-
13	ical cyber infrastructure shall report significant
14	cyber incidents affecting critical cyber infrastruc-
15	ture.
16	(5) Limitations.—The Council may not iden-
17	tify as a category of critical cyber infrastructure
18	under this section—
19	(A) critical infrastructure based solely on
20	activities protected by the first amendment to
21	the Constitution of the United States;
22	(B) an information technology product
23	based solely on a finding that the product is ca-
24	pable of, or is actually, being used in critical
25	cyber infrastructure; or

1	(C) a commercial item that organizes or
2	communicates information electronically.
3	(6) Notification of identification of cat-
4	EGORY OF CRITICAL CYBER INFRASTRUCTURE.—Not
5	later than 10 days after the Council identifies a cat-
6	egory of critical cyber infrastructure under this sec-
7	tion, the Council shall notify the relevant owners of
8	the identified critical cyber infrastructure.
9	(7) Definition.—In this subsection, the term
10	"damage" has the meaning given that term in sec-
11	tion 1030(e) of title 18, United States Code.
12	(c) Congressional Notice and Opportunity for
13	DISAPPROVAL.—
14	(1) Notification.—Not later than 10 days
15	after the date on which the Council identifies a cat-
16	egory of critical infrastructure as critical cyber infra-
17	structure under this section, the Council shall—
18	(A) notify Congress of the identification;
19	and
20	(B) submit to Congress a report explaining
21	the basis for the identification.
22	(2) Opportunity for congressional re-
23	VIEW.—The identification of a category of critical
24	infrastructure as critical cyber infrastructure shall
25	not take effect for purposes of this title until the

1	date that is 60 days after the date on which the
2	Council notifies Congress under paragraph (1).
3	SEC. 103. VOLUNTARY CYBERSECURITY PRACTICES.
4	(a) Private Sector Development of Cyberse-
5	CURITY PRACTICES.—Not later than 180 days after the
6	date of enactment of this Act, each sector coordinating
7	council shall propose to the Council voluntary outcome-
8	based cybersecurity practices (referred to in this section
9	as "cybersecurity practices") sufficient to effectively reme-
10	diate or mitigate cyber risks identified through an assess-
11	ment conducted under section 102(a) comprised of—
12	(1) industry best practices, standards, and
13	guidelines; or
14	(2) practices developed by the sector coordi-
15	nating council in coordination with owners and oper-
16	ators, voluntary consensus standards development
17	organizations, representatives of State and local gov-
18	ernments, the private sector, and appropriate infor-
19	mation sharing and analysis organizations.
20	(b) REVIEW OF CYBERSECURITY PRACTICES.—
21	(1) In general.—The Council shall, in con-
22	sultation with owners and operators, the Critical In-
23	frastructure Partnership Advisory Council, and ap-

propriate information sharing and analysis organiza-

1	tions, and in coordination with appropriate rep-
2	resentatives from State and local governments—
3	(A) consult with relevant security experts
4	and institutions of higher education, including
5	university information security centers, appro-
6	priate nongovernmental cybersecurity experts,
7	and representatives from national laboratories;
8	(B) review relevant regulations or compul-
9	sory standards or guidelines;
10	(C) review cybersecurity practices proposed
11	under subsection (a); and
12	(D) consider any amendments to the cyber-
13	security practices and any additional cybersecu-
14	rity practices necessary to ensure adequate re-
15	mediation or mitigation of the cyber risks iden-
16	tified through an assessment conducted under
17	section 102(a).
18	(2) Adoption.—
19	(A) In general.—Not later than 1 year
20	after the date of enactment of this Act, the
21	Council shall—
22	(i) adopt any cybersecurity practices
23	proposed under subsection (a) that ade-
24	quately remediate or mitigate identified
25	cyber risks and any associated con-

sequences identified through an assessment conducted under section 102(a); and

- (ii) adopt any amended or additional cybersecurity practices necessary to ensure the adequate remediation or mitigation of the cyber risks identified through an assessment conducted under section 102(a).
- (B) No submission by sector coordinating council fails to propose to the Council cyberse-curity practices under subsection (a) within 180 days of the date of enactment of this Act, not later than 1 year after the date of enactment of this Act the Council shall adopt cybersecurity practices that adequately remediate or mitigate identified cyber risks and associated consequences identified through an assessment conducted under section 102(a) for the sector.
- 19 (c) FLEXIBILITY OF CYBERSECURITY PRACTICES.—
  20 Each sector coordinating council and the Council shall pe21 riodically assess cybersecurity practices, but not less fre22 quently than once every 3 years, and update or modify
  23 cybersecurity practices as necessary to ensure adequate re24 mediation and mitigation of the cyber risks identified
  25 through an assessment conducted under section 102(a).

1	(d) Prioritization.—Based on the risk assessments
2	performed under section 102(a), the Council shall
3	prioritize the development of cybersecurity practices to en-
4	sure the reduction or mitigation of the greatest cyber
5	risks.
6	(e) Private Sector Recommended Measures.—
7	Each sector coordinating council shall develop voluntary
8	recommended cybersecurity measures that provide owners
9	reasonable and cost-effective methods of meeting any cy-
10	bersecurity practice.
11	(f) Technology Neutrality.—No cybersecurity
12	practice shall require—
13	(1) the use of a specific commercial information
14	technology product; or
15	(2) that a particular commercial information
16	technology product be designed, developed, or manu-
17	factured in a particular manner.
18	(g) Relationship to Existing Regulations.—
19	(1) Inclusion in regulatory regimes.—
20	(A) IN GENERAL.—A Federal agency with
21	responsibilities for regulating the security of
22	critical infrastructure may adopt the cybersecu-
23	rity practices as mandatory requirements.
24	(B) REPORTS.—If, as of the date that is
25	1 year after the date of enactment of this Act.

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a Federal agency with responsibilities for regulating the security of critical infrastructure has not adopted the cybersecurity practices as mandatory requirements, the agency shall submit to the appropriate congressional committees a report on the reasons the agency did not do so, including a description of whether the critical cyber infrastructure for which the Federal agency has responsibility is maintaining practices sufficient to effectively remediate or mitigate cyber risks identified through an assessment conducted under section 102(a).

- (C) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to provide a Federal agency with authority for regulating the security of critical cyber infrastructure in addition or to a greater extent than the authority the Federal agency has under other law.
- (2) Avoidance of conflict.—No cybersecurity practice shall—
  - (A) prevent an owner (including a certified owner) from complying with any law or regulation; or
- 24 (B) require an owner (including a certified owner) to implement cybersecurity measures

- that prevent the owner from complying with any law or regulation.
- 3 (3) AVOIDANCE OF DUPLICATION.—Where reg-4 ulations or compulsory standards regulate the secu-5 rity of critical cyber infrastructure, a cybersecurity 6 practice shall, to the greatest extent possible, com-7 plement or otherwise improve the regulations or 8 compulsory standards.

#### (h) Independent Review.—

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- (1) IN GENERAL.—Each cybersecurity practice shall be publicly reviewed by the relevant sector coordinating council and the Critical Infrastructure Partnership Advisory Council, which may include input from relevant institutions of higher education, including university information security centers, national laboratories, and appropriate non-governmental cybersecurity experts.
- 18 (2) Consideration by council.—The Council 19 shall consider any review conducted under paragraph 20 (1).
- 21 (i) VOLUNTARY TECHNICAL ASSISTANCE.—At the re-
- 22 quest of an owner or operator of critical infrastructure,
- 23 the Council shall provide guidance on the application of
- 24 cybersecurity practices to the critical infrastructure.

1	SEC. 104. VOLUNTARY CYBERSECURITY PROGRAM FOR
2	CRITICAL INFRASTRUCTURE.
3	(a) Voluntary Cybersecurity Program for
4	CRITICAL INFRASTRUCTURE.—
5	(1) In general.—Not later than 1 year after
6	the date of enactment of this Act, the Council, in
7	consultation with owners and operators and the Crit-
8	ical Infrastructure Partnership Advisory Council,
9	shall establish the Voluntary Cybersecurity Program
10	for Critical Infrastructure in accordance with this
11	section.
12	(2) Eligibility.—
13	(A) In general.—An owner of critical
14	cyber infrastructure may apply for certification
15	under the Voluntary Cybersecurity Program for
16	Critical Infrastructure.
17	(B) Criteria.—The Council shall estab-
18	lish criteria for owners of critical infrastructure
19	that is not critical cyber infrastructure to be eli-
20	gible to apply for certification in the Voluntary
21	Cybersecurity Program for Critical Infrastruc-
22	ture.
23	(3) Application for certification.—An
24	owner of critical cyber infrastructure or an owner of
25	critical infrastructure that meets the criteria estab-

1	lished under paragraph (2)(B) that applies for cer
2	tification under this subsection shall—
3	(A) select and implement cybersecurity
4	measures of their choosing that satisfy the out
5	come-based cybersecurity practices established
6	under section 103; and
7	(B)(i) certify in writing and under penalty
8	of perjury to the Council that the owner has de
9	veloped and effectively implemented cybersecu
10	rity measures sufficient to satisfy the outcome
11	based cybersecurity practices established under
12	section 103; or
13	(ii) submit to the Council an assessmen
14	verifying that the owner has developed and ef
15	fectively implemented cybersecurity measures
16	sufficient to satisfy the outcome-based cyberse
17	curity practices established under section 103.
18	(4) Certification.—Upon receipt of a self
19	certification under paragraph (3)(B)(i) or an assess
20	ment under paragraph (3)(B)(ii) the Council shall
21	certify an owner.
22	(5) Nonperformance.—If the Council deter
23	mines that a certified owner is not in compliance
24	with the cybersecurity practices established under
25	section 103, the Council shall—

1	(A) notify the certified owner of such de-
2	termination; and
3	(B) work with the certified owner to reme-
4	diate promptly any deficiencies.
5	(6) Revocation.—If a certified owner fails to
6	remediate promptly any deficiencies identified by the
7	Council, the Council shall revoke the certification of
8	the certified owner.
9	(7) Redress.—
10	(A) In general.—If the Council revokes
11	a certification under paragraph (6), the Council
12	shall—
13	(i) notify the owner of such revoca-
14	tion; and
15	(ii) provide the owner with specific cy-
16	bersecurity measures that, if implemented,
17	would remediate any deficiencies.
18	(B) RECERTIFICATION.—If the Council de-
19	termines that an owner has remedied any defi-
20	ciencies and is in compliance with the cyberse-
21	curity practices, the Council may recertify the
22	owner.
23	(b) Assessments.—
24	(1) Third-party assessments.—The Council,
25	in consultation with owners and operators and the

- Critical Infrastructure Protection Advisory Council,
  shall enter into agreements with qualified thirdparty private entities, to conduct assessments that
  use reliable, repeatable, performance-based evaluations and metrics to assess whether an owner certified under subsection (a)(3)(B)(ii) is in compliance
  with all applicable cybersecurity practices.
  - (2) Training.—The Council shall ensure that third party assessors described in paragraph (1) undergo regular training and accreditation.
  - (3) OTHER ASSESSMENTS.—Using the procedures developed under this section, the Council may perform cybersecurity assessments of a certified owner based on actual knowledge or a reasonable suspicion that the certified owner is not in compliance with the cybersecurity practices or any other risk-based factors as identified by the Council.
  - (4) Notification.—The Council shall provide copies of any assessments by the Federal Government to the certified owner.

#### (5) Access to information.—

(A) IN GENERAL.—For the purposes of an assessment conducted under this subsection, a certified owner shall provide the Council, or a

third party assessor, any reasonable access necessary to complete an assessment.

(B) PROTECTION OF INFORMATION.—Information provided to the Council, the Council's designee, or any assessor during the course of an assessment under this section shall be protected from disclosure in accordance with section 106.

#### (c) Benefits of Certification.—

#### (1) Limitations on civil liability.—

- (A) In GENERAL.—In any civil action for damages directly caused by an incident related to a cyber risk identified through an assessment conducted under section 102(a), a certified owner shall not be liable for any punitive damages intended to punish or deter if the certified owner is in substantial compliance with the appropriate cybersecurity practices at the time of the incident related to that cyber risk.
- (B) LIMITATION.—Subaragraph (A) shall only apply to harm directly caused by the incident related to the cyber risk and shall not apply to damages caused by any additional or intervening acts or omissions by the owner.

- 1 (2) EXPEDITED SECURITY CLEARANCE PROC2 ESS.—The Council, in coordination with the Office
  3 of the Director of National Intelligence, shall estab4 lish a procedure to expedite the provision of security
  5 clearances to appropriate personnel employed by a
  6 certified owner.
  - (3) Prioritized technical assistance.—
    The Council shall ensure that certified owners are eligible to receive prioritized technical assistance.
  - (4) Provision of Cyber threat information.—The Council shall develop, in coordination with certified owners, a procedure for ensuring that certified owners are, to the maximum extent practicable and consistent with the protection of sources and methods, informed of relevant real-time cyber threat information.
  - (5) Public Recognition.—With the approval of a certified owner, the Council may publicly recognize the certified owner if the Council determines such recognition does not pose a risk to the security of critical cyber infrastructure.
  - (6) Study to examine benefits of procurement preference.—
- 24 (A) IN GENERAL.—The Federal Acquisi-25 tion Regulatory Council, in coordination with

1	the Council and with input from relevant pri-
2	vate sector individuals and entities, shall con-
3	duct a study examining the potential benefits of
4	establishing a procurement preference for the
5	Federal Government for certified owners.
6	(B) Areas.—The study under subpara-
7	graph (A) shall include a review of—
8	(i) potential persons and related prop-
9	erty and services that could be eligible for
10	preferential consideration in the procure-
11	ment process;
12	(ii) development and management of
13	an approved list of categories of property
14	and services that could be eligible for pref-
15	erential consideration in the procurement
16	process;
17	(iii) appropriate mechanisms to imple-
18	ment preferential consideration in the pro-
19	curement process, including—
20	(I) establishing a policy encour-
21	aging Federal agencies to conduct
22	market research and industry out-
23	reach to identify property and services
24	that adhere to relevant cybersecurity
25	practices;

1	(II) authorizing the use of a
2	mark for the Voluntary Cybersecurity
3	Program for Critical Infrastructure to
4	be used for marketing property or
5	services to the Federal Government;
6	(III) establishing a policy of en-
7	couraging procurement of certain
8	property and services from an ap-
9	proved list;
10	(IV) authorizing the use of a
11	preference by Federal agencies in the
12	evaluation process; and
13	(V) authorizing a requirement in
14	certain solicitations that the person
15	providing the property or services be a
16	certified owner; and
17	(iv) benefits of and impact on the
18	economy and efficiency of the Federal pro-
19	curement system, if preferential consider-
20	ation were given in the procurement proc-
21	ess to encourage the procurement of prop-
22	erty and services that adhere to relevant
23	baseline performance goals establishing
24	under the Voluntary Cybersecurity Pro-
25	gram for Critical Infrastructure.

## 1 SEC. 105. RULES OF CONSTRUCTION.

2	Nothing in this title shall be construed to—
3	(1) limit the ability of a Federal agency with re-
4	sponsibilities for regulating the security of critical
5	infrastructure from requiring that the cybersecurity
6	practices developed under section 103 be met;
7	(2) provide additional authority for any sector-
8	specific agency or any Federal agency that is not a
9	sector-specific agency with responsibilities for regu-
10	lating the security of critical infrastructure to estab-
11	lish standards or other cybersecurity measures that
12	are applicable to the security of critical infrastruc-
13	ture not otherwise authorized by law;
14	(3) limit or restrict the authority of the Depart-
15	ment, or any other Federal agency, under any other
16	provision of law; or
17	(4) permit any owner (including a certified
18	owner) to fail to comply with any other law or regu-
19	lation, unless specifically authorized.
20	SEC. 106. PROTECTION OF INFORMATION.
21	(a) Definitions.—In this section—
22	(1) the term "covered information" means any
23	information—
24	(A) submitted as part of the process estab-
25	lished under section 102(a)(3);
26	(B) submitted under section 102(b)(2)(C);

- 1 (C) required to be submitted by owners
  2 under section 102(b)(4);
  3 (D) provided to the Secretary, the Sec-
  - (D) provided to the Secretary, the Secretary's designee, or any assessor during the course of an assessment under section 104; or
  - (E) provided to the Secretary or the Inspector General of the Department through the tip line or another secure channel established under subsection (c); and
  - (2) the term "Inspector General" means an Inspector General described in subparagraph (A), (B), or (I) of section 11(b)(1) of the Inspector General Act of 1978 (5 U.S.C. App.), the Inspector General of the United States Postal Service, the Inspector General of the Central Intelligence Agency, and the Inspector General of the Intelligence Community.

