# H. R. 6497

To modernize Federal information security management and improve Federal cybersecurity to combat persisting and emerging threats, and for other purposes.

### IN THE HOUSE OF REPRESENTATIVES

January 25, 2022

Mrs. Carolyn B. Maloney of New York (for herself, Mr. Comer, Mr. Connolly, Mr. Sessions, Ms. Norton, Mr. Keller, Ms. Wasserman Schultz, Mr. Hice of Georgia, Mr. Cooper, Mr. C. Scott Franklin of Florida, Ms. Brown of Ohio, Mr. Gibbs, Mr. Lynch, and Mr. Raskin) introduced the following bill; which was referred to the Committee on Oversight and Reform, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

## A BILL

To modernize Federal information security management and improve Federal cybersecurity to combat persisting and emerging threats, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Federal Information
- 5 Security Modernization Act of 2022".

#### 1 SEC. 2. TABLE OF CONTENTS.

#### 2 The table of contents for this Act is as follows:

- Sec. 1. Short title.
- Sec. 2. Table of contents.
- Sec. 3. Definitions.

#### TITLE I—UPDATES TO FISMA

- Sec. 101. Title 44 amendments.
- Sec. 102. Amendments to subtitle III of title 40.
- Sec. 103. Actions to enhance Federal incident response.
- Sec. 104. Additional guidance to agencies on FISMA updates.
- Sec. 105. Agency requirements to notify private sector entities impacted by incidents.

#### TITLE II—IMPROVING FEDERAL CYBERSECURITY

- Sec. 201. Mobile security standards.
- Sec. 202. Data and logging retention for incident response.
- Sec. 203. Federal penetration testing policy.
- Sec. 204. Ongoing threat hunting program.
- Sec. 205. Codifying vulnerability disclosure programs.
- Sec. 206. Implementing zero trust architecture.
- Sec. 207. GAO automation report.
- Sec. 208. Extension of Federal Acquisition Security Council.
- Sec. 209. Federal chief information security officer.
- Sec. 210. Extension of Chief Data Officer Council.
- Sec. 211. Council of the inspectors general on integrity and efficiency dash-board.
- Sec. 212. Quantitative cybersecurity metrics.

# TITLE III—PILOT PROGRAMS TO ENHANCE FEDERAL CYBERSECURITY

- Sec. 301. Risk-based budget pilot.
- Sec. 302. Active cyber defensive study.
- Sec. 303. Security operations center as a service pilot.
- Sec. 304. Endpoint detection and response as a service pilot.

#### 3 SEC. 3. DEFINITIONS.

- 4 In this Act, unless otherwise specified:
- 5 (1) Additional cybersecurity proce-
- 6 DURE.—The term "additional cybersecurity proce-
- 7 dure" has the meaning given the term in section
- 8 3552(b) of title 44, United States Code, as amended
- 9 by this Act.

1	(2) AGENCY.—The term "agency" has the
2	meaning given the term in section 3502 of title 44
3	United States Code.
4	(3) Appropriate congressional commit-
5	TEES.—The term "appropriate congressional com-
6	mittees" means—
7	(A) the Committee on Homeland Security
8	and Governmental Affairs of the Senate;
9	(B) the Committee on Oversight and Re-
10	form of the House of Representatives; and
11	(C) the Committee on Homeland Security
12	of the House of Representatives.
13	(4) DIRECTOR.—The term "Director" means
14	the Director of the Office of Management and Budge
15	et.
16	(5) Incident.—The term "incident" has the
17	meaning given the term in section 3552(b) of title
18	44, United States Code.
19	(6) NATIONAL SECURITY SYSTEM.—The term
20	"national security system" has the meaning given
21	the term in section 3552(b) of title 44, United
22	States Code.
23	(7) Penetration test.—The term "penetra-
24	tion test" has the meaning given the term in section

- 3552(b) of title 44, United States Code, as amended
  by this Act.
- 3 (8) Threat Hunting.—The term "threat
  4 hunting" means iteratively searching systems for
  5 threats that evade detection by automated threat de6 tection systems.
- 7 (9) Zero trust architecture.—The term "zero trust architecture" means a security model, a 8 9 set of system design principles, and a coordinated 10 cybersecurity and system management strategy that 11 employs continuous monitoring, risk-based access 12 controls, or system security automation techniques 13 to address the cybersecurity principle that threats 14 exist both inside and outside traditional network 15 boundaries with an assumption that a breach is in-16 evitable or has likely already occurred, and therefore 17 employs least-privileged access for network or system 18 users while monitoring for anomalous or malicious 19 activity.

### 20 TITLE I—UPDATES TO FISMA

- 21 SEC. 101. TITLE 44 AMENDMENTS.
- 22 (a) Subchapter I Amendments.—Subchapter I of
- 23 chapter 35 of title 44, United States Code, is amended—
- 24 (1) in subsection (a)(1)(B) of section 3504—

1	(A) by striking clause (v) and inserting the
2	following:
3	"(v) confidentiality, privacy, disclo-
4	sure, and sharing of information;";
5	(B) by redesignating clause (vi) as clause
6	(vii); and
7	(C) by inserting after clause (v) the fol-
8	lowing:
9	"(vi) in consultation with the National
10	Cyber Director, confidentiality and security
11	of information; and";
12	(2) in section 3505—
13	(A) in paragraph (2) of the first subsection
14	designated as subsection (c) by adding "dis-
15	covery of internet-accessible information sys-
16	tems and assets, as well as" after "an inventory
17	under this subsection shall include";
18	(B) in paragraph (3) of the first subsection
19	designated as subsection (e)—
20	(i) in subparagraph (B)—
21	(I) by inserting "the Secretary of
22	Homeland Security acting through the
23	Director of the Cybersecurity and In-
24	frastructure Security Agency, the Na-

1	tional Cyber Director, and" before
2	"the Comptroller General"; and
3	(II) by striking "and" at the end;
4	(ii) in subparagraph (C)(v), by strik-
5	ing the period at the end and inserting ";
6	and"; and
7	(iii) by adding at the end the fol-
8	lowing:
9	"(D) maintained on a continual basis
10	through the use of automation, machine-read-
11	able data, and scanning wherever practicable.";
12	and
13	(C) by striking the second subsection des-
14	ignated as subsection (e);
15	(3) in section 3506—
16	(A) in subsection (a)(3), by inserting "In
17	carrying out these duties, the Chief Information
18	Officer shall coordinate, as appropriate, with
19	the Chief Data Officer in accordance with the
20	designated functions under section 3520(c)."
21	after "reduction of information collection bur-
22	dens on the public."; and
23	(B) in subsection $(b)(1)(C)$ , by inserting ",
24	availability" after "integrity"; and
25	(4) in section 3513—

1	(A) by redesignating subsection (c) as sub-
2	section (d); and
3	(B) by inserting after subsection (b) the
4	following:
5	"(c) Each agency providing a written plan under sub-
6	section (b) shall provide any portion of the written plan
7	addressing information security to the National Cyber Di-
8	rector.".
9	(b) Subchapter II Definitions.—
10	(1) In general.—Section 3552(b) of title 44,
11	United States Code, is amended—
12	(A) by redesignating paragraphs (1), (2),
13	(3), $(4)$ , $(5)$ , $(6)$ , and $(7)$ as paragraphs $(2)$ ,
14	(4), (5), (6), (7), (9), and (11), respectively;
15	(B) by inserting before paragraph (2), as
16	so redesignated, the following:
17	"(1) The term 'additional cybersecurity proce-
18	dure' means a process, procedure, or other activity
19	that is established in excess of the information secu-
20	rity standards promulgated under section 11331(b)
21	of title 40 to increase the security and reduce the cy-
22	bersecurity risk of agency systems.";
23	(C) by inserting after paragraph (2), as so
24	redesignated, the following:

1	"(3) The term 'high value asset' means infor-	
2	mation or an information system that the head of an	
3	agency determines, using policies, principles, stand-	
4	ards, or guidelines issued by the Director under sec-	
5	tion 3553(a), to be so critical to the agency that the	
6	loss or corruption of the information or the loss of	
7	access to the information system would have a seri-	
8	ous impact on the ability of the agency to perform	
9	the mission of the agency or conduct business.";	
10	(D) by inserting after paragraph (7), as so	
11	redesignated, the following:	
12	"(8) The term 'major incident' has the meaning	
13	given the term in guidance issued by the Director	
14	under section 3598(a).";	
15	(E) by inserting after paragraph (9), as so	
16	redesignated, the following:	
17	"(10) The term 'penetration test' has the mean-	
18	ing given the term in guidance issued by the Direc-	
19	tor."; and	
20	(F) by inserting after paragraph (11), as	
21	so redesignated, the following:	
22	"(12) The term 'shared service' means a cen-	
23	tralized business or mission capability that is pro-	
24	vided to multiple organizations within an agency or	
25	to multiple agencies.".	