#### (b) Critical Infrastructure Information.—

(1) IN GENERAL.—Covered information shall be treated as voluntarily shared critical infrastructure information under section 214 of the Homeland Security Act of 2002 (6 U.S.C. 133), except that the requirement of such section 214 that the information be voluntarily submitted shall not be required for protection of information under this section to apply.

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

1	(iii) risk to public health, safety, secu-
2	rity, or privacy; or
3	(iv) other misfeasance or nonfeasance.
4	(2) Designation of employees.—The Sec-
5	retary and the Inspector General of the Department
6	shall each designate employees authorized to receive
7	concerns reported under this subsection that in-
8	clude—
9	(A) disclosure of covered information; or
10	(B) any other disclosure of information
11	that is specifically prohibited by law or is spe-
12	cifically required by Executive order to be kept
13	secret in the interest of national defense or the
14	conduct of foreign affairs.
15	(3) Handling of Certain Concerns.—A
16	concern described in paragraph (1)(B)—
17	(A) shall be received initially to the Inspec-
18	tor General of the Department;
19	(B) shall not be provided initially to the
20	Secretary; and
21	(C) may be provided to the Secretary if de-
22	termined appropriate by the Inspector General
23	of the Department.
24	(d) Rules of Construction.—Nothing in this sec-
25	tion shall be construed to—

- (1) limit or otherwise affect the right, ability, duty, or obligation of any entity to use or disclose any information of that entity, including in the conduct of any judicial or other proceeding;
  - (2) prevent the classification of information submitted under this section if that information meets the standards for classification under Executive Order 12958, or any successor thereto, or affect measures and controls relating to the protection of classified information as prescribed by Federal statute or under Executive Order 12958, or any successor thereto;
  - (3) limit or otherwise affect the ability of an entity, agency, or authority of a State, a local government, or the Federal Government or any other individual or entity under applicable law to obtain information that is not covered information (including any information lawfully and properly disclosed generally or broadly to the public) and to use such information in any manner permitted by law, including the disclosure of such information under—
- (A) section 552 or 2302(b)(8) of title 5, United States Code;
- 24 (B) section 2409 of title 10, United States 25 Code; or

1	(C) any other Federal, State, or local law,
2	ordinance, or regulation that protects against
3	retaliation an individual who discloses informa-
4	tion that the individual reasonably believes evi-
5	dences a violation of any law, rule, or regula-
6	tion, gross mismanagement, substantial and
7	specific danger to public health, safety, or secu-
8	rity, or other misfeasance or nonfeasance;
9	(4) prevent the Secretary from using informa-

- (4) prevent the Secretary from using information required to be submitted under this Act for enforcement of this title, including enforcement proceedings subject to appropriate safeguards;
- (5) authorize information to be withheld from any committee of Congress, the Comptroller General, or any Inspector General;
- (6) affect protections afforded to trade secrets under any other provision of law; or
- (7) create a private right of action for enforcement of any provision of this section.

# (e) Audit.—

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(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Inspector General of the Department shall conduct an audit of the management of covered information under this

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

1	(G) any other factors at the discretion of
2	the Inspector General of the Department.
3	SEC. 107. ANNUAL ASSESSMENT OF CYBERSECURITY.
4	(a) In General.—Not later than 1 year after the
5	date of enactment of this Act, and every year thereafter,
6	the Council shall submit to the appropriate congressional
7	committees a report on the effectiveness of this title in
8	reducing the risk of cyber attack to critical infrastructure.
9	(b) CONTENTS.—Each report submitted under sub-
10	section (a) shall include—
11	(1) a discussion of cyber risks and associated
12	consequences and whether the cybersecurity prac-
13	tices developed under section 103 are sufficient to
14	effectively remediate and mitigate cyber risks and
15	associated consequences; and
16	(2) an analysis of—
17	(A) whether owners of critical cyber infra-
18	structure are successfully implementing the cy-
19	bersecurity practices adopted under section 103;
20	(B) whether the critical infrastructure of
21	the United States is effectively secured from cy-
22	bersecurity threats, vulnerabilities, and con-
23	sequences;
24	(C) whether Federal agencies with respon-
25	sibilities for regulating the security of critical

- infrastructure are adequately adopting and enforcing the cybersecurity practices adopted under section 103; and
- 4 (D) whether additional legislative authority
  5 or other actions are needed to effectively reme6 diate or mitigate cyber risks and associated
  7 consequences.
- 8 (c) FORM OF REPORT.—A report submitted under 9 this subsection shall be submitted in an unclassified form, 10 but may include a classified annex, if necessary.

#### 11 SEC. 108. INTERNATIONAL COOPERATION.

- 12 (a) IN GENERAL.—The Secretary, in coordination 13 with the Secretary of State, the heads of appropriate sec-14 tor-specific agencies, and the heads of any appropriate 15 Federal agency with responsibilities for regulating the se-
- 16 curity of covered critical infrastructure, shall—
- 17 (1) consistent with the protection of intelligence 18 sources and methods and other sensitive matters, in-19 form the owner or operator of information infra-20 structure located outside the United States the dis-21 ruption of which could result in national or regional 22 catastrophic damage within the United States and 23 the government of the country in which the informa-24 tion infrastructure is located of any cyber risks to 25 such information infrastructure; and

- 1 (2) coordinate with the government of the coun2 try in which such information infrastructure is lo3 cated and, as appropriate, the owner or operator of
  4 the information infrastructure regarding the imple5 mentation of cybersecurity measures or other meas6 ures to the information infrastructure to mitigate or
  7 remediate cyber risks.
- 8 (b) International Agreements.—The Secretary,
  9 in coordination with the Secretary of State, including in
  10 particular with the interpretation of international agree11 ments, shall perform the functions prescribed by this sec12 tion consistent with applicable international agreements.

#### 13 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.
- In this title:
- 19 (1) CERTIFIED OWNER.—The term "certified 20 owner" means an owner of critical cyber infrastruc-21 ture or an owner of critical infrastructure that is 22 certified by the Council under section 104(a)(4).
- 23 (2) Cyber Risk.—The term "cyber risk"
  24 means any risk to information infrastructure, includ25 ing physical or personnel risks and security

- vulnerabilities, that, if exploited or not mitigated, could pose a significant risk of disruption to the operation of information infrastructure essential to the reliable operation of critical infrastructure.
  - (3) Sector coordinating council" means a private sector coordinating council comprised of representatives of owners and operators within a particular sector of critical infrastructure established by the National Infrastructure Protection Plan.
  - (4) Sector-specific agency" means the relevant Federal agency responsible for infrastructure protection activities in a designated critical infrastructure sector or key resources category under the National Infrastructure Protection Plan, or any other appropriate Federal agency identified by the President after the date of enactment of this Act.

1	TITLE II—FEDERAL INFORMA-
2	TION SECURITY MANAGE-
3	MENT AND CONSOLIDATING
4	RESOURCES
5	SEC. 201. FISMA REFORM.
6	(a) In General.—Chapter 35 of title 44, United
7	States Code, is amended by striking subchapters II and
8	III and inserting the following:
9	"SUBCHAPTER II—INFORMATION SECURITY
10	"§ 3551. Purposes
11	"The purposes of this subchapter are to—
12	"(1) provide a comprehensive framework for en-
13	suring the effectiveness of information security con-
14	trols over information resources that support Fed-
15	eral operations and assets;
16	"(2) recognize the highly networked nature of
17	the Federal computing environment and provide ef-
18	fective governmentwide management of policies, di-
19	rectives, standards, and guidelines, as well as effec-
20	tive and nimble oversight of and response to infor-
21	mation security risks, including coordination of in-
22	formation security efforts throughout the Federal ci-
23	vilian, national security, and law enforcement com-

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

### 12 **"§ 3552. Definitions**

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- "(a) IN GENERAL.—Except as provided under subsection (b), the definitions under section 3502 (including the definitions of the terms 'agency' and 'information system') shall apply to this subchapter.
- 17 "(b) Other Terms.—In this subchapter:
- "(1) ADEQUATE SECURITY.—The term 'adequate security' means security commensurate with the risk and impact resulting from the unauthorized access to or loss, misuse, destruction, or modification of information.
- "(2) CONTINUOUS MONITORING.—The term continuous monitoring' means the ongoing real time or near real-time process used to determine if the

complete set of planned, required, and deployed security controls within an information system continue to be effective over time in light of rapidly changing information technology and threat development. To the maximum extent possible, this also requires automation of that process to enable cost effective, efficient, and consistent monitoring and provide a more dynamic view of the security state of those deployed controls.

"(3) Countermeasure.—The term 'countermeasure' means automated or manual actions with defensive intent to modify or block data packets associated with electronic or wire communications, Internet traffic, program code, or other system traffic transiting to or from or stored on an information system for the purpose of protecting the information system from cybersecurity threats, conducted on an information system owned or operated by or on behalf of the party to be protected or operated by a private entity acting as a provider of electronic communication services, remote computing services, or cybersecurity services to the party to be protected.

"(4) Incident.—The term 'incident' means an occurrence that—

1	"(A) actually or imminently jeopardizes,
2	without lawful authority, the integrity, con-
3	fidentiality, or availability of information or an
4	information system; or
5	"(B) constitutes a violation or imminent
6	threat of violation of law, security policies, secu-
7	rity procedures, or acceptable use policies.
8	"(5) Information security.—The term 'in-
9	formation security' means protecting information
10	and information systems from unauthorized access,
11	use, disclosure, disruption, modification, or destruc-
12	tion in order to provide—
13	"(A) integrity, which means guarding
14	against improper information modification or
15	destruction, and includes ensuring nonrepudi-
16	ation and authenticity;
17	"(B) confidentiality, which means pre-
18	serving authorized restrictions on access and
19	disclosure, including means for protecting per-
20	sonal privacy and proprietary information; and
21	"(C) availability, which means ensuring
22	timely and reliable access to and use of infor-
23	mation.

1	"(6) Information technology.—The term
2	'information technology' has the meaning given that
3	term in section 11101 of title 40.
4	"(7) National Security System.—
5	"(A) IN GENERAL.—The term 'national se-
6	curity system' means any information system
7	(including any telecommunications system) used
8	or operated by an agency or by a contractor of
9	an agency, or other organization on behalf of an
10	agency—
11	"(i) the function, operation, or use of
12	which—
13	"(I) involves intelligence activi-
14	ties;
15	"(II) involves cryptologic activi-
16	ties related to national security;
17	"(III) involves command and
18	control of military forces;
19	"(IV) involves equipment that is
20	an integral part of a weapon or weap-
21	ons system; or
22	"(V) subject to subparagraph
23	(B), is critical to the direct fulfillment
24	of military or intelligence missions; or

1	"(ii) that is protected at all times by
2	procedures established for information that
3	have been specifically authorized under cri-
4	teria established by an Executive order or
5	an Act of Congress to be kept classified in
6	the interest of national defense or foreign
7	policy.
8	"(B) Exclusion.—Subparagraph
9	(A)(i)(V) does not include a system that is to
10	be used for routine administrative and business
11	applications (including payroll, finance, logis-
12	tics, and personnel management applications).
13	"(8) Secretary.—The term 'Secretary' means
14	the Secretary of Homeland Security.
15	"§ 3553. Federal information security authority and
16	coordination
17	"(a) In General.—Except as provided in sub-
18	sections (f) and (g), the Secretary shall oversee agency in-
19	formation security policies and practices, including the de-
20	velopment and oversight of information security policies
21	and directives and compliance with this subchapter.
22	"(b) Duties.—The Secretary shall—
23	"(1) develop, issue, and oversee the implemen-
24	tation of information security policies and directives,

1	to the extent determined appropriate by the Sec-
2	retary, including—
3	"(A) policies and directives consistent with
4	the standards promulgated under section 11331
5	of title 40 to identify and provide information
6	security protections that are commensurate
7	with the risk and impact resulting from the un-
8	authorized access, use, disclosure, disruption,
9	modification, or destruction of—
10	"(i) information collected, created,
11	processed, stored, disseminated, or other-
12	wise used or maintained by or on behalf of
13	an agency; or
14	"(ii) information systems used or op-
15	erated by an agency or by a contractor of
16	an agency or other organization, such as a
17	State government entity, on behalf of an
18	agency;
19	"(B) minimum operational requirements
20	for network operations centers and security op-
21	erations centers of agencies to facilitate the
22	protection of and provide common situational
23	awareness for all agency information and infor-
24	mation systems;

1	"(C) reporting requirements, consistent
2	with relevant law, regarding information secu-
3	rity incidents;
4	"(D) requirements for agencywide informa-
5	tion security programs, including continuous
6	monitoring of information security;
7	"(E) performance requirements and
8	metrics for the security of agency information
9	systems;
10	"(F) training requirements to ensure that
11	agencies are able to fully and timely comply
12	with directions issued by the Secretary under
13	this subchapter;
14	"(G) training requirements regarding pri-
15	vacy, civil rights, civil liberties, and information
16	oversight for agency information security em-
17	ployees;
18	"(H) requirements for the annual reports
19	to the Secretary under section 3554(c); and
20	"(I) any other information security re-
21	quirements as determined by the Secretary;
22	"(2) review agency information security pro-
23	grams required to be developed under section
24	3554(b);

- "(3) develop and conduct targeted risk assessments and operational evaluations for agency information and information systems in consultation with
  the heads of other agencies or governmental and private entities that own and operate such systems,
  that may include threat, vulnerability, and impact
  assessments and penetration testing;
  - "(4) operate consolidated intrusion detection, prevention, or other protective capabilities and use associated countermeasures for the purpose of protecting agency information and information systems from information security threats;
  - "(5) in conjunction with other agencies and the private sector, assess and foster the development of information security technologies and capabilities for use across multiple agencies;
  - "(6) designate an entity to receive reports and information about information security incidents, threats, and vulnerabilities affecting agency information systems;
  - "(7) provide incident detection, analysis, mitigation, and response information and remote or onsite technical assistance to the heads of agencies;
  - "(8) coordinate with appropriate agencies and officials to ensure, to the maximum extent feasible,

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1	that policies and directives issued under paragraph
2	(1) are complementary with—
3	"(A) standards and guidelines developed
4	for national security systems; and
5	"(B) policies and directives issues by the
6	Secretary of Defense, Director of the Central
7	Intelligence Agency, and Director of National
8	Intelligence under subsection (g)(1); and
9	"(9) not later than March 1 of each year, sub-
10	mit to Congress a report on agency compliance with
11	the requirements of this subchapter, which shall in-
12	clude—
13	"(A) a summary of the incidents described
14	by the reports required in section 3554(c);
15	"(B) a summary of the results of assess-
16	ments required by section 3555;
17	"(C) a summary of the results of evalua-
18	tions required by section 3556;
19	"(D) significant deficiencies in agency in-
20	formation security practices as identified in the
21	reports, assessments, and evaluations referred
22	to in subparagraphs (A), (B), and (C), or other-
23	wise; and

1	"(E) planned remedial action to address
2	any deficiencies identified under subparagraph
3	(D).
4	"(c) Issuing Policies and Directives.—When
5	issuing policies and directives under subsection (b), the
6	Secretary shall consider any applicable standards or guide-
7	lines developed by the National Institute of Standards and
8	Technology and issued by the Secretary of Commerce
9	under section 11331 of title 40. The Secretary shall con-
10	sult with the Director of the National Institute of Stand-
11	ards and Technology when such policies and directives im-
12	plement standards or guidelines developed by National In-
13	stitute of Standards and Technology. To the maximum ex-
14	tent feasible, such standards and guidelines shall be com-
15	plementary with standards and guidelines developed for
16	national security systems.
17	"(d) Communications and System Traffic.—
18	"(1) In general.—Notwithstanding any other
19	provision of law, in carrying out the responsibilities
20	under paragraphs (3) and (4) of subsection (b), if
21	the Secretary makes a certification described in
22	paragraph (2), the Secretary may acquire, intercept,
23	retain, use, and disclose communications and other
24	system traffic that are transiting to or from or
25	stored on agency information systems and deploy

1	countermeasures with regard to the communications
2	and system traffic.
3	"(2) Certification.—A certification described
4	in this paragraph is a certification by the Secretary
5	that—
6	"(A) the acquisitions, interceptions, and
7	countermeasures are reasonably necessary for
8	the purpose of protecting agency information
9	systems from information security threats;
10	"(B) the content of communications will be
11	collected and retained only when the commu-
12	nication is associated with a known or reason-
13	ably suspected information security threat, and
14	communications and system traffic will not be
15	subject to the operation of a countermeasure
16	unless associated with the threats;
17	"(C) information obtained under activities
18	authorized under this subsection will only be re-
19	tained, used, or disclosed to protect agency in-
20	formation systems from information security
21	threats, mitigate against such threats, or, with
22	the approval of the Attorney General, for law
23	enforcement purposes when—

1	"(i) the information is evidence of a
2	crime that has been, is being, or is about
3	to be committed; and
4	"(ii) disclosure of the information to a
5	law enforcement agency is not otherwise
6	prohibited by law;
7	"(D) notice has been provided to users of
8	agency information systems concerning the po-
9	tential for acquisition, interception, retention,
10	use, and disclosure of communications and
11	other system traffic; and
12	"(E) the activities are implemented pursu-
13	ant to policies and procedures governing the ac-
14	quisition, interception, retention, use, and dis-
15	closure of communications and other system
16	traffic that have been reviewed and approved by
17	the Attorney General.
18	"(3) Private entities.—The Secretary may
19	enter into contracts or other agreements, or other-
20	wise request and obtain the assistance of, private en-
21	tities that provide electronic communication or infor-
22	mation security services to acquire, intercept, retain,
23	use, and disclose communications and other system
24	traffic or to deploy countermeasures in accordance
25	with this subsection.

1	"(e) DIRECTIONS TO AGENCIES.—
2	"(1) Authority.—
3	"(A) In General.—Notwithstanding sec-
4	tion 3554, and subject to subparagraph (B), in
5	response to a known or reasonably suspected in-
6	formation security threat, vulnerability, or inci-
7	dent that represents a substantial threat to the
8	information security of an agency, the Secretary
9	may direct other agency heads to take any law-
10	ful action with respect to the operation of the
11	information systems, including those owned or
12	operated by another entity on behalf of an
13	agency, that collect, process, store, transmit,
14	disseminate, or otherwise maintain agency in-
15	formation, for the purpose of protecting the in-
16	formation system from or mitigating an infor-
17	mation security threat.
18	"(B) Exception.—The authorities of the
19	Secretary under this subsection shall not apply
20	to a system described in paragraph (2), (3), or
21	(4) of subsection (g).
22	"(2) Procedures for use of authority.—
23	The Secretary shall—
24	"(A) in coordination with the Director of
25	the Office of Management and Budget and, as

1	appropriate, in consultation with operators of
2	information systems, establish procedures gov-
3	erning the circumstances under which a direc-
4	tive may be issued under this subsection, which
5	shall include—
6	"(i) thresholds and other criteria;
7	"(ii) privacy and civil liberties protec-
8	tions; and
9	"(iii) providing notice to potentially
10	affected third parties;
11	"(B) specify the reasons for the required
12	action and the duration of the directive;
13	"(C) minimize the impact of directives
14	under this subsection by—
15	"(i) adopting the least intrusive
16	means possible under the circumstances to
17	secure the agency information systems;
18	and
19	"(ii) limiting directives to the shortest
20	period practicable; and
21	"(D) notify the Director of the Office of
22	Management and Budget and head of any af-
23	fected agency immediately upon the issuance of
24	a directive under this subsection.
25	"(3) Imminent threats.—

"(A) IN GENERAL.—If the Secretary determines that there is an imminent threat to agency information systems and a directive under this subsection is not reasonably likely to result in a timely response to the threat, the Secretary may authorize the use of protective capabilities under the control of the Secretary for communications or other system traffic transiting to or from or stored on an agency information system without prior consultation with the affected agency for the purpose of ensuring the security of the information or information systems.

"(B) LIMITATION ON DELEGATION.—The authority under this paragraph may not be delegated to an official in a position lower than Assistant Secretary or Director of the National Cybersecurity and Communications Integration Center.

"(C) Notice.—The Secretary or designee of the Secretary shall immediately notify the Director of the Office of Management and Budget and the head and chief information officer (or equivalent official) of each affected agency of—

1	"(i) any action taken under this sub-
2	section; and
3	"(ii) the reasons for and duration and
4	nature of the action.
5	"(D) OTHER LAW.—The actions of the
6	Secretary under this paragraph shall be con-
7	sistent with applicable law.
8	"(4) Limitation.—The Secretary may direct
9	or authorize lawful action or protective capability
10	under this subsection only to—
11	"(A) protect agency information from un-
12	authorized access, use, disclosure, disruption,
13	modification, or destruction; or
14	"(B) require the remediation of or protect
15	against identified information security risks
16	with respect to—
17	"(i) information collected or main-
18	tained by or on behalf of an agency; or
19	"(ii) that portion of an information
20	system used or operated by an agency or
21	by a contractor of an agency or other orga-
22	nization on behalf of an agency.
23	"(f) National Security Systems.—
24	"(1) IN GENERAL.—This section shall not apply
25	to a national security system.

1 "(2) Information security.—Information se-2 curity policies, directives, standards, and guidelines 3 for national security systems shall be overseen as di-4 rected by the President and, in accordance with that 5 direction, carried out under the authority of the 6 heads of agencies that operate or exercise authority 7 over national security systems. 8 "(g) Delegation of Authorities.— 9 "(1) IN GENERAL.—The authorities of the Sec-10 retary described in paragraphs (1), (2), (3), and (4) 11 of subsection (b) shall be delegated to— "(A) the Secretary of Defense in the case 12 13 of systems described in paragraph (2); 14 "(B) the Director of the Central Intel-15 ligence Agency in the case of systems described 16 in paragraph (3); and 17 "(C) the Director of National Intelligence 18 in the case of systems described in paragraph 19 (4).20 "(2) Department of Defense.—The systems 21 described in this paragraph are systems that are op-22 erated by the Department of Defense, a contractor 23 of the Department of Defense, or another entity on 24 behalf of the Department of Defense that process 25 any information the unauthorized access, use, disclo-

sure, disruption, modification, or destruction of which would have a debilitating impact on the mission of the Department of Defense.

"(3) Central intelligence agency.—The systems described in this paragraph are systems that are operated by the Central Intelligence Agency, a contractor of the Central Intelligence Agency, or another entity on behalf of the Central Intelligence Agency that process any information the unauthorized access, use, disclosure, disruption, modification, or destruction of which would have a debilitating impact on the mission of the Central Intelligence Agency.

"(4) Office of the director of National Intelligence.—The systems described in this paragraph are systems that are operated by the Office of the Director of National Intelligence, a contractor of the Office of the Director of National Intelligence, or another entity on behalf of the Office of the Director of National Intelligence that process any information the unauthorized access, use, disclosure, disruption, modification, or destruction of which would have a debilitating impact on the mission of the Office of the Director of National Intelligence.

"(5) 1 INTEGRATION OF INFORMATION.—The 2 Secretary of Defense, the Director of the Central In-3 telligence Agency, and the Director of National In-4 telligence shall carry out their responsibilities under 5 this subsection in coordination with the Secretary 6 and share relevant information in a timely manner 7 with the Secretary relating to the security of agency 8 information and information systems, including sys-9 tems described in paragraphs (2), (3), and (4), to 10 enable the Secretary to carry out the responsibilities 11 set forth in this section and to maintain comprehen-12 sive situational awareness regarding information se-13 curity incidents, threats, and vulnerabilities affecting 14 agency information systems, consistent with stand-15 ards and guidelines for national security systems, 16 issued in accordance with law and as directed by the 17 President.

## 18 "§ 3554. Agency responsibilities

- "(a) IN GENERAL.—The head of each agency shall—
  "(1) be responsible for—
- 21 "(A) providing information security protec-22 tions commensurate with the risk resulting 23 from unauthorized access, use, disclosure, dis-24 ruption, modification, or destruction of—

1	"(i) information collected, created,
2	processed, stored, disseminated, or other-
3	wise used or maintained by or on behalf of
4	the agency; or
5	"(ii) information systems used or op-
6	erated by the agency or by a contractor of
7	the agency or other organization, such as
8	a State government entity, on behalf of the
9	agency;
10	"(B) complying with this subchapter, in-
11	cluding—
12	"(i) the policies and directives issued
13	under section 3553, including any direc-
14	tions under section 3553(e); and
15	"(ii) information security policies, di-
16	rectives, standards, and guidelines for na-
17	tional security systems issued in accord-
18	ance with law and as directed by the Presi-
19	dent;
20	"(C) complying with the requirements of
21	the information security standards prescribed
22	under section 11331 of title 40, including any
23	required security configuration checklists; and
24	"(D) ensuring that information security
25	management processes are integrated with

1	agency strategic and operational planning proc-
2	esses;
3	"(2) ensure that senior agency officials provide
4	information security for the information and infor-
5	mation systems that support the operations and as-
6	sets under the control of the officials, including
7	through—
8	"(A) assessing, with a frequency commen-
9	surate with risk, the risk and impact that could
10	result from the unauthorized access, use, disclo-
11	sure, disruption, modification, or destruction of
12	the information or information systems;
13	"(B) determining the levels of information
14	security appropriate to protect the information
15	and information systems in accordance with the
16	policies and directives issued under section
17	3553(b) and standards prescribed under section
18	11331 of title 40;
19	"(C) implementing policies, procedures,
20	and capabilities to reduce risks to an acceptable
21	level in a cost-effective manner;
22	"(D) security testing and evaluation, in-
23	cluding continuously monitoring the effective
24	implementation of information security controls
25	and techniques, threats, vulnerabilities, assets,

1	and other aspects of information security as ap-
2	propriate; and
3	"(E) reporting information about informa-
4	tion security incidents, threats, and
5	vulnerabilities in a timely manner as required
6	under policies and procedures established under
7	subsection (b)(7);
8	"(3) assess and maintain the resiliency of infor-
9	mation systems critical to the mission and oper-
10	ations of the agency;
11	"(4) delegate to the chief information officer or
12	equivalent official (or to a senior agency official who
13	reports to the chief information officer or equivalent
14	official) the authority to ensure and primary respon-
15	sibility for ensuring compliance with this subchapter,
16	including—
17	"(A) overseeing the establishment and
18	maintenance of an agencywide security oper-
19	ations capability that on a continuous basis
20	can—
21	"(i) detect, report, respond to, con-
22	tain, and mitigate information security in-
23	cidents that impair adequate security of
24	the agency information and information
25	systems in a timely manner and in accord-

1	ance with the policies and directives issued
2	under section 3553(b); and
3	"(ii) report any information security
4	incident described under clause (i) to the
5	entity designated under section 3553(b)(6);
6	"(B) developing, maintaining, and over-
7	seeing an agencywide information security pro-
8	gram as required under subsection (b);
9	"(C) developing, maintaining, and over-
10	seeing information security policies, procedures,
11	and control techniques to address all applicable
12	requirements, including those issued under sec-
13	tion 3553 and section 11331 of title 40;
14	"(D) training and overseeing employees
15	and contractors of the agency with significant
16	responsibilities for information security with re-
17	spect to such responsibilities; and
18	"(E) assisting senior agency officials con-
19	cerning their responsibilities under paragraph
20	(2);
21	"(5) the agency has trained and obtained secu-
22	rity clearances for an adequate number of employees
23	to assist the agency in complying with this sub-
24	chapter, including the policies and directives issued
25	under section 3553(b);

1	"(6) ensure that the chief information officer
2	(or other senior agency official designated under
3	paragraph (4)), in coordination with other senior
4	agency officials, reports to the head of the agency on
5	the effectiveness of the agency information security
6	program, including the progress of remedial actions;
7	"(7) ensure that the chief information officer
8	(or other senior agency official designated under
9	paragraph (4))—
10	"(A) possesses the necessary qualifications
11	to administer the duties of the official under
12	this subchapter; and
13	"(B) has information security duties as a
14	primary duty of the official; and
15	"(8) ensure that senior agency officials (includ-
16	ing component chief information officers or equiva-
17	lent officials) carry out responsibilities under this
18	subchapter as directed by the official delegated au-
19	thority under paragraph (4).
20	"(b) AGENCY PROGRAM.—The head of each agency
21	shall develop, document, and implement an agencywide in-
22	formation security program, which shall be reviewed under
23	section 3553(b)(2), to provide information security for the
24	information and information systems that support the op-
25	erations and assets of the agency, including those provided

1	or managed by another agency, contractor, or other
2	source, which shall include—
3	"(1) the development, execution, and mainte-
4	nance of a risk management strategy for information
5	security that—
6	"(A) considers information security
7	threats, vulnerabilities, and consequences;
8	"(B) includes periodic assessments and re-
9	porting of risk, with a frequency commensurate
10	with risk and impact;
11	"(2) policies and procedures that—
12	"(A) are based on the risk management
13	strategy and assessment results required under
14	paragraph (1);
15	"(B) reduce information security risks to
16	an acceptable level in a cost-effective manner;
17	"(C) ensure that cost-effective and ade-
18	quate information security is addressed
19	throughout the life cycle of each agency infor-
20	mation system; and
21	"(D) ensure compliance with—
22	"(i) this subchapter;
23	"(ii) the information security policies
24	and directives issued under section
25	3553(b); and

1	"(iii) any other applicable require-
2	ments;
3	"(3) subordinate plans for providing adequate
4	information security for networks, facilities, and sys-
5	tems or groups of information systems;
6	"(4) security awareness training developed in
7	accordance with the requirements issued under sec-
8	tion 3553(b) to inform individuals with access to
9	agency information systems, including information
10	security employees, contractors, and other users of
11	information systems that support the operations and
12	assets of the agency, of—
13	"(A) information security risks associated
14	with their activities;
15	"(B) their responsibilities in complying
16	with agency policies and procedures designed to
17	reduce those risks;
18	"(C) requirements for fulfilling privacy,
19	civil rights, civil liberties, and other information
20	oversight responsibilities; and
21	"(D) methods for individuals to report
22	risks and incidents to relevant Offices of In-
23	spectors General and the Secretary under sec-
24	tion 106 of the Cybersecurity Act of 2012;

1	"(5) security testing and evaluation commensu-
2	rate with risk and impact that includes—
3	"(A) risk-based continuous monitoring of
4	the operational status and security of agency
5	information systems to enable evaluation of the
6	effectiveness of and compliance with informa-
7	tion security policies, procedures, and practices
8	including a relevant and appropriate selection of
9	management, operational, and technical controls
10	of information systems identified in the inven-
11	tory required under section 3505(c);
12	"(B) penetration testing exercises and
13	operational evaluations in accordance with the
14	requirements issued under section 3553(b) to
15	evaluate whether the agency adequately protects
16	against, detects, and responds to incidents;
17	"(C) vulnerability scanning, intrusion de-
18	tection and prevention, and penetration testing
19	in accordance with the requirements issued
20	under section 3553(b); and
21	"(D) any other periodic testing and evalua-
22	tion, in accordance with the requirements
23	issued under section 3553(b);
24	"(6) a process for ensuring that remedial ac-
25	tions are taken to mitigate information security