1	(2) Conforming amendments.—
2	(A) HOMELAND SECURITY ACT OF 2002.—
3	Section 1001(c)(1)(A) of the Homeland Secu-
4	rity Act of 2002 (6 U.S.C. 511(1)(A)) is
5	amended by striking "section 3552(b)(5)" and
6	inserting "section 3552(b)".
7	(B) TITLE 10.—
8	(i) Section 2222.—Section 2222(i)(8)
9	of title 10, United States Code, is amended
10	by striking "section 3552(b)(6)(A)" and
11	inserting "section 3552(b)(9)(A)".
12	(ii) Section 2223.—Section
13	2223(c)(3) of title 10, United States Code,
14	is amended by striking "section
15	3552(b)(6)" and inserting "section
16	3552(b)".
17	(iii) Section 2315.—Section 2315 of
18	title 10, United States Code, is amended
19	by striking "section 3552(b)(6)" and in-
20	serting "section 3552(b)".
21	(iv) Section 2339A.—Section
22	2339a(e)(5) of title 10, United States
23	Code, is amended by striking "section
24	3552(b)(6)" and inserting "section
25	3552(b)".

1 (C) High-performance computing act 2 OF 1991.—Section 207(a) of the High-Perform-3 ance Computing Act of 1991 (15 U.S.C. 4 5527(a)) is amended by striking "section 5 3552(b)(6)(A)(i)" and inserting "section 6 3552(b)(9)(A)(i)". (D) Internet of things cybersecu-7 8 RITY IMPROVEMENT ACT OF 2020.—Section 3(5) 9 of the Internet of Things Cybersecurity Im-10 provement Act of 2020 (15 U.S.C. 278g-3a) is 11 amended by striking "section 3552(b)(6)" and 12 inserting "section 3552(b)". 13 (E) NATIONAL DEFENSE AUTHORIZATION 14 2013.—Section ACT FOR FISCAL YEAR 15 933(e)(1)(B) of the National Defense Authorization Act for Fiscal Year 2013 (10 U.S.C. 16 17 2224 note) is amended by striking "section 18 3542(b)(2)" and inserting "section 3552(b)". 19 (F) IKE SKELTON NATIONAL DEFENSE AU-20 THORIZATION ACT FOR FISCAL YEAR 2011.—The

Ike Skelton National Defense Authorization Act

for Fiscal Year 2011 (Public Law 111–383) is

amended—

21

22

23

1	(i) in section 806(e)(5) (10 U.S.C.
2	2304 note), by striking "section 3542(b)"
3	and inserting "section 3552(b)";
4	(ii) in section 931(b)(3) (10 U.S.C.
5	2223 note), by striking "section
6	3542(b)(2)" and inserting "section
7	3552(b)"; and
8	(iii) in section 932(b)(2) (10 U.S.C.
9	2224 note), by striking "section
10	3542(b)(2)" and inserting "section
11	3552(b)".
12	(G) E-GOVERNMENT ACT OF 2002.—Sec-
13	tion 301(c)(1)(A) of the E–Government Act of
14	2002 (44 U.S.C. 3501 note) is amended by
15	striking "section 3542(b)(2)" and inserting
16	"section 3552(b)".
17	(H) NATIONAL INSTITUTE OF STANDARDS
18	AND TECHNOLOGY ACT.—Section 20 of the Na-
19	tional Institute of Standards and Technology
20	Act (15 U.S.C. 278g–3) is amended—
21	(i) in subsection (a)(2), by striking
22	"section 3552(b)(5)" and inserting "sec-
23	tion 3552(b)"; and
24	(ii) in subsection (f)—

1	(I) in paragraph (3), by striking
2	"section 3532(1)" and inserting "sec-
3	tion 3552(b)"; and
4	(II) in paragraph (5), by striking
5	"section 3532(b)(2)" and inserting
6	"section 3552(b)".
7	(c) Subchapter II Amendments.—Subchapter II
8	of chapter 35 of title 44, United States Code, is amend-
9	ed—
10	(1) in section 3551—
11	(A) in paragraph (4), by striking "diag-
12	nose and improve" and inserting "integrate, de-
13	liver, diagnose, and improve";
14	(B) in paragraph (5), by striking "and" at
15	the end;
16	(C) in paragraph (6), by striking the pe-
17	riod at the end and inserting a semicolon; and
18	(D) by adding at the end the following:
19	"(7) recognize that each agency has specifie
20	mission requirements and, at times, unique cyberse-
21	curity requirements to meet the mission of the agen-
22	cy;
23	"(8) recognize that each agency does not have
24	the same resources to secure agency systems, and an
25	agency should not be expected to have the capability

1	to secure the systems of the agency from advanced
2	adversaries alone; and
3	"(9) recognize that a holistic Federal cybersecu-
4	rity model is necessary to account for differences be-
5	tween the missions and capabilities of agencies.";
6	(2) in section 3553—
7	(A) in subsection (a)—
8	(i) in paragraph (5), by striking
9	"and" at the end;
10	(ii) in paragraph (6), by striking the
11	period at the end and inserting "; and";
12	and
13	(iii) by adding at the end the fol-
14	lowing:
15	"(7) promoting, in consultation with the Direc-
16	tor of the Cybersecurity and Infrastructure Security
17	Agency, the National Cyber Director, and the Direc-
18	tor of the National Institute of Standards and Tech-
19	nology—
20	"(A) the use of automation to improve
21	Federal cybersecurity and visibility with respect
22	to the implementation of Federal cybersecurity;
23	and

1	"(B) the use of zero trust architecture to
2	improve resiliency and timely response actions
3	to incidents on Federal systems.";
4	(B) in subsection (b)—
5	(i) in the matter preceding paragraph
6	(1), by striking "The Secretary, in con-
7	sultation with the Director" and inserting
8	"The Secretary of Homeland Security, act-
9	ing through the Director of the Cybersecu-
10	rity and Infrastructure Security Agency
11	and in consultation with the Director and
12	the National Cyber Director";
13	(ii) in paragraph (2)(A), by inserting
14	"and reporting requirements under sub-
15	chapter IV of this chapter" after "section
16	3556'';
17	(iii) redesignate paragraphs (8) and
18	(9) as paragraphs (9) and (10); and
19	(iv) insert a new paragraph (8):
20	"(8) expeditiously seek opportunities to reduce
21	costs, administrative burdens, and other barriers to
22	information technology security and modernization
23	for Federal agencies, including through—
24	"(A) central shared services contracts for
25	cybersecurity capabilities identified as optimal

1	by the Director, in coordination with the Sec-
2	retary acting through the Director of the Cy-
3	bersecurity and Infrastructure Security Agency
4	and other agencies as appropriate; and
5	"(B) offering technical assistance and ex-
6	pertise to agencies on the selection and success-
7	ful engagement of highly adaptive cybersecurity
8	service contracts and other relevant contracts
9	provided by the U.S. General Services Adminis-
10	tration.";
11	(C) in subsection (c)—
12	(i) in the matter preceding paragraph
13	(1), by striking "each year" and inserting
14	"each year during which agencies are re-
15	quired to submit reports under section
16	3554(c)" and by striking "preceding year"
17	and inserting "preceding two years";
18	(ii) by striking paragraph (1);
19	(iii) by redesignating paragraphs (2),
20	(3), and (4) as paragraphs (1), (2), and
21	(3), respectively;
22	(iv) in paragraph (3), as so redesig-
23	nated, by striking "and" at the end; and
24	(v) by inserting after paragraph (3),
25	as so redesignated, the following:

1	"(4) a summary of each assessment of Federal
2	risk posture performed under subsection (i); and";
3	(D) by redesignating subsections (i), (j),
4	(k), and (l) as subsections (j), (k), (l), and (m)
5	respectively;
6	(E) in subsection (h)—
7	(i) in paragraph (2), subparagraph
8	(A) adding "and the National Cyber Direc-
9	tor" after "in coordination with the Direc-
10	tor'';
11	(ii) in paragraph (2), subparagraph
12	(D) adding ", the National Cyber Direc-
13	tor," after "notify the Director"; and
14	(iii) in paragraph (3), subparagraph
15	(A), clause (iv) adding ", the National
16	Cyber Director," after "the Secretary pro-
17	vides prior notice to the Director";
18	(F) by inserting after subsection (h) the
19	following:
20	"(i) Federal Risk Assessments.—On an ongoing
21	and continuous basis, the Director of the Cybersecurity
22	and Infrastructure Security Agency shall perform assess-
23	ments using any available information on the cybersecu-
24	rity posture of agencies, and brief the Director and Na-