1	vulnerabilities commensurate with risk and impact,
2	and otherwise address any deficiencies in the infor-
3	mation security policies, procedures, and practices of
4	the agency;
5	"(7) policies and procedures to ensure detec-
6	tion, mitigation, reporting, and responses to infor-
7	mation security incidents, in accordance with the
8	policies and directives issued under section 3553(b),
9	including—
10	"(A) ensuring timely internal reporting of
11	information security incidents;
12	"(B) establishing and maintaining appro-
13	priate technical capabilities to detect and miti-
14	gate risks associated with information security
15	incidents;
16	"(C) notifying and consulting with the en-
17	tity designated by the Secretary under section
18	3553(b)(6); and
19	"(D) notifying and consulting with—
20	"(i) law enforcement agencies and rel-
21	evant Offices of Inspectors General;
22	"(ii) relevant committees of Congress,
23	as appropriate; and

1	"(iii) any other entity, in accordance
2	with law and as directed by the President;
3	and
4	"(8) plans and procedures to ensure continuity
5	of operations for information systems that support
6	the operations and assets of the agency.
7	"(c) Annual Agency Reporting.—The head of
8	each agency shall—
9	"(1) report annually to the Committee on Gov-
10	ernment Reform and the Committee on Science,
11	Space, and Technology of the House of Representa-
12	tives, the Committee on Homeland Security and
13	Governmental Affairs and the Committee on Com-
14	merce, Science, and Transportation of the Senate,
15	any other appropriate committees of Congress, and
16	the Secretary on the adequacy and effectiveness of
17	information security policies, procedures, and prac-
18	tices, including—
19	"(A) a description of each major informa-
20	tion security incident, or set of related inci-
21	dents, resulting in significant compromise of in-
22	formation security, including a summary of—
23	"(i) the threats, vulnerabilities, and
24	impact of the incident:

1	"(ii) the system risk assessment con-
2	ducted before the incident and required
3	under section 3554(a)(2); and
4	"(iii) the detection and response ac-
5	tions taken;
6	"(B) the number of information security
7	incidents within the agency resulting in signifi-
8	cant compromise of information security, pre-
9	sented by system impact level, type of incident,
10	and location;
11	"(C) the total number of information secu-
12	rity incidents within the agency, presented by
13	system impact level, type of incident, and loca-
14	tion;
15	"(D) an identification and analysis of, in-
16	cluding actions and plans to address, any sig-
17	nificant deficiencies identified in such policies,
18	procedures and practices;
19	"(E) any information or evaluation re-
20	quired under the reporting requirements issued
21	under section 3553(b); and
22	"(2) address the adequacy and effectiveness of
23	the information security policies, procedures, and
24	practices of the agency as required for management
25	and budget plans and reports, as appropriate.

- 1 "(d) Communications and System Traffic.—
- 2 Notwithstanding any other provision of law, the head of
- 3 each agency is authorized to allow the Secretary, or a pri-
- 4 vate entity providing assistance to the Secretary under
- 5 section 3553, to acquire, intercept, retain, use, and dis-
- 6 close communications, system traffic, records, or other in-
- 7 formation transiting to or from or stored on an agency
- 8 information system for the purpose of protecting agency
- 9 information and information systems from information se-
- 10 curity threats or mitigating the threats in connection with
- 11 the implementation of the information security capabilities
- 12 authorized by paragraph (3) or (4) of section 3553(b).

# 13 "§ 3555. Annual assessments

- 14 "(a) In General.—Except as provided in subsection
- 15 (c), the Secretary shall conduct periodic assessments of
- 16 the information security programs and practices of agen-
- 17 cies based on the annual agency reports required under
- 18 section 3554(c), the annual independent evaluations re-
- 19 quired under section 3556, the results of any continuous
- 20 monitoring, and other available information.
- 21 "(b) Contents.—Each assessment conducted under
- 22 subsection (a) shall—
- "(1) assess the effectiveness of agency informa-
- 24 tion security policies, procedures, and practices;

1	"(2) provide an assessment of the status of
2	agency information system security for the Federal
3	Government as a whole; and
4	"(3) include recommendations for improving in-
5	formation system security for an agency or the Fed-
6	eral Government as a whole.
7	"(c) Certain Information Systems.—
8	"(1) National security systems.—A peri-
9	odic assessment conducted under subsection (a) re-
10	lating to a national security system shall be pre-
11	pared as directed by the President.
12	"(2) Specific agencies.—Periodic assess-
13	ments conducted under subsection (a) shall be pre-
14	pared in accordance with governmentwide reporting
15	requirements by—
16	"(A) the Secretary of Defense for informa-
17	tion systems under the control of the Depart-
18	ment of Defense;
19	"(B) the Director of the Central Intel-
20	ligence Agency for information systems under
21	the control of the Central Intelligence Agency
22	and
23	"(C) the Director of National Intelligence
24	for information systems under the control of

- 1 the Office of the Director of National Intel-
- 2 ligence.
- 3 "(d) Agency-specific Assessments.—Each as-
- 4 sessment conducted under subsection (a) that relates, in
- 5 whole or in part, to the information systems of an agency
- 6 shall be made available to the head of the agency.
- 7 "(e) Protection of Information.—In conducting
- 8 assessments under subsection (a), the Secretary shall take
- 9 appropriate actions to ensure the protection of information
- 10 which, if disclosed, may adversely affect information secu-
- 11 rity. Such protections shall be commensurate with the risk
- 12 and comply with all applicable laws and policies.
- 13 "(f) Report to Congress.—The Secretary, in co-
- 14 ordination with the Secretary of Defense, the Director of
- 15 the Central Intelligence Agency, and the Director of Na-
- 16 tional Intelligence, shall evaluate and submit to Congress
- 17 an annual report on the adequacy and effectiveness of the
- 18 information security programs and practices assessed
- 19 under this section.

# 20 "§ 3556. Independent evaluations

- 21 "(a) IN GENERAL.—Not less than annually, an inde-
- 22 pendent evaluation of the information security program
- 23 and practices of each agency shall be performed to assess
- 24 the effectiveness of the programs and practices.

1	"(b) Contents.—Each evaluation performed under
2	subsection (a) shall include—
3	"(1) testing of the effectiveness of information
4	security policies, procedures, and practices of a rep-
5	resentative subset of the information systems of the
6	agency; and
7	"(2) an assessment of the effectiveness of the
8	information security policies, procedures, and prac-
9	tices of the agency.
10	"(c) Conduct of Independent Evaluations.—
11	Except as provided in subsection (f), an evaluation of an
12	agency under subsection (a) shall be performed by—
13	"(1) the Inspector General of the agency;
14	"(2) at the discretion of the Inspector General
15	of the agency, an independent entity entering a con-
16	tract with the Inspector General to perform the eval-
17	uation; or
18	"(3) if the agency does not have an Inspector
19	General, an independent entity selected by the head
20	of the agency, in consultation with the Secretary.
21	"(d) Previously Conducted Evaluations.—The
22	evaluation required by this section may be based in whole
23	or in part on a previously conducted audit, evaluation, or
24	report relating to programs or practices of the applicable
25	agency.

- 1 "(e) Reports.—The official or entity performing an
- 2 evaluation of an agency under subsection (a) shall submit
- 3 to Congress, the agency, and the Comptroller General of
- 4 the United States a report regarding the evaluation. The
- 5 head of the agency shall provide to the Secretary a report
- 6 received under this subsection.
- 7 "(f) National Security Systems.—An evaluation
- 8 under subsection (a) of a national security system shall
- 9 be performed as directed by the President.
- 10 "(g) Comptroller General.—The Comptroller
- 11 General of the United States shall periodically evaluate
- 12 and submit to Congress reports on—
- "(1) the adequacy and effectiveness of the in-
- 14 formation security policies and practices of agencies;
- 15 and
- "(2) implementation of this subchapter.

# 17 "§ 3557. National security systems

- 18 "The head of each agency operating or exercising
- 19 control of a national security system shall be responsible
- 20 for ensuring that the agency—
- 21 "(1) provides information security protections
- commensurate with the risk and magnitude of the
- harm resulting from the unauthorized use, disclo-
- sure, disruption, modification, or destruction of the

- 1 information contained in the national security sys-
- 2 tem;
- 3 "(2) implements information security policies
- 4 and practices as required by standards and guide-
- 5 lines for national security systems issued in accord-
- 6 ance with law and as directed by the President; and
- 7 "(3) complies with this subchapter.

### 8 "§ 3558. Effect on existing law

- 9 "Nothing in this subchapter shall be construed to
- 10 alter or amend any law regarding the authority of any
- 11 head of an agency over the agency.".
- 12 (b) Technical and Conforming Amendment.—
- 13 The table of sections for chapter 35 of title 44 is amended
- 14 by striking the matter relating to subchapters II and III
- 15 and inserting the following:

#### "SUBCHAPTER II—INFORMATION SECURITY

- "Sec. 3551. Purposes.
- "Sec. 3552. Definitions.
- "Sec. 3553. Federal information security authority and coordination.
- "Sec. 3554. Agency responsibilities.
- "Sec. 3555. Annual assessments.
- "Sec. 3556. Independent evaluations.
- "Sec. 3557. National security systems.
- "Sec. 3558. Effect on existing law.".

#### 16 SEC. 202. MANAGEMENT OF INFORMATION TECHNOLOGY.

- 17 (a) IN GENERAL.—Section 11331 of title 40, United
- 18 States Code, is amended to read as follows:
- 19 "§ 11331. Responsibilities for Federal information sys-
- 20 tems standards
- 21 "(a) Definitions.—In this section:

- 1 "(1) Federal information system.—The 2 term 'Federal information system' means an infor-3 mation system used or operated by an executive 4 agency, by a contractor of an executive agency, or by 5 another entity on behalf of an executive agency.
  - "(2) Information security.—The term 'information security' has the meaning given that term in section 3552 of title 44.
  - "(3) NATIONAL SECURITY SYSTEM.—The term 'national security system' has the meaning given that term in section 3552 of title 44.

# 12 "(b) STANDARDS AND GUIDELINES.—

- "(1) AUTHORITY TO PRESCRIBE.—Except as provided under paragraph (2), and based on the standards and guidelines developed by the National Institute of Standards and Technology under paragraphs (2) and (3) of section 20(a) of the National Institute of Standards and Technology Act (15 U.S.C. 278g–3(a)), the Secretary of Commerce, in consultation with the Secretary of Homeland Security, shall prescribe standards and guidelines relating to Federal information systems.
- "(2) National security systems.—Standards and guidelines for national security systems shall be developed, prescribed, enforced, and over-

1	seen as otherwise authorized by law and as directed
2	by the President.
3	"(c) Mandatory Requirements.—
4	"(1) AUTHORITY TO MAKE MANDATORY.—The
5	Secretary of Commerce may require executive agen-
6	cies to comply with the standards prescribed under
7	subsection (b)(1) to the extent determined necessary
8	by the Secretary of Commerce to improve the effi-
9	ciency of operation or security of Federal informa-
10	tion systems.
11	"(2) Required mandatory standards.—
12	"(A) IN GENERAL.—The Secretary of
13	Commerce shall require executive agencies to
14	comply with the standards described in sub-
15	paragraph (B).
16	"(B) Contents.—The standards de-
17	scribed in this subparagraph are information
18	security standards that—
19	"(i) provide minimum information se-
20	curity requirements as determined under
21	section 20(b) of the National Institute of
22	Standards and Technology Act (15 U.S.C
23	278g–3(b)); and

1	"(ii) are otherwise necessary to im-
2	prove the security of Federal information
3	and Federal information systems.
4	"(d) AUTHORITY TO DISAPPROVE OR MODIFY.—The
5	President may disapprove or modify the standards and
6	guidelines prescribed under subsection (b)(1) if the Presi-
7	dent determines such action to be in the public interest.
8	The authority of the President to disapprove or modify
9	the standards and guidelines may be delegated to the Di-
10	rector of the Office of Management and Budget. Notice
11	of a disapproval or modification under this subsection
12	shall be published promptly in the Federal Register. Upon
13	receiving notice of a disapproval or modification, the Sec-
14	retary of Commerce shall immediately rescind or modify
15	the standards or guidelines as directed by the President
16	or the Director of the Office of Management and Budget.
17	"(e) Exercise of Authority.—To ensure fiscal
18	and policy consistency, the Secretary of Commerce shall
19	exercise the authority under this section subject to direc-
20	tion by the President and in coordination with the Direc-
21	tor of the Office of Management and Budget.
22	"(f) Application of More Stringent Stand-
23	ARDS.—The head of an executive agency may employ
24	standards for the cost-effective information security for
25	Federal information systems of that agency that are more

stringent than the standards prescribed by the Secretary 2 of Commerce under subsection (b)(1) if the more stringent standards— 3 "(1) contain any standards with which the Sec-4 5 retary of Commerce has required the agency to com-6 ply; and "(2) are otherwise consistent with the policies 7 and directives issued under section 3553(b) of title 8 9 44. 10 "(g) Decisions on Promulgation of Stand-ARDS.—The decision by the Secretary of Commerce re-12 garding the promulgation of any standard under this section shall occur not later than 6 months after the submission of the proposed standard to the Secretary of Com-14 merce by the National Institute of Standards and Technology, as provided under section 20 of the National Insti-16 tute of Standards and Technology Act (15 U.S.C. 278g-3).". 18 19 (b) Technical and Conforming Amendments.— 20 (1) Section 3502(8)) of title 44, United States Code, is amended by inserting "hosting," after "col-21 22 lection,". (2) The National Institute of Standards and 23 24 Technology Act (15 U.S.C. 271 et seq.) is amend-

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ed—

1	(A) in section $20(a)(2)$ (15 U.S.C. 278g–
2	3(a)(2)), by striking "section $3532(b)(2)$ " and
3	inserting "section 3552(b)"; and
4	(B) in section 21(b) (15 U.S.C. 278g-
5	4(b))—
6	(i) in paragraph (2), by inserting ",
7	the Secretary of Homeland Security," after
8	"the Institute"; and
9	(ii) in paragraph (3), by inserting
10	"the Secretary of Homeland Security,"
11	after "the Secretary of Commerce,".
12	(3) Section 1001(c)(1)(A) of the Homeland Se-
13	curity Act of 2002 (6 U.S.C. 511(c)(1)(A)) is
14	amended by striking "section 3532(3)" and insert-
15	ing "section 3552(b)".
16	(4) Part IV of title 10, United States Code, is
17	amended—
18	(A) in section 2222(j)(5), by striking "sec-
19	tion 3542(b)(2)" and inserting "section
20	3552(b)";
21	(B) in section 2223(c)(3), by striking "sec-
22	tion 3542(b)(2)" and inserting "section
23	3552(b)"; and
24	(C) in section 2315, by striking "section
25	3542(b)(2)" and inserting "section 3552(b)".

- 1 (5) Section 8(d)(1) of the Cyber Security Re-
- 2 search and Development Act (15 U.S.C. 7406(d)(1))
- 3 is amended by striking "section 3534(b)" and in-
- 4 serting "section 3554(b)".

#### 5 SEC. 203. SAVINGS PROVISIONS.

- 6 (a) In General.—Policies and compliance guidance
- 7 issued by the Director of the Office of Management and
- 8 Budget before the date of enactment of this Act under
- 9 section 3543(a)(1) of title 44 (as in effect on the day be-
- 10 fore the date of enactment of this Act) shall continue in
- 11 effect, according to their terms, until modified, termi-
- 12 nated, superseded, or repealed under section 3553(b)(1)
- 13 of title 44, as added by this Act.
- 14 (b) Other Standards and Guidelines.—Stand-
- 15 ards and guidelines issued by the Secretary of Commerce
- 16 or by the Director of the Office of Management and Budg-
- 17 et before the date of enactment of this Act under section
- 18 11331(b)(1) of title 40 (as in effect on the day before the
- 19 date of enactment of this Act) shall continue in effect, ac-
- 20 cording to their terms, until modified, terminated, super-
- 21 seded, or repealed under section 11331(b)(1), as added by
- 22 this Act.

1	SEC. 204. CONSOLIDATION OF EXISTING DEPARTMENTAL
2	CYBER RESOURCES AND AUTHORITIES.
3	(a) In General.—Title II of the Homeland Security
4	Act of 2002 (6 U.S.C. 121 et seq.) is amended by adding
5	at the end the following:
6	"Subtitle E—Cybersecurity
7	"SEC. 241. DEFINITIONS.
8	"In this subtitle:
9	"(1) AGENCY INFORMATION INFRASTRUC-
10	TURE.—The term 'agency information infrastruc-
11	ture' means the Federal information infrastructure
12	of a particular Federal agency.
13	"(2) CENTER.—The term 'Center' means the
14	National Center for Cybersecurity and Communica-
15	tions established under section 242.
16	"(3) Damage.—The term 'damage' has the
17	meaning given that term in section 1030(e) of title
18	18, United States Code.
19	"(4) FEDERAL AGENCY.—The term 'Federal
20	agency' has the meaning given the term 'agency' in
21	section 3502 of title 44, United States Code.
22	"(5) Federal Cybersecurity Center.—The
23	term 'Federal cybersecurity center' has the meaning
24	given that term in section 708 of the Cybersecurity
25	Act of 2012.

1	"(6) FEDERAL ENTITY.—The term 'Federal en-
2	tity' has the meaning given that term in section 708
3	of the Cybersecurity Act of 2012.
4	"(7) Federal information infrastruc-
5	TURE.—The term 'Federal information infrastruc-
6	ture'—
7	"(A) means information and information
8	systems that are owned, operated, controlled, or
9	licensed solely for use by, or on behalf of, any
10	Federal agency, including information systems
11	used or operated by another entity on behalf of
12	a Federal agency; and
13	"(B) does not include—
14	"(i) a national security system; or
15	"(ii) information and information sys-
16	tems that are owned, operated, controlled
17	or licensed for use solely by, or on behalf
18	of, the Department of Defense, a military
19	department, or another element of the in-
20	telligence community.
21	"(8) Incident.—The term 'incident' has the
22	meaning given that term in section 3552 of title 44
23	United States Code

- 1 "(9) Information Security.—The term 'in-2 formation security' has the meaning given that term 3 in section 3552 of title 44, United States Code.
  - "(10) Information system.—The term 'information system' has the meaning given that term in section 3502 of title 44, United States Code.
    - "(11) INTELLIGENCE COMMUNITY.—The term intelligence community' has the meaning given that term in section 3(4) of the National Security Act of 1947 (50 U.S.C. 401a(4)).
    - "(12) National Security and Emergency Preparedness communications infrastructure' means the systems supported or covered by the Office of Emergency Communications and the National Communications System on the date of enactment of the Cybersecurity Act of 2012 or otherwise described in Executive Order 12472, or any successor thereto, relating to national security and emergency preparedness communications functions.
  - "(13) National information infrastructure' means information and information systems—

1	"(A) that are owned, operated, or con-
2	trolled, in whole or in part, within or from the
3	United States; and
4	"(B) that are not owned, operated, con-
5	trolled, or licensed for use by a Federal agency.
6	"(14) National Security System.—The term
7	'national security system' has the meaning given
8	that term in section 3552 of title 44, United States
9	Code.
10	"(15) Non-federal entity.—The term 'non-
11	Federal entity' has the meaning given that term in
12	section 708 of the Cybersecurity Act of 2012.
13	"SEC. 242. CONSOLIDATION OF EXISTING RESOURCES.
13 14	"SEC. 242. CONSOLIDATION OF EXISTING RESOURCES.  "(a) ESTABLISHMENT.—There is established within
14 15	"(a) Establishment.—There is established within
14 15	"(a) Establishment.—There is established within the Department a National Center for Cybersecurity and
14 15 16 17	"(a) Establishment.—There is established within the Department a National Center for Cybersecurity and Communications.
14 15 16 17	"(a) ESTABLISHMENT.—There is established within the Department a National Center for Cybersecurity and Communications.  "(b) Transfer of Functions.—There are transfer.
14 15 16 17 18	"(a) ESTABLISHMENT.—There is established within the Department a National Center for Cybersecurity and Communications.  "(b) Transfer of Functions.—There are transferred to the Center the National Cyber Security Division,
14 15 16 17 18	"(a) ESTABLISHMENT.—There is established within the Department a National Center for Cybersecurity and Communications.  "(b) Transfer of Functions.—There are transferred to the Center the National Cyber Security Division, the Office of Emergency Communications, and the National Cyber Security Division,
14 15 16 17 18 19 20	"(a) Establishment.—There is established within the Department a National Center for Cybersecurity and Communications.  "(b) Transfer of Functions.—There are transferred to the Center the National Cyber Security Division, the Office of Emergency Communications, and the National Communications System, including all the functions, personnel, assets, authorities, and liabilities of the
14 15 16 17 18 19 20 21	"(a) ESTABLISHMENT.—There is established within the Department a National Center for Cybersecurity and Communications.  "(b) Transfer of Functions.—There are transferred to the Center the National Cyber Security Division, the Office of Emergency Communications, and the National Communications System, including all the functions, personnel, assets, authorities, and liabilities of the

1	"(c) DIRECTOR.—The Center shall be headed by a
2	Director, who shall be appointed by the President, by and
3	with the advice and consent of the Senate, and who shall
4	report directly to the Secretary.
5	"(d) Duties.—The Director of the Center shall—
6	"(1) manage Federal efforts to secure, protect,
7	and ensure the resiliency of the Federal information
8	infrastructure, national information infrastructure,
9	and national security and emergency preparedness
10	communications infrastructure of the United States,
11	working cooperatively with appropriate government
12	agencies and the private sector;
13	"(2) support private sector efforts to secure,
14	protect, and ensure the resiliency of the national in-
15	formation infrastructure;
16	"(3) prioritize the efforts of the Center to ad-
17	dress the most significant risks and incidents that
18	have caused or are likely to cause damage to the
19	Federal information infrastructure, the national in-
20	formation infrastructure, and national security and
21	emergency preparedness communications infrastruc-
22	ture of the United States;
23	"(4) ensure, in coordination with the privacy of-
24	ficer designated under subsection (j), the privacy of-
25	ficer appointed under section 222, and the Director

- of the Office of Civil Rights and Civil Liberties appointed under section 705, that the activities of the Center comply with all policies, regulations, and laws protecting the privacy and civil liberties of United States persons; and
- 6 "(5) perform such other duties as the Secretary 7 may require relating to the security and resiliency of 8 the Federal information infrastructure, national in-9 formation infrastructure, and the national security 10 and emergency preparedness communications infra-11 structure of the United States.
- 12 "(e) Authorities and Responsibilities of Cen-
- 13 TER.—The Center shall—
- 14 "(1) engage in activities and otherwise coordi-15 nate Federal efforts to identify, protect against, re-16 mediate, and mitigate, respond to, and recover from 17 cybersecurity threats, consequences, vulnerabilities 18 and incidents impacting the Federal information in-19 frastructure and the national information infrastruc-20 ture, including by providing support to entities that 21 own or operate national information infrastructure, 22 at their request;
  - "(2) conduct risk-based assessments of the Federal information infrastructure, and risk assessments of critical infrastructure;

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"(3) develop, oversee the implementation of, and enforce policies, principles, and guidelines on information security for the Federal information infrastructure, including exercise of the authorities under the Federal Information Security Management Act of 2002 (title III of Public Law 107–347; 116 Stat. 2946);

> "(4) evaluate and facilitate the adoption of technologies designed to enhance the protection of information infrastructure, including making such technologies available to entities that own or operate national information infrastructure, with or without reimbursement, as necessary to accomplish the purposes 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;

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

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- "(B) receive and distribute classified and unclassified information from and to entities that own or operate national information infrastructure to support efforts by such entities to secure such infrastructure and for enhancing overall situational 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;
  - "(9) consult, in coordination with the Secretary of State, with appropriate international partners to enhance the security of the Federal information infrastructure, national information infrastructure, and information infrastructure located outside the United States the disruption of which could result in

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

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

- 1 "(h) Cybersecurity Exercise Program.—The
- 2 Director of the Center shall develop and implement a na-
- 3 tional cybersecurity exercise program with the participa-
- 4 tion of State and local governments, international partners
- 5 of the United States, and the private sector.
- 6 "(i) Liaison Officers.—
- 7 "(1) Required detail of liaison offi-
- 8 CERS.—The Secretary of Defense, the Attorney Gen-
- 9 eral, the Secretary of Commerce, and the Director of
- National Intelligence shall assign personnel to the
- 11 Center to act as full-time liaisons.
- 12 "(2) OPTIONAL DETAIL OF LIAISON OFFI-
- 13 CERS.—The head of any Federal agency not de-
- scribed in paragraph (1), with the concurrence of
- the Director of the Center, may assign personnel to
- the Center to act as liaisons.
- 17 "(3) Private Sector Liaison.—The Director
- of the Center shall designate not less than 1 em-
- ployee of the Center to serve as a liaison with the
- 20 private sector.
- 21 "(j) Privacy Officer.—The Director of the Center,
- 22 in consultation with the Secretary, shall designate a full-
- 23 time privacy officer.
- 24 "(k) Sufficiency of Resources Plan.—

1 "(1) Report.—Not later than 120 days after 2 the date of enactment of the Cybersecurity Act of 3 2012, the Director of the Office of Management and 4 Budget shall submit to the appropriate committees 5 of Congress and the Comptroller General of the 6 United States a report on the resources and staff 7 necessary to carry out fully the responsibilities under 8 this subtitle, including the availability of existing re-9 sources and staff.

"(2) Comptroller General of the United States shall evaluate the reasonableness and adequacy of the report submitted by the Director of the Office of Management and Budget under paragraph (1) and submit to the appropriate committees of Congress a report regarding the same.

17 "(1) No Right or Benefit.—The provision of as-18 sistance or information under this section to governmental 19 or private entities that own or operate critical infrastructure shall be at the discretion of the Secretary. The provi-20 21 sion of certain assistance or information to a governmental 22 or private entity pursuant to this section shall not create 23 a right or benefit, substantive or procedural, to similar assistance or information for any other governmental or 25 private entity.

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# 1 "SEC. 243. DEPARTMENT OF HOMELAND SECURITY INFOR-

2	MATION SHARING.
3	"(a) Information Sharing.—The Director of the
4	Center shall establish procedures to—
5	"(1) ensure the appropriate, regular, and timely
6	sharing of classified and unclassified cybersecurity
7	information, including information relating to
8	threats, vulnerabilities, traffic, trends, incidents, and
9	other anomalous activities that affect the Federal in-
10	formation infrastructure, national information infra-
11	structure, or information systems between and
12	among appropriate Federal and non-Federal entities,
13	including Federal cybersecurity centers, Federal and
14	non-Federal network and security operations cen-
15	ters, cybersecurity exchanges, and non-Federal enti-
16	ties responsible for such information systems;
17	"(2) expand and enhance the sharing of timely
18	and actionable cybersecurity threat and vulnerability
19	information by the Federal Government with owners
20	and operators of the national information infrastruc-
21	ture;
22	"(3) establish a method of accessing classified
23	or unclassified information, as appropriate and in
24	accordance with applicable laws protecting trade se-
25	crets, that will provide situational awareness of the
26	security of the Federal information infrastructure

- and the national information infrastructure relating to cybersecurity threats, and vulnerabilities, including traffic, trends, incidents, damage, and other anomalous activities affecting the Federal information infrastructure or the national information infrastructure;
  - "(4) develop, in consultation with the Attorney General, the Director of National Intelligence, and the privacy officer established under section 242(j), guidelines to protect the privacy and civil liberties of United States persons and intelligence sources and 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.

#### "(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 partners of the United States regarding threats, vulnerabilities, incidents, and anomalous activities affecting the national information infrastructure, Federal information infrastructure, or information infrastructure that is owned, operated, controlled, or

1	licensed solely for use by, or on behalf of, the De-
2	partment of Defense, a military department, or an-
3	other element of the intelligence community is treat-
4	ed as voluntarily shared critical infrastructure infor-
5	mation under section 214 as requested by submit-
6	ting entities.
7	"(2) Limitation.—Paragraph (1) shall not
8	apply to information that is submitted to—
9	"(A) conceal violations of law, inefficiency,
10	or administrative error;
11	"(B) prevent embarrassment to a person,
12	organization, or agency; or
13	"(C) interfere with competition in the pri-
14	vate sector.
15	"(c) Limitation on Use of Voluntarily Sub-
16	MITTED INFORMATION FOR REGULATORY ENFORCEMENT
17	ACTIONS.—A Federal entity may not use information sub-
18	mitted under this subtitle as evidence in a regulatory en-
19	forcement action against the individual or entity that law-
20	fully submitted the information.
21	"(d) Federal Agencies.—
22	"(1) Information sharing program.—The
23	Director of the Center, in consultation with the
24	members of the Chief Information Officers Council
25	established under section 3603 of title 44, United

States Code, shall establish a program for sharing information with and between the Center and other Federal agencies that includes processes and procedures—

"(A) under which the Director of the Center regularly shares with each Federal agency analyses and reports regarding the security of such agency information infrastructure and on the overall security of the Federal information infrastructure and information infrastructure that is owned, operated, controlled, or licensed for use by, or on behalf of, the Department of Defense, a military department, or another element of the intelligence community, which shall include means and methods of preventing, responding to, mitigating, and remediating cybersecurity threats and vulnerabilities; and

"(B) under which Federal agencies provide the Director of the Center, upon request, with information concerning the security of the Federal information infrastructure, information infrastructure that is owned, operated, controlled, or licensed for use by, or on behalf of, the Department of Defense, a military department, or another element of the intelligence community,

1	or the national information infrastructure nec-
2	essary to carry out the duties of the Director of
3	the Center under this subtitle or any other pro-
4	vision of law.
5	"(2) Access to information.—
6	"(A) IN GENERAL.—The Director of the
7	Center shall ensure—
8	"(i) that the head of each Federal
9	agency has timely access to data, including
10	appropriate raw and processed data, re-
11	garding the information infrastructure of
12	the Federal agency; and
13	"(ii) to the greatest extent possible,
14	that the head of each Federal agency is
15	kept apprised of common trends in security
16	compliance as well as the likelihood that a
17	significant cybersecurity risk or incident
18	could cause damage to the agency informa-
19	tion infrastructure.
20	"(B) Compliance.—The head of a Fed-
21	eral agency shall comply with all processes and
22	procedures established under this subsection re-
23	garding notification to the Director of the Cen-
24	ter relating to incidents.

"(C) 1 IMMEDIATE NOTIFICATION RE-2 QUIRED.—Unless otherwise directed by the 3 President, any Federal agency with a national 4 security system shall, consistent with the level 5 of the risk, immediately notify the Director of 6 the Center regarding any incident affecting the 7 security of a national security system.

#### 8 "SEC. 244. PROHIBITED CONDUCT.

- 9 "None of the authorities provided under this subtitle 10 shall authorize the Director of the Center, the Center, the 11 Department, or any other Federal entity to—
- "(1) compel the disclosure of information from a private entity relating to an incident unless otherwise authorized by law; or
  - "(2) intercept a wire, oral, or electronic communication (as those terms are defined in section 2510 of title 18, United States Code), access a stored electronic or wire communication, install or use a pen register or trap and trace device, or conduct electronic surveillance (as defined in section 101 of the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C.1801)) relating to an incident unless otherwise authorized under chapter 119, chapter 121, or chapter 206 of title 18, United States Code, or

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- the Foreign Intelligence Surveillance Act of 1978
- 2 (50 U.S.C. 1801 et seq.).".
- 3 (b) Technical and Conforming Amendment.—
- 4 The table of contents in section 1(b) of the Homeland Se-
- 5 curity Act of 2002 (6 U.S.C. 101 et seq.) is amended by
- 6 inserting after the item relating to section 237 the fol-
- 7 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.".