1	tional Cyber Director on the findings of those assessments
2	including—
3	"(1) the status of agency cybersecurity remedial
4	actions described in section 3554(b)(7);
5	"(2) any vulnerability information relating to
6	the systems of an agency that is known by the agen-
7	cy;
8	"(3) analysis of incident information under sec-
9	tion 3597;
10	"(4) evaluation of penetration testing per-
11	formed under section 3559A;
12	"(5) evaluation of vulnerability disclosure pro-
13	gram information under section 3559B;
14	"(6) evaluation of agency threat hunting re-
15	sults;
16	"(7) evaluation of Federal and non-Federal
17	cyber threat intelligence;
18	"(8) data on agency compliance with standards
19	issued under section 11331 of title 40;
20	"(9) agency system risk assessments performed
21	under section $3554(a)(1)(A)$ ; and
22	"(10) any other information the Director of the
23	Cybersecurity and Infrastructure Security Agency
24	determines relevant.";
25	(G) in subsection (j), as so redesignated—

1	(i) by striking "Not later than" and
2	inserting:
3	"(1) IN GENERAL.—Not later than";
4	(ii) by striking "regarding the spe-
5	cific" and inserting "that includes a sum-
6	mary of—
7	"(A) the specific";
8	(iii) in paragraph (1), as so des-
9	ignated, by striking the period at the end
10	and inserting "; and"; and
11	(iv) by adding at the end the fol-
12	lowing:
13	"(B) the trends identified in the Federal
14	risk assessments performed under subsection
15	(i).
16	"(2) FORM.—The report required under para-
17	graph (1) shall be unclassified but may include a
18	classified annex."; and
19	(H) by adding at the end the following:
20	"(n) BINDING OPERATIONAL DIRECTIVES.—If the
21	Director of the Cybersecurity and Infrastructure Security
22	Agency issues a binding operational directive or an emer-
23	gency directive under this section, not later than 7 days
24	after the date on which the binding operational directive
25	requires an agency to take an action, the Director of the

1	Cybersecurity and Infrastructure Security Agency shall
2	provide to the Director and National Cyber Director the
3	status of the implementation of the binding operational
4	directive at the agency.";
5	(3) in section 3554—
6	(A) in subsection (a)—
7	(i) in paragraph (1)—
8	(I) by redesignating subpara-
9	graphs (A), (B), and (C) as subpara-
10	graphs (B), (C), and (D), respectively;
11	(II) by inserting before subpara-
12	graph (B), as so redesignated, the fol-
13	lowing:
14	"(A) on an ongoing and continuous basis,
15	performing an agency system risk assessment
16	that—
17	"(i) identifies and documents the high
18	value assets of the agency using guidance
19	from the Director;
20	"(ii) evaluates the data assets inven-
21	toried under section 3511 for sensitivity to
22	compromises in confidentiality, integrity,
23	and availability;

1	"(iii) identifies agency systems that
2	have access to or hold the data assets
3	inventoried under section 3511;
4	"(iv) evaluates the threats facing
5	agency systems and data, including high
6	value assets, based on Federal and non-
7	Federal cyber threat intelligence products,
8	where available;
9	"(v) evaluates the vulnerability of
10	agency systems and data, including high
11	value assets, including by analyzing—
12	"(I) the results of penetration
13	testing performed by the Department
14	of Homeland Security under section
15	3553(b)(9);
16	"(II) the results of penetration
17	testing performed under section
18	3559A;
19	"(III) information provided to
20	the agency through the vulnerability
21	disclosure program of the agency
22	under section 3559B;
23	"(IV) incidents; and

1	"(V) any other vulnerability in-
2	formation relating to agency systems
3	that is known to the agency;
4	"(vi) assesses the impacts of potential
5	agency incidents to agency systems, data,
6	and operations based on the evaluations
7	described in clauses (ii) and (iv) and the
8	agency systems identified under clause
9	(iii); and
10	"(vii) assesses the consequences of po-
11	tential incidents occurring on agency sys-
12	tems that would impact systems at other
13	agencies, including due to interconnectivity
14	between different agency systems or oper-
15	ational reliance on the operations of the
16	system or data in the system;";
17	(III) in subparagraph (B), as so
18	redesignated, in the matter preceding
19	clause (i), by striking "providing in-
20	formation" and inserting "using infor-
21	mation from the assessment con-
22	ducted under subparagraph (A), pro-
23	viding information";
24	(IV) in subparagraph (C), as so
25	redesignated—

1	(aa) in clause (ii) by insert-
2	ing "binding" before "oper-
3	ational"; and
4	(bb) in clause (vi), by strik-
5	ing "and" at the end; and
6	(V) by adding at the end the fol-
7	lowing:
8	"(E) providing an update on the ongoing
9	and continuous assessment performed under
10	subparagraph (A)—
11	"(i) upon request, to the inspector
12	general of the agency or the Comptroller
13	General of the United States; and
14	"(ii) on a periodic basis, as deter-
15	mined by guidance issued by the Director
16	but not less frequently than every 2 years,
17	to—
18	"(I) the Director;
19	"(II) the Director of the Cyberse-
20	curity and Infrastructure Security
21	Agency; and
22	"(III) the National Cyber Direc-
23	tor;
24	"(F) in consultation with the Director of
25	the Cybersecurity and Infrastructure Security

1	Agency and not less frequently than once every
2	3 years, performing an evaluation of whether
3	additional cybersecurity procedures are appro-
4	priate for securing a system of, or under the
5	supervision of, the agency, which shall—
6	"(i) be completed considering the
7	agency system risk assessment performed
8	under subparagraph (A); and
9	"(ii) include a specific evaluation for
10	high value assets;
11	"(G) not later than 30 days after com-
12	pleting the evaluation performed under sub-
13	paragraph (F), providing the evaluation and an
14	implementation plan, if applicable, for using ad-
15	ditional cybersecurity procedures determined to
16	be appropriate to—
17	"(i) the Director of the Cybersecurity
18	and Infrastructure Security Agency;
19	"(ii) the Director; and
20	"(iii) the National Cyber Director;
21	and
22	"(H) if the head of the agency determines
23	there is need for additional cybersecurity proce-
24	dures, ensuring that those additional cybersecu-

1	rity procedures are reflected in the budget re-
2	quest of the agency;"; and
3	(ii) in paragraph (2)—
4	(I) in subparagraph (A), by in-
5	serting "in accordance with the agen-
6	cy system risk assessment performed
7	under paragraph (1)(A)" after "infor-
8	mation systems";
9	(II) in subparagraph (B)—
10	(aa) by striking "in accord-
11	ance with standards" and insert-
12	ing "in accordance with—
13	"(i) standards"; and
14	(bb) by adding at the end
15	the following:
16	"(ii) the evaluation performed under
17	paragraph $(1)(F)$ ; and
18	"(iii) the implementation plan de-
19	scribed in paragraph (1)(G);"; and
20	(III) in subparagraph (D), by in-
21	serting ", through the use of penetra-
22	tion testing, the vulnerability disclo-
23	sure program established under sec-
24	tion 3559B, and other means," after
25	"periodically";

1	(B) in subsection (b)—
2	(i) by striking paragraph (1) and in-
3	serting the following:
4	"(1) pursuant to subsection $(a)(1)(A)$ , per-
5	forming ongoing and continuous agency system risk
6	assessment, which may include using automated
7	tools consistent with standards and guidelines pro-
8	mulgated under section 11331 of title 40, as applica-
9	ble;";
10	(ii) in paragraph (2)(D)—
11	(I) by redesignating clauses (iii)
12	and (iv) as clauses (iv) and (v), re-
13	spectively;
14	(II) by inserting after clause (ii)
15	the following:
16	"(iii) binding operational directives
17	and emergency directives promulgated by
18	the Director of the Cybersecurity and In-
19	frastructure Security Agency under section
20	3553;"; and
21	(III) in clause (iv), as so redesig-
22	nated, by striking "as determined by
23	the agency; and" and inserting "as
24	determined by the agency, considering