# 8 TITLE III—RESEARCH AND O DEVELOPMENT

# 9 **DEVELOPMENT**

- 10 SEC. 301. FEDERAL CYBERSECURITY RESEARCH AND DE-
- 11 **VELOPMENT.**
- 12 (a) Fundamental Cybersecurity Research.—
- 13 The Director of the Office of Science and Technology Pol-
- 14 icy (referred to in this section as the "Director"), in co-
- 15 ordination with the Secretary and the head of any relevant
- 16 Federal agency, shall build upon programs and plans in
- 17 effect as of the date of enactment of this Act to develop
- 18 a national cybersecurity research and development plan,
- 19 which shall be updated biennially.
- 20 (b) REQUIREMENTS.—The plan required to be devel-
- 21 oped under subsection (a) shall encourage computer and

1	information science and engineering research to meet chal-
2	lenges in cybersecurity, including—
3	(1) how to design and build complex software-
4	intensive systems that are secure and reliable when
5	first deployed;
6	(2) how to test and verify that software, wheth-
7	er developed locally or obtained from a third party
8	is free of significant known security flaws;
9	(3) how to test and verify that software ob-
10	tained from a third party correctly implements stat-
11	ed functionality, and only that functionality;
12	(4) how to guarantee the privacy of the iden-
13	tity, information, or lawful transactions of an indi-
14	vidual when stored in distributed systems or trans-
15	mitted over networks;
16	(5) how to build new protocols to enable the
17	Internet to have robust security as one of the key
18	capabilities of the Internet;
19	(6) how to determine the origin of a message
20	transmitted over the Internet;
21	(7) how to support privacy in conjunction with
22	improved security;
23	(8) how to address the growing problem of in-
24	sider threat

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

1	(2) that develops new models for professional
2	development of faculty in cybersecurity education,
3	including secure coding development.

## (d) Cybersecurity Modeling and Test Beds.—

(1) Review.—Not later than 1 year after the date of enactment of this Act, the Director shall conduct a review of cybersecurity test beds in existence on the date of enactment of this Act to inform the program established under paragraph (2).

## (2) Establishment of Program.—

(A) IN GENERAL.—The Director of the National Science Foundation, the Secretary, and the Secretary of Commerce shall establish a program for the appropriate Federal agencies to award grants to institutions of higher education or research and development non-profit institutions to establish cybersecurity test beds capable of realistic modeling of real-time cyber attacks and defenses.

(B) REQUIREMENT.—The test beds established under subparagraph (A) shall be sufficiently large in order to model the scale and complexity of real world networks and environments.

1	(3) Purpose.—The purpose of the program es-
2	tablished under paragraph (2) shall be to support
3	the rapid development of new cybersecurity defenses,
4	techniques, and processes by improving under-
5	standing and assessing the latest technologies in a
6	real-world environment.
7	(e) Coordination With Other Research Initia-
8	TIVES.—The Director shall to the extent practicable, co-
9	ordinate research and development activities under this
10	section with other ongoing research and development secu-
11	rity-related initiatives, including research being conducted
12	by—
13	(1) the National Institute of Standards and
14	Technology;
15	(2) the Department;
16	(3) other Federal agencies;
17	(4) other Federal and private research labora-
18	tories, research entities, and universities and institu-
19	tions of higher education, and relevant nonprofit or-
20	ganizations; and
21	(5) international partners of the United States.
22	(f) NSF Computer and Network Security Re-
23	SEARCH GRANT AREAS.—Section 4(a)(1) of the Cyber Se-
24	curity Research and Development Act (15 U.S.C.
25	7403(a)(1)) is amended—

1	(1) in subparagraph (H), by striking "and" at
2	the end;
3	(2) in subparagraph (I), by striking the period
4	at the end and inserting a semicolon; and
5	(3) by adding at the end the following:
6	"(J) secure fundamental protocols that are
7	at the heart of inter-network communications
8	and data exchange;
9	"(K) secure software engineering and soft-
10	ware assurance, including—
11	"(i) programming languages and sys-
12	tems that include fundamental security
13	features;
14	"(ii) portable or reusable code that re-
15	mains secure when deployed in various en-
16	vironments;
17	"(iii) verification and validation tech-
18	nologies to ensure that requirements and
19	specifications have been implemented; and
20	"(iv) models for comparison and
21	metrics to assure that required standards
22	have been met;
23	"(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) advance the development and accelerate
the deployment of more secure versions of funda-
mental Internet protocols and architectures, includ-
ing for the secure domain name addressing system
and routing security;
"(2) improve and create technologies for detect-
ing and analyzing attacks or intrusions, including
analysis of malicious software;
"(3) improve and create mitigation and recov-
ery methodologies, including techniques for contain-
ment of attacks and development of resilient net-
works and systems;
"(4) develop and support infrastructure and
tools to support cybersecurity research and develop-
ment efforts, including modeling, test beds, and data
sets for assessment of new cybersecurity tech-
nologies;
"(5) assist the development and support of
technologies to reduce vulnerabilities in process con-
trol systems;
"(6) understand human behavioral factors that
can affect cybersecurity technology and practices;
"(7) test, evaluate, and facilitate, with appro-
priate protections for any proprietary information

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

1	"(5) shall submit a report to the appropriate
2	committees of Congress on a review of the cyberse-
3	curity activities, and the capacity, of the national
4	laboratories and other research entities available to
5	the Department to determine if the establishment of
6	a national laboratory dedicated to cybersecurity re-
7	search 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 Na-
16	tional Science Foundation, in coordination with the Sec-
17	retary, shall establish cybersecurity research centers based
18	at institutions of higher education and other entities that
19	meet the criteria described in subsection (b) to develop so-
20	lutions and strategies that support the efforts of the Fed-
21	eral government under this Act in—
22	(1) improving the security and resilience of in-
23	formation infrastructure;

(2) reducing cyber vulnerabilities; and

1	(3) mitigating the consequences of cyber at-
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
6	National Science Foundation shall consider—
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;
11	(2) demonstrated capability to conduct high
12	performance computation integral to complex cyber-
13	security research, whether through on-site or off-site
14	computing;
15	(3) demonstrated expertise in interdisciplinary
16	cybersecurity research;
17	(4) affiliation with private sector entities in-
18	volved with industrial research described in para-
19	graph (1) and ready access to testable commercial
20	data;
21	(5) prior formal research collaboration arrange-
22	ments with institutions of higher education and Fed-
23	eral research laboratories;
24	(6) capability to conduct research in a secure
25	environment; and

1	(7) affiliation with existing research programs
2	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 Ex-
6	cellence in cybersecurity for the protection of critical infra-
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
11	the 9/11 Commission Act of 2007 (Public Law 110–53;
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:
19	(1) Cybersecurity mission.—The term "cy-
20	bersecurity mission" means activities that encom-
21	pass the full range of threat reduction, vulnerability
22	reduction, deterrence, international engagement, in-
23	cident response, resiliency, and recovery policies and
24	activities, including computer network operations, in-

formation assurance, law enforcement, diplomacy,

1	military, and intelligence missions as such activities
2	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 cybersecu-
6	rity mission that is the responsibility of a Federa
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 re-
21	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

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.

1	the Secretary, and the Director of the National Institute
2	of Standards and Technology shall leverage existing pro-
3	grams designed to inform the public of safety and security
4	of products or services, including self-certifications and
5	independently-verified assessments regarding the quan-
6	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 com-
21	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.

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-
12	tions and challenges held as part of the program es-
13	tions and chanenges neid as part of the program es-
13	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.  (a) IN GENERAL.—The Director of the National
14 15 16 17	tablished under paragraph (1).  SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE  PROGRAM.  (a) IN GENERAL.—The Director of the National
14 15 16 17	tablished under paragraph (1).  SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE  PROGRAM.  (a) IN GENERAL.—The Director of the National Science Foundation, in coordination with the Secretary,
114 115 116 117 118	tablished under paragraph (1).  SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE  PROGRAM.  (a) IN GENERAL.—The Director of the National Science Foundation, in coordination with the Secretary, shall establish a Federal Cyber Scholarship-for-Service
14 15 16 17 18 19 20	tablished under paragraph (1).  SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE  PROGRAM.  (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-
14 15 16 17 18 19 20 21	tablished under paragraph (1).  SEC. 404. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE  PROGRAM.  (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 information technology professionals, industrial control system

1	(b) Program Description and Components.—
2	The program established under subsection (a) shall—

- (1) incorporate findings from the assessment and development of the strategy under section 405;
- (2) provide not more than 1,000 scholarships per year, to students who are enrolled in a program of study at an institution of higher education leading to a degree or specialized program certification in the cybersecurity field, in an amount that covers each student's tuition and fees at the institution and provides the student with an additional stipend;
- (3) require each scholarship recipient, as a condition of receiving a scholarship under the program, to enter into an agreement under which the recipient agrees to work in the cybersecurity mission of a Federal, State, local, or tribal agency for a period equal to the length of the scholarship following receipt of the student's degree if offered employment in that field by a Federal, State, local, or tribal 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	(1) be a citizen or lawful permanent resident of
2	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 pro-
7	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.
15	(f) EVALUATION AND REPORT.—The Director of the
16	National Science Foundation shall evaluate and report pe-
17	riodically to Congress on the success of recruiting individ-
18	uals for the scholarships and on hiring and retaining those
19	individuals in the public sector workforce.
20	SEC. 405. ASSESSMENT OF CYBERSECURITY FEDERAL
21	WORKFORCE.
22	(a) In General.—The Director of the Office of Per-
23	sonnel Management and the Secretary, in coordination
24	with the Director of National Intelligence, the Secretary
25	of Defense, and the Chief Information Officers Council es-

tablished under section 3603 of title 44, United States Code, shall assess the readiness and capacity of the Fed-3 eral workforce to meet the needs of the cybersecurity mis-4 sion of the Federal Government. 5 (b) Strategy.— (1) In general.—Not later than 180 days 6 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 Federal Government. 15 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. 22 (c) UPDATES.—The Director of the Office of Per-23 sonnel Management, in consultation with the Director of the National Center for Cybersecurity and Communica-

tions and the Director of the Office of Management and

1	Budget, shall update the strategy developed under sub-
2	section (b) as needed.
3	SEC. 406. FEDERAL CYBERSECURITY OCCUPATION CLASSI-
4	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.
12	(b) APPLICABILITY OF CLASSIFICATIONS.—The Di-
13	rector of the Office of Personnel Management shall ensure
14	that the comprehensive occupation classifications issued
15	under subsection (a) may be used throughout the Federal
16	Government.
17	SEC. 407. TRAINING AND EDUCATION OF FEDERAL EM-
18	PLOYEES.
19	(a) Definition.—In this section, the term "agency
20	information infrastructure" means the Federal informa-
21	tion infrastructure of a Federal agency.
22	(b) Training.—
23	(1) Federal government employees and
24	FEDERAL CONTRACTORS.—The Director of the Of-
25	fice 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;

1	(I) information regarding supply chain se-
2	curity;
3	(J) information security risks associated
4	with the activities of Federal employees and
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	$(\mathbf{J}).$
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.
23	(4) Heads of Federal agencies.—Not later
24	than 30 days after the date on which an individual

is appointed to a position at level I or II of the Ex-

- 1 ecutive Schedule, the Secretary and the Director of
- 2 National Intelligence shall provide that individual
- 3 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 stu-
- 16 dents enrolled in career and technical institutions in the
- 17 United States to serve as Federal employees engaged in
- 18 cybersecurity missions.
- 19 (d) Leadership in Cybersecurity.—The head of
- 20 each Federal agency shall adopt best practices, developed
- 21 by the Office of Personnel Management, regarding effec-
- 22 tive ways to educate and motivate employees of the Fed-
- 23 eral Government to demonstrate leadership in cybersecu-
- 24 rity, 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 AUTHORIA
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:
	"CEC OAF NAMIONAL CENTRED DOD CYDEDCECLIDIUS AND
12	"SEC. 245. NATIONAL CENTER FOR CYBERSECURITY AND
12 13	COMMUNICATIONS ACQUISITION AUTHORI-
13	COMMUNICATIONS ACQUISITION AUTHORIS
13 14	COMMUNICATIONS ACQUISITION AUTHORI-
13 14 15	COMMUNICATIONS ACQUISITION AUTHORISTIES.  "(a) IN GENERAL.—The National Center for Cyber-
13 14 15 16	COMMUNICATIONS ACQUISITION AUTHORISM.  "(a) In General.—The National Center for Cybersecurity and Communications is authorized to use the au-
13 14 15 16	COMMUNICATIONS ACQUISITION AUTHORISM.  "(a) IN GENERAL.—The National Center for Cybersecurity and Communications is authorized to use the authorities under subsections (c)(1) and (d)(1)(B) of sections
113 114 115 116 117	COMMUNICATIONS ACQUISITION AUTHORISM.  "(a) IN GENERAL.—The National Center for Cybersecurity and Communications is authorized to use the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities (c)(1) and (d)(1)(B) of section 2304 of title 2004
13 14 15 16 17 18	COMMUNICATIONS ACQUISITION AUTHORISM.  "(a) In General.—The National Center for Cybersecurity and Communications is authorized to use the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (a)(1) and (b)(2) of sections
13 14 15 16 17 18 19 20	COMMUNICATIONS ACQUISITION AUTHORISM.  "(a) IN GENERAL.—The National Center for Cybersecurity and Communications is authorized to use the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities under subsections (a)(1) and (b)(2) of section 3304 of title 41, United States Code, subject to all other
13 14 15 16 17 18 19 20 21	TIES.  "(a) In General.—The National Center for Cybersecurity and Communications is authorized to use the authorities under subsections (c)(1) and (d)(1)(B) of section 2304 of title 10, United States Code, instead of the authorities 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

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.
	"CTC 040 DECDAMENT AND DESCRIPTION DOOD AND TOO
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 CYBERSECURITY 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	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS.  "(a) DEFINITIONS.—In this section:  "(1) Collective Bargaining agreement' has the
114 115 116 117 118	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS.  "(a) DEFINITIONS.—In this section:  "(1) 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' has the meaning given that term in section 7103(a)(8) of title 5, United States Code.
14 15 16 17 18 19 20 21	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS.  "(a) DEFINITIONS.—In this section:  "(1) 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-
14 15 16 17 18 19 20 21	THE NATIONAL CENTER FOR CYBERSECU- RITY AND COMMUNICATIONS.  "(a) DEFINITIONS.—In this section:  "(1) Collective Bargaining agreement' has 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 'qualified employee' means an employee who performs

1 "(1) Establish positions, appoint per-2 SONNEL, AND FIX RATES OF PAY.—The Secretary 3 may exercise with respect to qualified employees of 4 the Department the same authority of that the Sec-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 limitations applicable to the Secretary of Defense 12 with respect to civilian intelligence personnel of the 13 Department of Defense.