1	the agency risk assessment performed
2	under subsection (a)(1)(A).";
3	(iii) in paragraph (5)(A), by inserting
4	", including penetration testing, as appro-
5	priate," after "shall include testing";
6	(iv) by redesignating paragraphs (7)
7	and (8) as paragraphs (8) and (9), respec-
8	tively;
9	(v) by inserting after paragraph (6)
10	the following:
11	"(7) a process for providing the status of every
12	remedial action, as well as unremediated identified
13	system vulnerabilities, to the Director and the Direc-
14	tor of the Cybersecurity and Infrastructure Security
15	Agency, using automation and machine-readable
16	data to the greatest extent practicable;"; and
17	(vi) in paragraph (8)(C), as so redes-
18	ignated—
19	(I) by striking clause (ii) and in-
20	serting the following:
21	"(ii) notifying and consulting with the
22	Federal information security incident cen-
23	ter established under section 3556 pursu-
24	ant to the requirements of section 3594;";

1	(II) by redesignating clause (iii)
2	as clause (iv);
3	(III) by inserting after clause (ii)
4	the following:
5	"(iii) performing the notifications and
6	other activities required under subchapter
7	IV of this chapter; and"; and
8	(IV) in clause (iv), as so redesig-
9	nated—
10	(aa) in subclause (II), by
11	adding "and" at the end;
12	(bb) by striking subclause
13	(III); and
14	(cc) by redesignating sub-
15	clause (IV) as subclause (III);
16	and
17	(C) in subsection (c)—
18	(i) by redesignating paragraph (2) as
19	paragraph (5);
20	(ii) by striking paragraph (1) and in-
21	serting the following:
22	"(1) BIANNUAL REPORT.—Not later than 2
23	years after the date of the enactment of the Federal
24	Information Security Modernization Act of 2022 and
25	not less frequently than once every 2 years there-

1	after, using the continuous and ongoing agency sys-
2	tem risk assessment under subsection (a)(1)(A), the
3	head of each agency shall submit to the Director,
4	the Director of the Cybersecurity and Infrastructure
5	Security Agency, the majority and minority leaders
6	of the Senate, the Speaker and minority leader of
7	the House of Representatives, the Committee on
8	Homeland Security and Governmental Affairs of the
9	Senate, the Committee on Oversight and Reform of
10	the House of Representatives, the Committee on
11	Homeland Security of the House of Representatives,
12	the Committee on Commerce, Science, and Trans-
13	portation of the Senate, the Committee on Science,
14	Space, and Technology of the House of Representa-
15	tives, the appropriate authorization and appropria-
16	tions committees of Congress, the National Cyber
17	Director, and the Comptroller General of the United
18	States a report that—
19	"(A) summarizes the agency system risk
20	assessment performed under subsection
21	(a)(1)(A);
22	"(B) evaluates the adequacy and effective-
23	ness of information security policies, proce-
24	dures, and practices of the agency to address
25	the risks identified in the agency system risk

1	assessment performed under subsection
2	(a)(1)(A), including an analysis of the agency's
3	cybersecurity and incident response capabilities
4	using the metrics established under section
5	224(c) of the Cybersecurity Act of 2015 (6
6	U.S.C. 1522(c));
7	"(C) summarizes the evaluation and imple-
8	mentation plans described in subparagraphs (F)
9	and (G) of subsection (a)(1) and whether those
10	evaluation and implementation plans call for
11	the use of additional cybersecurity procedures
12	determined to be appropriate by the agency;
13	and
14	"(D) summarizes the status of remedial
15	actions identified by inspector general of the
16	agency, the Comptroller General of the United
17	States, and any other source determined appro-
18	priate by the head of the agency.
19	"(2) Unclassified reports.—Each report
20	submitted under paragraph (1)—
21	"(A) shall be, to the greatest extent prac-
22	ticable, in an unclassified and otherwise uncon-
23	trolled form; and
24	"(B) may include a classified annex.

1	"(3) Access to information.—The head of
2	an agency shall ensure that, to the greatest extent
3	practicable, information is included in the unclassi-
4	fied form of the report submitted by the agency
5	under paragraph $(2)(A)$ .
6	"(4) Briefings.—During each year during
7	which a report is not required to be submitted under
8	paragraph (1), the Director shall provide to the con-
9	gressional committees described in paragraph (1) a
10	briefing summarizing current cybersecurity posture
11	of agencies."; and
12	(iii) in paragraph (5), as so redesig-
13	nated, by inserting ", including the report-
14	ing procedures established under section
15	11315(d) of title 40 and subsection
16	(a)(3)(A)(v) of this section," after "poli-
17	cies, procedures, and practices"; and
18	(4) in section 3555—
19	(A) in the section heading, by striking
20	"ANNUAL INDEPENDENT" and inserting
21	"INDEPENDENT";
22	(B) in subsection (a)—
23	(i) in paragraph (1), by inserting
24	"during which a report is required to be

1	submitted under section 3553(c)," after
2	"Each year";
3	(ii) in paragraph (2)(A), by inserting
4	", including by penetration testing and
5	analyzing the vulnerability disclosure pro-
6	gram of the agency' after "information
7	systems"; and
8	(iii) by adding at the end the fol-
9	lowing:
10	"(3) An evaluation under this section may in-
11	clude recommendations for improving the cybersecu-
12	rity posture of the agency.";
13	(C) in subsection $(b)(1)$ , by striking "an-
14	nual'';
15	(D) in subsection $(e)(1)$ , by inserting "dur-
16	ing which a report is required to be submitted
17	under section 3553(c)" after "Each year";
18	(E) by striking subsection (f) and inserting
19	the following:
20	"(f) Protection of Information.—(1) Agencies,
21	evaluators, and other recipients of information that, if dis-
22	closed, may cause grave harm to the efforts of Federal
23	information security officers, shall take appropriate steps
24	to ensure the protection of that information, including
25	safeguarding the information from public disclosure.