- "(2) SCHOLARSHIP PROGRAM.—The Secretary may exercise with respect to qualified employees of the Department the same authority of the Secretary of Defense has with respect to civilian personnel under section 2200a of title 10, United States Code, to the same extent, and subject to the same conditions and limitations, that the Secretary of Defense may exercise such authority with respect to civilian personnel of the Department of Defense.
- "(3) Plan for execution of **AUTHORI-**TIES.—Not later than 120 days after the date of enactment of this subtitle, the Secretary shall submit

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- a report to the appropriate committees of Congress with a plan for the use of the authorities provided under this subsection.
  - "(4) Collective Bargaining agreements.—

    Nothing in paragraph (1) may be construed to impair the continued effectiveness of a collective bargaining agreement with respect to an office, component, subcomponent, or equivalent of the Department that is a successor to an office, component, subcomponent, or equivalent of the Department covered 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 SERVICE 18 PROTECTIONS: APPLICABILITY.—
- "(1) APPLICABILITY OF MERIT SYSTEM PRIN-20 CIPLES.—The Secretary shall exercise the authority 21 under subsection (b) in a manner consistent with the 22 merit system principles set forth in section 2301 of 23 title 5, United States Code.
- 24 "(2) CIVIL SERVICE PROTECTIONS.—Section 25 1221, section 2302, and chapter 75 of title 5,

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1	United States Code, shall apply to the positions es-
2	tablished under subsection (b)(1).
3	"(d) Requirements.—Before the initial exercise of
4	any authority authorized under subsection (b)(1) the Sec-
5	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);
12	"(2) make a good faith attempt to resolve any
13	employee concerns regarding proposed changes in
14	conditions of employment through discussions with
15	the groups described in paragraph (1);
16	"(3) develop a program to provide training to
17	supervisors of cybersecurity employees at the De-
18	partment on the use of the new authorities, includ-
19	ing actions, options, and strategies a supervisor may
20	use in—
21	"(A) developing and discussing relevant
22	goals and objectives with the employee, commu-
23	nicating and discussing progress relative to per-
24	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.

1	"(3) Ongoing Participation.—Participation
2	by supervisors of cybersecurity employees at the De-
3	partment in the program established under sub-
4	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—
16	"(1) discusses the process used by the Sec-
17	retary in accepting applications, assessing can-
18	didates, ensuring adherence to veterans' preference,
19	and selecting applicants for vacancies to be filled by
20	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:

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;
- 14 (2) provides aggregate statistics on the number
- of breaches of networks of Executive agencies, the
- volume of data exfiltrated, and the estimated cost of
- 17 remedying the breaches; and
- 18 (3) discusses the risk of cyber sabotage.
- 19 (b) DEPARTMENT OF DEFENSE.—Not later than 180
- 20 days after the date of enactment of this Act, and annually
- 21 thereafter, the Secretary of Defense shall submit to Con-
- 22 gress a report that—

1	(1) summarizes major cyber incidents against
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
- 16 the reporting requirements under section 3553 of chapter
- 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
- 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 Direc-
- 11 tors of the Federal Bureau of Investigation and the
- 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
- 16 the Prioritizing Resources and Organization for Intellec-
- 17 tual Property Act of 2008 (42 U.S.C. 3713d).
- 18 SEC. 411. REPORT ON RESEARCH RELATING TO SECURE
- 19 **DOMAIN.**
- 20 (a) IN GENERAL.—The Secretary shall enter into a
- 21 contract with the National Research Council, or another
- 22 federally funded research and development corporation,
- 23 under which the Council or corporation shall submit to
- 24 Congress reports on available technical options, consistent
- 25 with constitutional and statutory privacy rights, for en-

1	hancing the security of the information networks of enti-
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.
14	SEC. 413. REPORT ON IMPEDIMENTS TO PUBLIC AWARE-
15	NESS.
16	Not later than 180 days after the date of enactment
17	of this Act, and annually thereafter for 3 years (or more
18	frequently if determined appropriate by the Secretary) the
19	Secretary shall submit to Congress a report on—
20	(1) legal or other impediments to appropriate
21	public awareness of—
22	(A) the nature of, methods of propagation
23	of, and damage caused by common cyber secu-
24	rity threats such as computer viruses, phishing
25	techniques, and malware;

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
18	of this Act, the Secretary, in consultation with the Sec-
19	retary of Defense and the Director of National Intel-
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:

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
24	operations, assets, financial condition, strategy, competi-

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

- 1 unauthorized access, use, disclosure, disruption, modifica-
- 2 tion, or destruction of registrant information, information
- 3 of third parties collected by the registrant, or information
- 4 systems of the registrant.
- 5 (c) GUIDANCE.—Not later than 1 year after the date
- 6 of enactment of this Act, the Securities and Exchange
- 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 Ex-
- 11 change Commission Division of Corporation Finance, CF
- 12 Disclosure Guidance: Topic No. 2, Cybersecurity) to deter-
- 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
- 17 (2) issued as Commission interpretive guidance.
- 18 (d) Annual Reports.—For 5 years following the
- 19 evaluation under subsection (b), the Commission shall sub-
- 20 mit to Congress, on an annual basis, a report that re-
- 21 views—
- 22 (1) the types of information security risks and
- 23 related events that registrants disclosed in the pre-
- vious 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.
14	TITLE V—FEDERAL ACQUISI-
15	TION RISK MANAGEMENT
16	STRATEGY
17	SEC. 501. FEDERAL ACQUISITION RISK MANAGEMENT
18	STRATEGY.
19	(a) In General.—The Secretary, in coordination
20	with relevant private sector and academic experts and each
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-

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—

1	(A) incorporate all-source intelligence anal-
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
13	TO ENHANCE AGENCY PLANNING FOR INFOR-
14	MATION SECURITY NEEDS.
15	Chapter 113 of title 40, United States Code, is
15 16	Chapter 113 of title 40, United States Code, is amended—
	· · · · · · · · · · · · · · · · · · ·
16	amended—
16 17	amended— (1) in section 11302—
16 17 18	amended—  (1) in section 11302—  (A) in subsection (f), by striking "tech-
16 17 18 19	amended—  (1) in section 11302—  (A) in subsection (f), by striking "technology." and inserting "technology, including
16 17 18 19 20	amended—  (1) in section 11302—  (A) in subsection (f), by striking "technology." and inserting "technology, including information technology or network information
16 17 18 19 20 21	amended—  (1) in section 11302—  (A) in subsection (f), by striking "technology." and inserting "technology, including information technology or network information security requirements.";
16 17 18 19 20 21 22	amended—  (1) in section 11302—  (A) in subsection (f), by striking "technology." and inserting "technology, including information technology or network information security requirements.";  (B) in subsection (i)—

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	"(l) 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.

1	"(m) Reducing the Use of Counterfeit Prod-
2	UCTS.—Not later than 180 days after the date of enact-
3	ment of the Cybersecurity Act of 2012, the Director shall
4	issue guidance requiring, to the extent practicable, Federal
5	agencies to purchase information technology products only
6	through the authorized channels or distributors of a sup-
7	plier."; and
8	(2) in section $11312(b)(3)$ , by inserting ", in-
9	formation security improvement," after "risk-ad-
10	justed return on investment".
11	TITLE VI—INTERNATIONAL
12	COOPERATION
13	SEC. 601. DEFINITIONS.
13 14	SEC. 601. DEFINITIONS.  In this title:
14	In this title:
14 15	In this title:  (1) Computer System; computer data.—
14 15 16	In this title:  (1) Computer system; computer data.—  The terms "computer system" and "computer data"
14 15 16 17	In this title:  (1) Computer system; computer data.—  The terms "computer system" and "computer data" have the meanings given those terms in chapter I of
14 15 16 17	In this title:  (1) Computer system; computer data.—  The terms "computer system" and "computer data" have the meanings given those terms in chapter I of the Convention on Cybercrime.
114 115 116 117 118	In this title:  (1) Computer system; computer data.—  The terms "computer system" and "computer data" have the meanings given those terms in chapter I of the Convention on Cybercrime.  (2) Convention on Cybercrime.—The term
114 115 116 117 118 119 220	In this title:  (1) Computer system; computer data.—  The terms "computer system" and "computer data" have the meanings given those terms in chapter I of the Convention on Cybercrime.  (2) Convention on Cybercrime.—The term "Convention on Cybercrime" means the Council of
14 15 16 17 18 19 20 21	In this title:  (1) Computer system; computer data.—  The terms "computer system" and "computer data" have the meanings given those terms in chapter I of the Convention on Cybercrime.  (2) Convention on Cybercrime.—The term "Convention on Cybercrime" means the Council of Europe's Convention on Cybercrime, done at Buda-

- 1 (3) CYBER ISSUES.—The term "cyber issues"
  2 means the full range of international policies de3 signed to ensure an open, interoperable, secure, and
  4 reliable global information and communications in5 frastructure.
  - (4) Cybercrime.—The term "cybercrime" refers to criminal offenses relating to computer systems of computer data described in the Convention of Cybercrime.
- 10 (5) Relevant federal agencies.—The term "relevant Federal agencies" means any Federal 11 12 agency that responsibility has 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.**

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- 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 national security of the United States, our economic

- prosperity, and the daily functioning of our government are dependent on a dynamic public and private information infrastructure, which includes tele-communications, computer networks and systems, and the information residing within. This critical infrastructure is severely threatened. . . . We cannot protect cyberspace without a coordinated and collaborative effort that incorporates both the US private sector and our international partners."
  - (2) In a January 2010 speech on Internet freedom, Secretary of State Hillary Clinton stated: "Those who disrupt the free flow of information in our society, or any other, pose a threat to our economy, our government, and our civil society. Countries or individuals that engage in cyber attacks should face consequences and international condemnation. In an Internet-connected world, an attack on one nation's networks can be an attack on all. And by reinforcing that message, we can create norms of behavior among states and encourage respect 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.

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- 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;
- 23 (3) it is in the interest of the United States to 24 work with other countries to build consensus on 25 principles and standards of conduct that protect

- computer systems and users that rely on them, prevent and punish acts of cybercrime, and promote the free flow of information;
  - (4) a comprehensive national cyberspace strategy must include tools for addressing threats to computer systems and acts of cybercrime from sources and by persons outside the United States;
  - (5) developing effective solutions to international cyberspace threats requires engagement with foreign countries on a bilateral basis and 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.

1	SEC. 604. COORDINATION OF INTERNATIONAL CYBER
2	ISSUES WITHIN THE UNITED STATES GOV-
3	ERNMENT.
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 diplo-
8	matic engagement on the full range of international
9	cyber issues, including building multilateral coopera-
10	tion and developing international norms, common
11	policies, and responses to secure the integrity of
12	cyberspace;
13	(2) provide strategic direction and coordination
14	for United States Government policy and programs
15	aimed at addressing and responding to cyber issues
16	overseas, especially in relation to issues that affect
17	United States foreign policy and related national se-
18	curity concerns;
19	(3) coordinate with relevant Federal agencies,
20	including the Department, the Department of De-
21	fense, the Department of the Treasury, the Depart-
22	ment of Justice, the Department of Commerce, and
23	the intelligence community to develop interagency
24	plans regarding international cyberspace, cybersecu-
25	rity, and cybercrime issues; and

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;

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

1	or program of significance in order to better combat
2	cybercrime by, among other things, improving the
3	effectiveness and capacity of the legal and judicial
4	systems and the capabilities of law enforcement
5	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
1 1	SHARING
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14 15	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DE-
15	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DE-
15 16 17	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DEFEND AGAINST CYBERSECURITY THREATS.
15 16 17	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DEFEND AGAINST CYBERSECURITY THREATS.  (a) IN GENERAL.—Notwithstanding chapter 119,
15 16 17 18	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DEFEND AGAINST CYBERSECURITY THREATS.  (a) IN GENERAL.—Notwithstanding chapter 119, 121, or 206 of title 18, United States Code, the Foreign
15 16 17 18 19	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DEFEND AGAINST CYBERSECURITY THREATS.  (a) IN GENERAL.—Notwithstanding chapter 119, 121, or 206 of title 18, United States Code, the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801 et
15 16 17 18 19 20	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DEFEND AGAINST CYBERSECURITY THREATS.  (a) IN GENERAL.—Notwithstanding chapter 119, 121, or 206 of title 18, United States Code, the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801 et seq.), and sections 222 and 705 of the Communications
15 16 17 18 19 20 21	FEND AGAINST CYBERSECURITY THREATS.  (a) IN GENERAL.—Notwithstanding chapter 119, 121, or 206 of title 18, United States Code, the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801 et seq.), and sections 222 and 705 of the Communications Act of 1934 (47 U.S.C. 222 and 605), any private entity
15 16 17 18 19 20 21 22	SEC. 701. AFFIRMATIVE AUTHORITY TO MONITOR AND DEFEND AGAINST CYBERSECURITY THREATS.  (a) IN GENERAL.—Notwithstanding chapter 119, 121, or 206 of title 18, United States Code, the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801 et seq.), and sections 222 and 705 of the Communications Act of 1934 (47 U.S.C. 222 and 605), any private entity may—

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.

1	(b) Use and Protection of Information.—A pri-
2	vate entity performing monitoring or operating counter-
3	measures under subsection (a)—
4	(1) may use cybersecurity threat indicators ac-
5	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 in-
12	formation that may be used to identify specific per-
13	sons acquired in the course of such monitoring from
14	unauthorized access or acquisition;
15	(3) shall comply with any lawful restrictions
16	placed on the use of cybersecurity threat indicators,
17	including, if requested, the removal or destruction of
18	information that can be used to identify specific per-
19	sons from such indicators;
20	(4) may not use cybersecurity threat indicators
21	to gain an unfair competitive advantage to the det-
22	riment of the entity that authorized such monitoring
23	or operation of countermeasures; and
24	(5) may use information obtained under any

other provision of law.

1	SEC. 702. VOLUNTARY DISCLOSURE OF CYBERSECURITY
2	THREAT INDICATORS AMONG PRIVATE ENTI-
3	TIES.
4	(a) Authority to Disclose.—Notwithstanding any
5	other provision of law, any private entity may disclose law-
6	fully obtained cybersecurity threat indicators to any other
7	private entity in accordance with this section.
8	(b) Use and Protection of Information.—A pri-
9	vate entity disclosing or receiving cybersecurity threat in-
10	dicators pursuant to subsection (a)—
11	(1) may use, retain, or further disclose such cy-
12	bersecurity threat indicators solely for the purpose
13	of protecting an information system or information
14	that is stored on, processed by, or transiting an in-
15	formation system from cybersecurity threats or miti-
16	gating such threats;
17	(2) shall make reasonable efforts to safeguard
18	communications, records, system traffic, or other in-
19	formation that can be used to identify specific per-
20	sons from unauthorized access or acquisition;
21	(3) shall comply with any lawful restrictions
22	placed on the disclosure or use of cybersecurity
23	threat indicators, including, if requested, the re-
24	moval of information that may be used to identify
25	specific persons from such indicators; and

1	(4) may not use the cybersecurity threat indica-
2	tors to gain an unfair competitive advantage to the
3	detriment of the entity that authorized such sharing
4	(c) Transfers to Unreliable Private Entities
5	PROHIBITED.—A private entity may not disclose cyberse-
6	curity threat indicators to another private entity that the
7	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.
13	(a) Designation of Cybersecurity Ex-
14	CHANGES.—The Secretary of Homeland Security, in con-
15	sultation with the Director of National Intelligence, the
16	Attorney General, and the Secretary of Defense, shall es-
17	tablish—
18	(1) a process for designating one or more ap-
19	propriate civilian Federal entities or non-Federal en-
20	tities to serve as cybersecurity exchanges to receive
21	and distribute cybersecurity threat indicators;
22	(2) procedures to facilitate and ensure the shar-
23	ing of classified and unclassified cybersecurity threat
24	indicators in as close to real time as possible with

1	appropriate Federal entities and non-Federal entities
2	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 ex-
7	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 Civilian
12	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.
21	(2) Responsibilities.—The lead Federal civil-
22	ian cybersecurity exchange designated under para-
23	graph (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-

eral entities, including Federal cybersecurity centers, non-Federal network or security operation centers, other cybersecurity exchanges, and non-Federal entities that disclose cybersecurity threat indicators under section 704(a), in as close to real time as possible, to provide situational awareness of the United States information security posture and foster information security collaboration among information system owners and operators;

- (E) conduct, in consultation with private entities and relevant Federal and other governmental entities, regular assessments of existing and proposed information sharing models to eliminate bureaucratic obstacles to information sharing and identify best practices for such sharing; and
- (F) coordinate with other Federal entities, as appropriate, to compile and analyze information about risks and incidents that threaten information systems, including information voluntarily submitted in accordance with section 704(a) or otherwise in accordance with applicable laws.