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         "(2) The protections required under paragraph (1)
 2
    shall be commensurate with the risk and comply with all
 3
    applicable laws and regulations.
 4
         "(3) With respect to information that is not related
 5
    to national security systems, agencies and evaluators shall
    make a summary of the information unclassified and pub-
    licly available, including information that does not iden-
 8
    tify—
             "(A) specific information system incidents; or
 9
             "(B)
10
                        specific
                                     information
                                                       system
11
         vulnerabilities.";
12
                  (F) in subsection (g)(2)—
                       (i) by striking "this subsection shall"
13
14
                  and inserting "this subsection—
                  "(A) shall";
15
16
                       (ii) in subparagraph (A), as so des-
17
                  ignated, by striking the period at the end
18
                  and inserting "; and"; and
19
                       (iii) by adding at the end the fol-
20
                  lowing:
                  "(B) identify any entity that performs an
21
22
             independent evaluation under subsection (b).";
23
             and
24
                  (G) striking subsection (j); and
```

1	(5) in section 3556(a)(4) by striking "3554(b)"
2	and inserting "3554(a)(1)(A)".
3	(d) Conforming Amendments.—
4	(1) Table of sections.—The table of sections
5	for chapter 35 of title 44, United States Code, is
6	amended—
7	(A) by striking the item relating to section
8	3553 and inserting the following:
	"3553. Authority and functions of the Director and the Director of the Cyberse- curity and Infrastructure Security Agency.";
9	and
10	(B) by striking the item relating to section
11	3555 and inserting the following:
	"3555. Independent evaluation.".
12	(2) OMB REPORTS.—Section 226(c) of the Cy-
13	bersecurity Act of $2015$ (6 U.S.C. $1524(c)$ ) is
14	amended—
15	(A) in paragraph (1)(B), in the matter
16	preceding clause (i), by striking "annually
17	thereafter" and inserting "thereafter during the
18	years during which a report is required to be
19	submitted under section 3553(c) of title 44,
20	United States Code"; and
21	(B) in paragraph (2)(B), in the matter
22	preceding clause (i)—

1	(i) by striking "annually thereafter"
2	and inserting "thereafter during the years
3	during which a report is required to be
4	submitted under section 3553(c) of title
5	44, United States Code"; and
6	(ii) by striking "the report required
7	under section 3553(c) of title 44, United
8	States Code" and inserting "that report".
9	(3) NIST RESPONSIBILITIES.—Section
10	20(d)(3)(B) of the National Institute of Standards
11	and Technology Act (15 U.S.C. 278g–3(d)(3)(B)) is
12	amended by striking "annual".
13	(e) Federal System Incident Response.—
14	(1) In General.—Chapter 35 of title 44,
15	United States Code, is amended by adding at the
16	end the following:
17	"SUBCHAPTER IV—FEDERAL SYSTEM
18	INCIDENT RESPONSE
19	"§ 3591. Definitions
20	"(a) In General.—Except as provided in subsection
21	(b), the definitions under sections 3502 and 3552 shall
22	apply to this subchapter.
23	"(b) Additional Definitions.—As used in this
24	subchapter:

1	"(1) Appropriate reporting entities.—The
2	term 'appropriate reporting entities' means—
3	"(A) the majority and minority leaders of
4	the Senate;
5	"(B) the Speaker and minority leader of
6	the House of Representatives;
7	"(C) the Committee on Homeland Security
8	and Governmental Affairs of the Senate;
9	"(D) the Committee on Oversight and Re-
10	form of the House of Representatives;
11	"(E) the Committee on Homeland Security
12	of the House of Representatives;
13	"(F) the appropriate authorization and ap-
14	propriations committees of Congress;
15	"(G) the Director;
16	"(H) the Director of the Cybersecurity and
17	Infrastructure Security Agency;
18	"(I) the National Cyber Director;
19	"(J) the Comptroller General of the United
20	States; and
21	"(K) the inspector general of any impacted
22	agency.
23	"(2) AWARDEE.—The term 'awardee'—
24	"(A) means a person, business, or other
25	entity that receives a grant from, or is a party

1	to a cooperative agreement or an other trans-
2	action agreement with, an agency; and
3	"(B) includes any subgrantee of a person,
4	business, or other entity described in subpara-
5	graph (A).
6	"(3) Breach.—The term 'breach' shall be de-
7	fined by the Director.
8	"(4) Contractor.—The term 'contractor'
9	means a prime contractor of an agency or a subcon-
10	tractor of a prime contractor of an agency.
11	"(5) Federal information.—The term 'Fed-
12	eral information' means information created, col-
13	lected, processed, maintained, disseminated, dis-
14	closed, or disposed of by or for the Federal Govern-
15	ment in any medium or form.
16	"(6) Federal information system.—The
17	term 'Federal information system' means an infor-
18	mation system used or operated by an agency, a con-
19	tractor, or another organization on behalf of an
20	agency.
21	"(7) Intelligence community.—The term
22	'intelligence community' has the meaning given the
23	term in section 3 of the National Security Act of
24	1947 (50 U.S.C. 3003).

1	"(8) Nationwide consumer reporting
2	AGENCY.—The term 'nationwide consumer reporting
3	agency' means a consumer reporting agency de-
4	scribed in section 603(p) of the Fair Credit Report-
5	ing Act (15 U.S.C. 1681a(p)).
6	"(9) Vulnerability disclosure.—The term
7	'vulnerability disclosure' means a vulnerability iden-
8	tified under section 3559B.
9	"§ 3592. Notification of breach
10	"(a) Notification.—As expeditiously as practicable
11	and without unreasonable delay, and in any case not later
12	than 45 days after an agency has a reasonable basis to
13	conclude that a breach has occurred, the head of the agen-
14	cy, in consultation with the chief privacy officer of the
15	agency, shall—
16	"(1) determine whether notice to any individual
17	potentially affected by the breach is appropriate
18	based on an assessment of the risk of harm to the
19	individual that considers—
20	"(A) the nature and sensitivity of the per-
21	sonally identifiable information affected by the
22	breach;
23	"(B) the likelihood of access to and use of
24	the personally identifiable information affected
25	by the breach;

1	"(C) the type of breach; and
2	"(D) any other factors determined by the
3	Director; and
4	"(2) as appropriate, provide written notice in
5	accordance with subsection (b) to each individual po-
6	tentially affected by the breach—
7	"(A) to the last known mailing address of
8	the individual; or
9	"(B) through an appropriate alternative
10	method of notification that the head of the
11	agency or a designated senior-level individual of
12	the agency selects based on factors determined
13	by the Director.
14	"(b) Contents of Notice.—Each notice of a
15	breach provided to an individual under subsection $(a)(2)$
16	shall include—
17	"(1) a brief description of the breach;
18	"(2) if possible, a description of the types of
19	personally identifiable information affected by the
20	breach;
21	"(3) contact information of the agency that
22	may be used to ask questions of the agency, which—
23	"(A) shall include an e-mail address or an-
24	other digital contact mechanism; and

1	"(B) may include a telephone number,
2	mailing address, or a website;
3	"(4) information on any remedy being offered
4	by the agency;
5	"(5) any applicable educational materials relat-
6	ing to what individuals can do in response to a
7	breach that potentially affects their personally iden-
8	tifiable information, including relevant contact infor-
9	mation for Federal law enforcement agencies and
10	each nationwide consumer reporting agency; and
11	"(6) any other appropriate information, as de-
12	termined by the head of the agency or established in
13	guidance by the Director.
14	"(c) Delay of Notification.—
15	"(1) IN GENERAL.—The Attorney General, the
16	Director of National Intelligence, or the Secretary of
17	Homeland Security may delay a notification required
18	under subsection (a) if the notification would—
19	"(A) impede a criminal investigation or a
20	national security activity;
21	"(B) reveal sensitive sources and methods;
22	"(C) cause damage to national security; or
23	"(D) hamper security remediation actions.
24	"(2) Documentation.—

"(A) IN GENERAL.—Any delay under para-1 2 graph (1) shall be reported in writing to the Di-3 rector, the Attorney General, the Director of 4 National Intelligence, the Secretary of Home-5 land Security, the National Cyber Director, the 6 Director of the Cybersecurity and Infrastruc-7 ture Security Agency, and the head of the agen-8 cy and the inspector general of the agency that 9 experienced the breach.

- "(B) CONTENTS.—A report required under subparagraph (A) shall include a written statement from the entity that delayed the notification explaining the need for the delay.
- "(C) FORM.—The report required under subparagraph (A) shall be unclassified but may include a classified annex.
- 17 "(3) Renewal.—A delay under paragraph (1) shall be for a period of 60 days and may be renewed.

"(d) UPDATE NOTIFICATION.—If an agency determines there is a significant change in the reasonable basis
to conclude that a breach occurred, a significant change
to the determination made under subsection (a)(1), or that
it is necessary to update the details of the information provided to potentially affected individuals as described in
subsection (b), the agency shall as expeditiously as prac-

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- 1 ticable and without unreasonable delay, and in any case
- 2 not later than 30 days after such a determination, notify
- 3 each individual who received a notification pursuant to
- 4 subsection (a) of those changes.
- 5 "(e) Rule of Construction.—Nothing in this sec-
- 6 tion shall be construed to limit—
- 7 "(1) the Director from issuing guidance relat-
- 8 ing to notifications or the head of an agency from
- 9 notifying individuals potentially affected by breaches
- that are not determined to be major incidents; or
- 11 "(2) the Director from issuing guidance relat-
- ing to notifications of major incidents or the head of