1	(3) Schedule for designation.—The des-
2	ignation of a lead Federal civilian cybersecurity ex-
3	change under paragraph (1) shall be made concur-
4	rently with the issuance of the interim policies and
5	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 des-
11	ignate additional civilian Federal entities to receive and
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
16	entities under section 704(g).
17	(e) REQUIREMENTS FOR NON-FEDERAL CYBERSECU-
18	RITY EXCHANGES.—
19	(1) In general.—In considering whether to
20	designate a private entity or any other non-Federal
21	entity as a cybersecurity exchange to receive and dis-
22	tribute cybersecurity threat indicators under section
23	704, and what entity to designate, the Secretary
24	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-

- 1 thorities of a Federal cybersecurity center, unless such cy-
- 2 bersecurity center is acting in its capacity as a designated
- 3 cybersecurity exchange.
- 4 (g) Congressional Notification of Designa-
- 5 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
- designation of a cybersecurity exchange under this
- 11 title.
- 12 (2) REQUIREMENT.—Written notification under
- paragraph (1) shall include a description of the cri-
- teria and processes used to make the designation.
- 15 SEC. 704. VOLUNTARY DISCLOSURE OF CYBERSECURITY
- 16 THREAT INDICATORS TO A CYBERSECURITY
- 17 EXCHANGE.
- 18 (a) AUTHORITY TO DISCLOSE.—Notwithstanding any
- 19 other provision of law, a non-Federal entity may disclose
- 20 lawfully obtained cybersecurity threat indicators to a cy-
- 21 bersecurity exchange in accordance with this section.
- 22 (b) Use, Retention, and Disclosure of Infor-
- 23 MATION BY A CYBERSECURITY EXCHANGE.—A cybersecu-
- 24 rity exchange may only use, retain, or further disclose in-
- 25 formation provided pursuant to subsection (a)—

	101
1	(1) in order to protect information systems
2	from cybersecurity threats and to mitigate cyberse-
3	curity threats; or
4	(2) to law enforcement pursuant to subsection
5	(g)(2).
6	(c) Use and Protection of Information Re-
7	CEIVED FROM A CYBERSECURITY EXCHANGE.—A non-
8	Federal entity receiving cybersecurity threat indicators
9	from a cybersecurity exchange—
10	(1) may use, retain, or further disclose such cy-
11	bersecurity threat indicators solely for the purpose
12	of protecting an information system or information
13	that is stored on, processed by, or transiting an in-
14	formation system from cybersecurity threats or miti-
15	gating such threats;
16	(2) shall make reasonable efforts to safeguard
17	communications, records, system traffic, or other in-
18	formation that can be used to identify specific per-
19	sons from unauthorized access or acquisition;
20	(3) shall comply with any lawful restrictions
21	placed on the disclosure or use of cybersecurity
22	threat indicators by the cybersecurity exchange or a
23	third party, if the cybersecurity exchange received
24	such information from the third party, including, if

requested, the removal of information that can be

- 1 used to identify specific persons from such indica-
- 2 tors; and
- 3 (4) may not use the cybersecurity threat indica-
- 4 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—
- 11 (1) exempt from disclosure under section
- 12 552(b)(3) of title 5, United States Code, or any
- comparable State law; and
- 14 (2) treated as voluntarily shared information
- under section 552 of title 5, United States Code, or
- any comparable State law.
- 17 (e) Exemption From Ex Parte Limitations.—
- 18 Any cybersecurity threat indicator disclosed by a non-Fed-
- 19 eral entity to a cybersecurity exchange pursuant to sub-
- 20 section (a) shall not be subject to the rules of any govern-
- 21 mental entity or judicial doctrine regarding ex parte com-
- 22 munications with a decision making official.
- 23 (f) Exemption From Waiver of Privilege.—Any
- 24 cybersecurity threat indicator disclosed by a non-Federal
- 25 entity to a cybersecurity exchange pursuant to subsection

1	(a) may not be construed to be a waiver of any applicable
2	privilege or protection provided under Federal, State, trib-
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-

1	tained in connection with activities authorized
2	in this title. Such policies and procedures
3	shall—
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
22	used to identify specific persons from un-
23	authorized access or acquisition;
24	(iv) include procedures for notifying
25	entities, as appropriate, if information re-

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

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-
22	vate entities that are performing, moni-
23	toring, operating countermeasures, or dis-
24	closing cybersecurity threat indicators pur-
25	suant to this title;

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-

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.

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

1	SEC. 705. SHARING OF CLASSIFIED CYBERSECURITY
2	THREAT INDICATORS.
3	(a) Sharing of Classified Cybersecurity
4	THREAT INDICATORS.—The procedures established under
5	section 703(a)(2) shall provide that classified cybersecu-
6	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;
11	(3) shared with a person with an appropriate
12	security clearance to receive such cybersecurity
13	threat indicators; and
14	(4) used by a certified entity in a manner that
15	protects such cybersecurity threat indicators from
16	unauthorized disclosure.
17	(b) Requirement for Guidelines.—Not later
18	than 60 days after the date of the enactment of this title,
19	the Director of National Intelligence shall issue guidelines
20	providing that appropriate Federal officials may, as the
21	Director considers necessary to carry out this title—
22	(1) grant a security clearance on a temporary
23	or permanent basis to an employee of a certified en-
24	tity;

1	(2) grant a security clearance on a temporary
2	or permanent basis to a certified entity and approval
3	to use appropriate facilities; or
4	(3) expedite the security clearance process for
5	such an employee or entity, if appropriate, in a man-
6	ner 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 Transpor-
18	tation, the Committee on Homeland Security and
19	Governmental Affairs, the Committee on the Judici-
20	ary, and the Select Committee on Intelligence of the
21	Senate; and
22	(3) the Committee on Armed Services, the
23	Committee on Energy and Commerce, the Com-
24	mittee on Homeland Security, the Committee on the

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

1	is also	disclosed	within	a	reasonable	time	to	a
2	cyberse	curity exc	hange.					

- 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
- 11 Actions.—No Federal entity may use a cybersecurity
- 12 threat indicator received pursuant to this title as evidence
- 13 in a regulatory enforcement action against the entity that
- 14 lawfully shared the cybersecurity threat indicator with a
- 15 cybersecurity exchange that is a Federal entity.
- 16 (d) Delay of Notification Authorized for Law
- 17 Enforcement, National Security, or Homeland
- 18 Security Purposes.—No civil or criminal cause of ac-
- 19 tion shall lie or be maintained in any Federal or State
- 20 court against any entity, and any such action shall be dis-
- 21 missed promptly, for a failure to disclose a cybersecurity
- 22 threat indicator if—
- 23 (1) the Attorney General or the Secretary de-
- termines that disclosure of a cybersecurity threat in-
- 25 dicator would impede a civil or criminal investigation

- and submits a written request to delay notification
- 2 for up to 30 days, except that the Attorney General
- or the Secretary may, by a subsequent written re-
- 4 quest, revoke such delay or extend the period of time
- 5 set forth in the original request made under this
- 6 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
- threaten national or homeland security and submits
- a written request to delay notification, except that
- the Secretary, the Attorney General, or the Director,
- may, by a subsequent written request, revoke such
- delay or extend the period of time set forth in the
- original request made under this paragraph if fur-
- ther delay is necessary.
- 17 (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 pri-
- 20 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

1	use of cybersecurity threat indicators is a complete defense
2	to any tort or breach of contract claim originating in a
3	failure to disclose cybersecurity threat indicators to a third
4	party.
5	(g) Limitation on Liability Protections.—Any
6	person who, knowingly or acting in gross negligence, vio-
7	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 Fed-
12	eral law prohibiting the conduct in question.
13	SEC. 707. CONSTRUCTION AND FEDERAL PREEMPTION.
14	(a) Construction.—Nothing in this title may be
15	construed—
16	(1) to limit any other existing authority or law-
17	ful requirement to monitor information systems and
18	information that is stored on, processed by, or
19	transiting such information systems, operate coun-
20	termeasures, and retain, use or disclose lawfully ob-
21	tained information;
22	(2) to permit the unauthorized disclosure of—
23	(A) information that has been determined
24	by the Federal Government pursuant to an Ex-
25	ecutive 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;

- 1 (7) to limit the ability of a non-Federal entity 2 or a Federal entity to receive data about its informa-3 tion systems, including lawfully obtained cybersecu-4 rity threat indicators;
  - (8) to authorize or prohibit any law enforcement, homeland security, or intelligence activities not otherwise authorized or prohibited under another provision of law;
  - (9) to permit price-fixing, allocating a market 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
  - (11) to prevent a governmental entity from using information not acquired through a cybersecurity exchange for regulatory purposes.
- 23 (b) Federal Preemption.—This title supersedes 24 any law or requirement of a State or political subdivision 25 of a State that restricts or otherwise expressly regulates

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- 1 the provision of cybersecurity services or the acquisition,
- 2 interception, retention, use or disclosure of communica-
- 3 tions, records, or other information by private entities to
- 4 the extent such law contains requirements inconsistent
- 5 with this title.
- 6 (c) Preservation of Other State Law.—Except
- 7 as expressly provided, nothing in this title shall be con-
- 8 strued to preempt the applicability of any other State law
- 9 or requirement.
- 10 (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 In-
- 15 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-
- formation with the Federal Government;
- 19 (2) to condition the disclosure of unclassified or
- 20 classified cybersecurity threat indicators pursuant to
- 21 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 Federal
- 25 grant, contract or purchase on the provision of cy-

- 1 bersecurity threat indicators to a Federal entity, if
- 2 the provision of such indicators does not reasonably
- 3 relate to the nature of activities, goods, or services
- 4 covered by the award.
- 5 (f) Limitation on Use of Information.—No cy-
- 6 bersecurity threat indicators obtained pursuant to this
- 7 title may be used, retained, or disclosed by a Federal enti-
- 8 ty or non-Federal entity, except as authorized under this
- 9 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 Intel-
- 13 ligence, in consultation with the Secretary and the head
- 14 of the Federal entity in possession of the information,
- 15 shall facilitate the declassification and sharing of informa-
- 16 tion in the possession of a Federal entity that is related
- 17 to cybersecurity threats, as the Director deems appro-
- 18 priate.
- 19 (h) REPORT ON IMPLEMENTATION.—Not later than
- 20 2 years after the date of the enactment of this title, the
- 21 Secretary, the Director of National Intelligence, the Attor-
- 22 ney General, and the Secretary of Defense shall jointly
- 23 submit to Congress a report that—
- 24 (1) describes the extent to which the authorities
- conferred by this title have enabled the Federal Gov-

- ernment and the private sector to mitigate cybersecurity threats;
  - (2) discloses any significant acts of noncompliance by a non-Federal entity with this title, with special emphasis on privacy and civil liberties, and any measures taken by the Federal Government to uncover such noncompliance;
    - (3) describes in general terms the nature and quantity of information disclosed and received by governmental entities and private entities under this title; and
    - (4) identifies the emergence of new threats or technologies that challenge the adequacy of the law, including the definitions, authorities and requirements of this title, for keeping pace with the threat.
- 16 (i) REQUIREMENT FOR ANNUAL REPORT.—On an annual basis, the Director of National Intelligence shall provide a report to the Select Committee on Intelligence of the Senate and the Permanent Select Committee on Intelligence of the House of Representatives on the implementation of section 705. Such report, which shall be submitted in a classified and in an unclassified form, shall include a list of private entities that receive classified cybersecurity threat indicators under this title, except that

the unclassified report shall not contain information that

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- 1 may be used to identify specific private entities unless
- 2 such private entities consent to such identification.
- 3 SEC. 708. DEFINITIONS.
- 4 In this title:

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- 5 (1) CERTIFIED ENTITY.—The term "certified 6 entity" means a protected entity, a self-protected en-7 tity, or a provider of cybersecurity services that—
  - (A) possesses or is eligible to obtain a security clearance, as determined by the Director 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.
  - (2) Countermeasure.—The term "countermeasure" means automated or manual actions to modify, redirect, or block information that is stored on, processed by, or transiting an information system that is known or suspected to contain cybersecurity threat indicators for the purpose of protecting an information system from cybersecurity threats, conducted on an information system owned or operated by or on behalf of the party to be protected or operated by a private entity acting as a provider of electronic communication services, remote computing

- services, or cybersecurity services to the party to be protected.
- 3 (3) CYBERSECURITY CRIME.—The term "cyber-4 security crime" means the violation of a provision of 5 State or Federal law relating to computer crimes, in-6 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).
  - (4) Cybersecurity exchange" means any governmental entity or private entity designated by the Secretary of Homeland Security, in consultation with the Director of National Intelligence, the Attorney General, and the Secretary of Defense, to receive and distribute cybersecurity threat indicators under section 703(a).
  - (5) Cybersecurity services.—The term "cybersecurity services" means products, goods, or services intended to detect, mitigate, or prevent cybersecurity threats.
  - (6) Cybersecurity threat" means any action that may result in unauthorized access to, exfiltration of, manipulation of, harm of, or impairment to the integrity,

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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;

1	(iv) a method of defeating an oper-
2	ational control;
3	(v) a method of causing a user with
4	legitimate access to an information system
5	or information that is stored on, processed
6	by, or transiting an information system to
7	unwittingly enable the defeat of a technical
8	control or an operational control;
9	(vi) malicious cyber command and
10	control;
11	(vii) the actual or potential harm
12	caused by an incident, including informa-
13	tion exfiltrated as a result of defeating a
14	technical control or an operational control
15	when it is necessary in order to identify or
16	describe a cybersecurity threat;
17	(viii) any other attribute of a cyberse-
18	curity threat, if disclosure of such attribute
19	is not otherwise prohibited by law; or
20	(ix) any combination thereof; and
21	(B) from which reasonable efforts have
22	been made to remove information that can be
23	used to identify specific persons unrelated to
24	the cybersecurity threat.

- (8) Federal Cybersecurity Center.—The term "Federal cybersecurity center" means the De-partment of Defense Cyber Crime Center, the Intel-ligence Community Incident Response Center, the United States Cyber Command Joint Operations Center, the National Cyber Investigative Joint Task Force, the National Security Agency/Central Secu-rity Service Threat Operations Center, the United States Computer Emergency Readiness Team, or 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" 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 industrial and process control systems, telephone switching and private branch exchanges, and environmental control systems.
  - (12) Malicious cyber command and control" means a method for remote identification of, access to, or use of, an information system or information that is stored on, processed by, or transiting an information system associated with a known or suspected cybersecurity threat.
  - (13) 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.
  - (14) MONITOR.—The term "monitor" means the interception, acquisition, or collection of information that is stored on, processed by, or transiting an information system for the purpose of identifying cybersecurity 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.
  - (16) OPERATIONAL CONTROL.—The term "operational control" means a security control for an information system that primarily is implemented and executed by people.
  - (17) PRIVATE ENTITY.—The term "private entity" has the meaning given the term "person" in section 1 of title 1, United States Code, and does not include a governmental entity.
  - (18) Protect.—The term "protect" means actions undertaken to secure, defend, or reduce the vulnerabilities of an information system, mitigate cybersecurity threats, or otherwise enhance information security or the resiliency of information systems or assets.
  - (19) TECHNICAL CONTROL.—The term "technical control" means a hardware or software restriction on, or audit of, access or use of an information system or information that is stored on, processed by, or transiting an information system that is intended to ensure the confidentiality, integrity, or availability of that system.

1	(20) Technical vulnerability.—The term
2	"technical vulnerability" means any attribute of
3	hardware or software that could enable or facilitate
4	the defeat of a technical control.
5	(21) Third party.—The term "third party"
6	includes Federal entities and non-Federal entities.

## Calendar No. 470

112TH CONGRESS S. 3414

## A BILL

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

 $J_{\rm ULY}~23,~2012$ 

Read the second time and placed on the calendar