- an agency from providing more information than de-
- scribed in subsection (b) when notifying individuals
- potentially affected by breaches.

## 16 "§ 3593. Congressional and executive branch reports

- 17 "(a) Initial Report.—
- 18 "(1) IN GENERAL.—Not later than 72 hours
- after an agency has a reasonable basis to conclude
- 20 that a major incident occurred, the head of the
- agency impacted by the major incident shall submit
- 22 to the appropriate reporting entities a written re-
- port. Within 7 days of a major incident determina-
- 24 tion, the head of the agency impacted shall coordi-
- 25 nate with the National Cyber Director, or their des-

1	ignee, to provide a briefing, along with any other
2	Federal entity determined appropriate by the Na-
3	tional Cyber Director, to the Committee on Home-
4	land Security and Governmental Affairs of the Sen-
5	ate, the Committee on Oversight and Reform of the
6	House of Representatives, the Committee on Home-
7	land Security of the House of Representatives, and
8	the appropriate authorization and appropriations
9	committees of Congress, in the manner requested by
10	the Congressional entities, taking into account—
11	"(A) the information known at the time of
12	the report, including the threat having likely
13	caused the major incident;
14	"(B) the sensitivity of the details associ-
15	ated with the major incident; and
16	"(C) the classification level of the informa-
17	tion contained in the report.
18	"(2) Contents.—A report required under
19	paragraph (1) shall include, in a manner that ex-
20	cludes or otherwise reasonably protects personally
21	identifiable information and to the extent permitted
22	by applicable law, including privacy and statistical
23	laws—
24	"(A) a summary of the information avail-
25	able about the major incident, including how

1	the major incident occurred and, if applicable,
2	information relating to the major incident as a
3	breach, based on information available to agen-
4	cy officials as of the date on which the agency
5	submits the report;
6	"(B) if applicable, whether any ransom has
7	been demanded or paid, or plans to be paid, by
8	any entity operating a Federal information sys-
9	tem or with access to a Federal information
10	system, unless disclosure of such information
11	may disrupt an active Federal law enforcement
12	or national security operation;
13	"(C) if applicable, a description and any
14	associated documentation of any circumstances
15	necessitating a delay in notification to individ-
16	uals potentially affected by the major incident
17	under subsection (c) of section 3592; and
18	"(D) if applicable, an assessment of the
19	impacts to the agency, the Federal Government,
20	or the security of the United States, based on
21	information available to agency officials on the
22	date on which the agency submits the report.
23	"(3) Components of Briefing.—The 7 day
24	briefing required under paragraph (1)—

1	"(A) shall, to the greatest extent prac-
2	ticable, include an unclassified component; and
3	"(B) may include a classified component.
4	"(b) Supplemental Report.—Within a reasonable
5	amount of time, but not later than 30 days after the date
6	on which an agency submits a written report under sub-
7	section (a), the head of the agency shall provide to the
8	appropriate reporting entities written updates on the
9	major incident and, to the extent practicable, provide a
10	briefing to the congressional committees described in sub-
11	section (a)(1), including summaries of—
12	"(1) vulnerabilities, means by which the major
13	incident occurred, and impacts to the agency relat-
14	ing to the major incident;
15	"(2) any risk assessment and subsequent risk-
16	based security implementation of the affected infor-
17	mation system before the date on which the major
18	incident occurred;
19	"(3) an estimate of the number of individuals
20	potentially affected by the major incident based on
21	information available to agency officials as of the
22	date on which the agency provides the update;
23	"(4) an assessment of the risk of harm to indi-
24	viduals potentially affected by the major incident

- 1 based on information available to agency officials as 2 of the date on which the agency provides the update;
- "(5) an update to the assessment of the risk to 3 4 agency operations, or to impacts on other agency or 5 non-Federal entity operations, affected by the major 6 incident based on information available to agency of-7 ficials as of the date on which the agency provides the update; and
- 9 "(6) the detection, response, and remediation 10 actions of the agency, including any support pro-11 vided by the Cybersecurity and Infrastructure Secu-12 rity Agency under section 3594(d) and status up-13 dates on the notification process described in section 14 3592(a), including any delay described in subsection 15 (c) of section 3592, if applicable.
- 16 "(c) UPDATE REPORT.—If the agency, or the National Cyber Director, determines that there is any signifi-18 cant change in the understanding of the agency of the 19 scope, scale, or consequence of a major incident for which 20 an agency submitted a written report under subsection 21 (a), the agency shall provide an updated report to the appropriate reporting entities that includes information re-23 lating to the change in understanding.
- 24 "(d) BIANNUAL REPORT.—Each agency shall submit as part of the biannual report required under section

- 3554(c)(1) of this title a description of each major inci-2 dent that occurred during the 2-year period preceding the 3 date on which the biannual report is submitted. "(e) Delay Report.— 4 "(1) In General.—The Director shall submit 6 to the appropriate reporting entities an annual re-7 port on all notification delays granted pursuant to 8 subsection (c) of section 3592. 9 "(2) Component of other report.—The Director may submit the report required under para-10 11 graph (1) as a component of the annual report sub-12 mitted under section 3597(b). 13 "(f) Report and Briefing Consistency.—In carrying out the duties under this section, and to achieve con-14 15 sistent and understandable agency reporting to Congress, the National Cyber Director shall— 16 "(1) provide to agencies formatting guidelines 17 18 and recommended contents of information to be in-19 cluded in the reports and briefings required under 20 this section, including recommendations for the use of plain language terminology and consistent for-21 22 mats for presenting any associated metrics; and
  - "(2) maintain a historical archive and major incident log of all reports and briefings provided under the requirements of this section, which shall include

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1	at a minimum an archive of the full contents of any
2	written report and associated documentation, the re-
3	porting agency, the date of submission, and a list of
4	the recipient Congressional entities, which shall be
5	made available upon request to the Congressional
6	entities listed under subsection (a)(1) and may, to
7	the extent practicable, utilize an internet accessible
8	portal for appropriate Congressional staff to directly
9	access the log and archived materials required to be
10	maintained under this paragraph.
11	"(g) Report Delivery.—Any written report re-
12	quired to be submitted under this section may be sub-
13	mitted in a paper or electronic format.
14	"(h) Rule of Construction.—Nothing in this sec-
15	tion shall be construed to limit—
16	"(1) the ability of an agency to provide addi-
17	tional reports or briefings to Congress; or
18	"(2) Congress from requesting additional infor-
19	mation from agencies through reports, briefings, or
20	other means.
21	"§ 3594. Government information sharing and inci-
22	dent response
23	"(a) In General.—
24	"(1) Incident reporting.—Subject to limita-
25	tions in subsection (b), the head of each agency shall

1	provide the information described in paragraph (2)
2	relating to an incident affecting the agency, whether
3	the information is obtained by the Federal Govern-
4	ment directly or indirectly, to the Cybersecurity and
5	Infrastructure Security Agency, the Office of Man-
6	agement and Budget, and the Office of the National
7	Cyber Director in a manner specified by the Director
8	under subsection (b).
9	"(2) Contents.—A provision of information
10	relating to an incident made by the head of an agen-
11	cy under paragraph (1) shall—
12	"(A) include detailed information about
13	the safeguards that were in place when the inci-
14	dent occurred;
15	"(B) whether the agency implemented the
16	safeguards described in subparagraph (A) cor-
17	rectly;
18	"(C) in order to protect against a similar
19	incident, identify—
20	"(i) how the safeguards described in
21	subparagraph (A) should be implemented
22	differently; and
23	"(ii) additional necessary safeguards;
24	and

1	"(D) include information to aid in incident
2	response, such as—
3	"(i) a description of the affected sys-
4	tems or networks;
5	"(ii) the estimated dates of when the
6	incident occurred; and
7	"(iii) information that could reason-
8	ably help identify the party that conducted
9	the incident, as appropriate.
10	"(3) Information sharing.—To the greatest
11	extent practicable, the Director of the Cybersecurity
12	and Infrastructure Security Agency shall—
13	"(A) share information relating to an inci-
14	dent with any agencies that may be impacted
15	by the incident, or are potentially susceptible or
16	similarly targeted, as well as with appropriate
17	Federal law enforcement agencies to facilitate
18	any necessary threat response activities as re-
19	quested; and
20	"(B) coordinate, in consultation with the
21	National Cyber Director, any necessary infor-
22	mation sharing efforts related to a major inci-
23	dent with the private sector.
24	"(4) National Security Systems.—Each
25	agency operating or exercising control of a national

- 1 security system shall share information about inci-
- dents that occur on national security systems with
- 3 the Director of the Cybersecurity and Infrastructure
- 4 Security Agency to the extent consistent with stand-
- 5 ards and guidelines for national security systems
- 6 issued in accordance with law and as directed by the
- 7 President.
- 8 "(b) Compliance.—The information provided and
- 9 method of reporting under subsection (a) shall take into
- 10 account the level of classification of the information and
- 11 any information sharing limitations and protections, such
- 12 as limitations and protections relating to law enforcement,
- 13 national security, privacy, statistical confidentiality, or
- 14 other factors determined by the Director in order to imple-
- 15 ment subsection (a)(1) in a manner that enables auto-
- 16 mated and consistent reporting.
- 17 "(c) Incident Response.—Each agency that has a
- 18 reasonable basis to conclude that a major incident oc-
- 19 curred involving Federal information in electronic medium
- 20 or form, as defined by the Director and not involving a
- 21 national security system, regardless of delays from notifi-
- 22 cation granted for a major incident, shall coordinate with
- 23 the Cybersecurity and Infrastructure Security Agency to
- 24 facilitate asset response activities and recommendations
- 25 for mitigating future incidents, and with appropriate Fed-

1	eral law enforcement agencies to facilitate threat response
2	activities, consistent with relevant policies, principles
3	standards, and guidelines on information security.
4	"§ 3595. Responsibilities of contractors and awardees
5	"(a) Reporting.—
6	"(1) In general.—Unless otherwise specified
7	in a contract, grant, cooperative agreement, or any
8	other transaction agreement, any contractor or
9	awardee of an agency shall report to the agency
10	within the same amount of time such agency is re-
11	quired to report an incident to the Cybersecurity
12	and Infrastructure Security Agency, if the con-
13	tractor or awardee has a reasonable basis to suspect
14	or conclude that—
15	"(A) an incident or breach has occurred
16	with respect to Federal information collected
17	used, or maintained by the contractor or award-
18	ee in connection with the contract, grant, coop-
19	erative agreement, or other transaction agree-
20	ment of the contractor or awardee;
21	"(B) an incident or breach has occurred
22	with respect to a Federal information system
23	used or operated by the contractor or awardee

in connection with the contract, grant, coopera-

tive agreement, or other transaction agreement
 of the contractor or awardee;

- "(C) a component of any Federal information system, or a system able to access, store, or process Federal information, contains a security vulnerability, including a supply chain compromise or an identified software or hardware vulnerability; or
- "(D) the contractor or awardee has received information from the agency that the contractor or awardee is not authorized to receive in connection with the contract, grant, cooperative agreement, or other transaction agreement of the contractor or awardee.

## "(2) Procedures.—

- "(A) Major incident.—Following a report of a breach or major incident by a contractor or awardee under paragraph (1), the agency, in consultation with the contractor or awardee, shall carry out the requirements under sections 3592, 3593, and 3594 with respect to the major incident.
- "(B) Incident.—Following a report of an incident by a contractor or awardee under paragraph (1), an agency, in consultation with the

- 1 contractor or awardee, shall carry out the re-2 quirements under section 3594 with respect to
- 3 the incident.
- 4 "(b) Effective Date.—This section shall apply on
- 5 and after the date that is 1 year after the date of the
- 6 enactment of the Federal Information Security Mod-
- 7 ernization Act of 2022 and shall apply with respect to any
- 8 contract entered into on or after such effective date.

## 9 "§ **3596.** Training

- 10 "(a) COVERED INDIVIDUAL DEFINED.—In this sec-
- 11 tion, the term 'covered individual' means an individual
- 12 who obtains access to Federal information or Federal in-
- 13 formation systems because of the status of the individual
- 14 as an employee, contractor, awardee, volunteer, or intern
- 15 of an agency.
- 16 "(b) Requirement.—The head of each agency shall
- 17 develop training for covered individuals on how to identify
- 18 and respond to an incident, including—
- "(1) the internal process of the agency for re-
- 20 porting an incident; and
- 21 "(2) the obligation of a covered individual to re-
- port to the agency a confirmed major incident and
- any suspected incident involving information in any
- 24 medium or form, including paper, oral, and elec-
- 25 tronic.

1	"(c) Inclusion in Annual Training.—The train-
2	ing developed under subsection (b) may be included as
3	part of an annual privacy or security awareness training
4	of an agency.
5	"§ 3597. Analysis and report on Federal incidents
6	"(a) Analysis of Federal Incidents.—
7	"(1) QUANTITATIVE AND QUALITATIVE ANAL-
8	YSES.—The Director of the Cybersecurity and Infra-
9	structure Security Agency shall develop, in consulta-
10	tion with the Director and the National Cyber Direc-
11	tor, and perform continuous monitoring and quan-
12	titative and qualitative analyses of incidents at agen-
13	cies, including major incidents, including—
14	"(A) the causes of incidents, including—
15	"(i) attacker tactics, techniques, and
16	procedures; and
17	"(ii) system vulnerabilities, including
18	previously unknown zero day exploitations,
19	unpatched systems, and information sys-
20	tem misconfigurations;
21	"(B) the scope and scale of incidents at
22	agencies;
23	"(C) common root causes of incidents
24	across multiple agencies:

1	"(D) agency incident response, recovery,
2	and remediation actions and the effectiveness of
3	those actions, as applicable;
4	"(E) lessons learned and recommendations
5	in responding to, recovering from, remediating,
6	and mitigating future incidents; and
7	"(F) trends across multiple Federal agen-
8	cies to address intrusion detection and incident
9	response capabilities using the metrics estab-
10	lished under section 224(c) of the Cybersecurity
11	Act of 2015 (6 U.S.C. 1522(c)).
12	"(2) Automated analysis.—The analyses de-
13	veloped under paragraph (1) shall, to the greatest
14	extent practicable, use machine readable data, auto-
15	mation, and machine learning processes.
16	"(3) Sharing of data and analysis.—
17	"(A) In General.—The Director shall
18	share on an ongoing basis the analyses required
19	under this subsection with agencies and the Na-
20	tional Cyber Director to—
21	"(i) improve the understanding of cy-
22	bersecurity risk of agencies; and
23	"(ii) support the cybersecurity im-
24	provement efforts of agencies.

1	"(B) Format.—In carrying out subpara-
2	graph (A), the Director shall share the anal-
3	yses—
4	"(i) in human-readable written prod-
5	ucts; and
6	"(ii) to the greatest extent practicable,
7	in machine-readable formats in order to
8	enable automated intake and use by agen-
9	cies.
10	"(b) Annual Report on Federal Incidents.—
11	Not later than 2 years after the date of the enactment
12	of this section, and not less frequently than annually
13	thereafter, the Director of the Cybersecurity and Infra-
14	structure Security Agency, in consultation with the Direc-
15	tor, the National Cyber Director, and the heads of other
16	agencies as appropriate, shall submit to the appropriate
17	reporting entities a report that includes—
18	"(1) a summary of causes of incidents from
19	across the Federal Government that categorizes
20	those incidents as incidents or major incidents;
21	"(2) the quantitative and qualitative analyses of
22	incidents developed under subsection $(a)(1)$ on an
23	agency-by-agency basis and comprehensively across
24	the Federal Government, including—
25	"(A) a specific analysis of breaches; and

1	"(B) an analysis of the Federal Govern-
2	ment's performance against the metrics estab-
3	lished under section 224(c) of the Cybersecurity
4	Act of 2015 (6 U.S.C. 1522(c)); and
5	"(3) an annex for each agency that includes—
6	"(A) a description of each major incident;
7	and
8	"(B) an analysis of the agency's perform-
9	ance against the metrics established under sec-
10	tion 224(c) of the Cybersecurity Act of 2015 (6
11	U.S.C. $1522(c)$ ).
12	"(c) Publication.—To the extent that publication
13	is consistent with national security interests, a version of
14	each report submitted under subsection (b) shall be made
15	publicly available on the website of the Cybersecurity and
16	Infrastructure Security Agency during the year in which
17	the report is submitted.
18	"(d) Information Provided by Agencies.—
19	"(1) In general.—The analysis required
20	under subsection (a) and each report submitted
21	under subsection (b) shall use information provided
22	by agencies under section 3594(a).
23	"(2) National security system reports.—
24	"(A) IN GENERAL.—Annually, the head of
25	an agency that operates or exercises control of

1	a national security system shall submit a report
2	that includes the information described in sub-
3	section (b) with respect to the agency to the ex-
4	tent that the submission is consistent with
5	standards and guidelines for national security
6	systems issued in accordance with law and as
7	directed by the President to—
8	"(i) the majority and minority leaders
9	of the Senate;
10	"(ii) the Speaker and minority leader
11	of the House of Representatives;
12	"(iii) the Committee on Homeland Se-
13	curity and Governmental Affairs of the
14	Senate;
15	"(iv) the Select Committee on Intel-
16	ligence of the Senate;
17	"(v) the Committee on Armed Serv-
18	ices of the Senate;
19	"(vi) the Committee on Appropria-
20	tions of the Senate;
21	"(vii) the Committee on Oversight and
22	Reform of the House of Representatives;
23	"(viii) the Committee on Homeland
24	Security of the House of Representatives;

1	"(ix) the Permanent Select Committee
2	on Intelligence of the House of Represent-
3	atives;
4	"(x) the Committee on Armed Serv-
5	ices of the House of Representatives; and
6	"(xi) the Committee on Appropria-
7	tions of the House of Representatives.
8	"(B) Classified form.—A report re-
9	quired under subparagraph (A) may be sub-
10	mitted in a classified form.
11	"(e) Requirement for Compiling Informa-
12	TION.—In publishing the public report required under
13	subsection (c), the Director of the Cybersecurity and In-
14	frastructure Security Agency shall sufficiently compile in-
15	formation such that no specific incident of an agency can
16	be identified, except with the concurrence of the Director
17	of the Office of Management and Budget, the National
18	Cyber Director, and in consultation with the impacted
19	agency.
20	"§ 3598. Major incident definition
21	"(a) In General.—Not later than 180 days after
22	the date of the enactment of the Federal Information Se-
23	curity Modernization Act of 2022, the Director, in coordi-
24	nation with the Director of the Cybersecurity and Infra-
25	structure Security Agency and the National Cyber Direc-

1	tor, shall develop and promulgate guidance on the defini-
2	tion of the term 'major incident' for the purposes of sub-
3	chapter II and this subchapter.
4	"(b) REQUIREMENTS.—With respect to the guidance
5	issued under subsection (a), the definition of the term
6	'major incident' shall—
7	"(1) include, with respect to any information
8	collected or maintained by or on behalf of an agency
9	or an information system used or operated by an
10	agency or by a contractor of an agency or another
11	organization on behalf of an agency, any incident
12	the head of the agency determines is likely to result
13	in demonstrable harm to—
14	"(A) the national security interests, foreign
15	relations, or the economy of the United States;
16	"(B) the public confidence, civil liberties,
17	or public health and safety of the people of the
18	United States;
19	"(C) the integrity of personally identifiable
20	information, including the exfiltration, modifica-
21	tion, or deletion of such information; or
22	"(D) any other type of incident determined
23	appropriate by the Director; and
24	"(2) stipulate that the Director, in coordination
25	with the National Cyber Director, shall declare a

1	major incident at each agency impacted by an inci-
2	dent if it is determined that an incident—
3	"(A) occurs at not less than 2 agencies;
4	"(B) is enabled by—
5	"(i) a common technical root cause,
6	such as a supply chain compromise or a
7	common software or hardware vulner-
8	ability; or
9	"(ii) the related activities of a com-
10	mon threat actor; or
11	"(C) has a significant impact on the con-
12	fidentiality, integrity, or availability of a high
13	value asset.
14	"(c) Evaluation and Updates.—Not later than 2
15	years after the date of the enactment of the Federal Infor-
16	mation Security Modernization Act of 2022, and not less
17	frequently than every 2 years thereafter, the Director shall
18	submit to the Committee on Homeland Security and Gov-
19	ernmental Affairs of the Senate and the Committee on
20	Oversight and Reform of the House of Representatives and
21	evaluation, which shall include—
22	"(1) an update, if necessary, to the guidance
23	issued under subsection (a);

"(2) the definition of the term 'major incident' 1 2 included in the guidance issued under subsection (a); 3 and "(3) an explanation of, and the analysis that led to, the definition described in paragraph (2).". 6 (2) CLERICAL AMENDMENT.—The table of sections for chapter 35 of title 44, United States Code, 7 8 is amended by adding at the end the following: "SUBCHAPTER IV—FEDERAL SYSTEM INCIDENT RESPONSE "3591. Definitions. "3592. Notification of breach. "3593. Congressional and executive branch reports. "3594. Government information sharing and incident response. "3595. Responsibilities of contractors and awardees. "3596. Training. "3597. Analysis and report on Federal incidents. "3598. Major incident definition.". 9 SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40. 10 (a) Modernizing Government Technology.— Subtitle G of title X of Division A of the National Defense 11 Authorization Act for Fiscal Year 2018 (Public Law 115– 12 91; 40 U.S.C. 11301 note) is amended in section 1078— 13 14 (1) by striking subsection (a) and inserting the 15 following: 16 "(a) Definitions.—In this section: "(1) AGENCY.—The term 'agency' has the 17 18 meaning given the term in section 551 of title 5,

United States Code.

1	"(2) High value asset.—The term 'high
2	value asset' has the meaning given the term in sec-
3	tion 3552 of title 44, United States Code."; and
4	(2) in subsection (c)—
5	(A) in paragraph (2)(A)(i), by inserting ",
6	including a consideration of the impact on high
7	value assets" after "operational risks";
8	(B) in paragraph (5)—
9	(i) in subparagraph (A), by striking
10	"and" at the end;
11	(ii) in subparagraph (B), by striking
12	the period at the end and inserting "and";
13	and
14	(iii) by adding at the end the fol-
15	lowing:
16	"(C) a senior official from the Cybersecu-
17	rity and Infrastructure Security Agency of the
18	Department of Homeland Security, appointed
19	by the Director."; and
20	(C) in paragraph (6)(A), by striking "shall
21	be—" and all that follows through "4 employ-
22	ees" and inserting "shall be 4 employees".
23	(b) Subchapter I.—Subchapter I of chapter 113 of
24	subtitle III of title 40, United States Code, is amended—
25	(1) in section 11302—

1	(A) in subsection (b), by striking "use, se-
2	curity, and disposal of" and inserting "use, and
3	disposal of, and, in consultation with the Direc-
4	tor of the Cybersecurity and Infrastructure Se-
5	curity Agency and the National Cyber Director,
6	promote and improve the security of,";
7	(B) in subsection (c)(3)(B), by adding at
8	the end the following:
9	"(iii) The Director may make avail-
10	able, upon request, to the National Cyber
11	Director any cybersecurity funding infor-
12	mation provided to the Director under
13	clause (ii) of this subparagraph.";
14	(C) in subsection (f), by striking "The Di-
15	rector shall" and inserting "The Director
16	shall—
17	"(1) encourage the heads of the executive agen-
18	cies to develop and use the best practices in the ac-
19	quisition of information technology, including supply
20	chain risk management standards, guidelines, and
21	practices developed by the National Institute of
22	Standards and Technology; and
23	"(2) consult with the Federal Chief Information
24	Security Officer appointed by the President under
25	section 3607 of title 44, for the development and use

1	of risk management standards, guidelines, and prac-
2	tices developed by the National Institute of Stand-
3	ards and Technology."; and
4	(D) in subsection (h), by inserting ", in-
5	cluding cybersecurity performances," after "the
6	performances"; and
7	(2) in section 11303(b), in paragraph (2)(B)—
8	(A) in clause (i), by striking "or" at the
9	end;
10	(B) in clause (ii), by adding "or" at the
11	end; and
12	(C) by adding at the end the following:
13	"(iii) whether the function should be
14	performed by a shared service offered by
15	another executive agency.".
16	(c) Subchapter II.—Subchapter II of chapter 113
17	of subtitle III of title 40, United States Code, is amend-
18	ed—
19	(1) in section 11312(a), by inserting ", includ-
20	ing security risks" after "managing the risks";
21	(2) in section 11313(1), by striking "efficiency
22	and effectiveness" and inserting "efficiency, security,
23	and effectiveness";
24	(3) in section 11315, by adding at the end the
25	following:

1	"(d) Component Agency Chief Information Of-
2	FICERS.—The Chief Information Officer or an equivalent
3	official of a component agency shall report to—
4	"(1) the Chief Information Officer designated
5	under section 3506(a)(2) of title 44 or an equivalent
6	official of the agency of which the component agency
7	is a component; and
8	"(2) the head of the component agency.";
9	(4) in section 11317, by inserting "security,"
10	before "or schedule"; and
11	(5) in section 11319(b)(1), in the paragraph
12	heading, by striking "CIOS" and inserting "CHIEF
13	INFORMATION OFFICERS".
14	(d) Subchapter III.—Section 11331 of title 40,
15	United States Code, is amended—
16	(1) in subsection (a), by striking "section
17	3532(b)(1)" and inserting "section 3552(b)";
18	(2) in subsection (b)(1)(A), by striking "the
19	Secretary of Homeland Security" and inserting "the
20	Director of the Cybersecurity and Infrastructure Se-
21	curity Agency"; and
22	(3) by adding at the end the following:
23	"(e) REVIEW OF OFFICE OF MANAGEMENT AND
24	BUDGET GUIDANCE AND POLICY.—
25	"(1) Conduct of Review.—

"(A) IN GENERAL.—Not less frequently 1 2 than once every 3 years, the Director of the Of-3 fice of Management and Budget, in consultation 4 with, as available, the Chief Information Offi-5 cers Council, the Director of the Cybersecurity 6 and Infrastructure Security Agency, the Na-7 tional Cyber Director, the Comptroller General 8 of the United States, and the Council of the In-9 spectors General on Integrity and Efficiency, 10 shall review the efficacy of the guidance and policy promulgated by the Director in reducing 12 cybersecurity risks, including an assessment of 13 the requirements for agencies to report infor-14 mation to the Director, and determine whether 15 any changes to that guidance or policy is appro-16 priate.

- "(B) Federal risk assessments.—In conducting the review described in subparagraph (A), the Director shall consider the Federal risk assessments performed under section 3553(i) of title 44.
- "(C) REQUIREMENTS BURDEN REDUCTION AND CLARITY.—In conducting the review described in subparagraph (A), the Director shall consider the cumulative reporting and compli-

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1 ance burden to agencies as well as the clarity 2 of the requirements and deadlines contained in 3 guidance and policy documents. "(2) UPDATED GUIDANCE.—Not later than 90 4 5 days after the date on which a review is completed 6 under paragraph (1), the Director of the Office of 7 Management and Budget shall issue updated guid-8 ance or policy to agencies determined appropriate by 9 the Director, based on the results of the review. "(3) Congressional Briefing.—Not later 10 11 than 60 days after the date on which a review is 12 completed under paragraph (1), the Director is ex-13 pected to provide to the Committee on Homeland 14 Security and Governmental Affairs of the Senate 15 and the Committee on Oversight and Reform of the 16 House of Representatives a briefing on the review 17 and any newly issued guidance or policy, which shall 18 include— 19 "(A) an overview of the guidance and pol-20 icy promulgated under this section that is cur-21 rently in effect; 22 "(B) the cybersecurity risk mitigation, or 23 other cybersecurity benefit, offered by each 24 guidance or policy document described in sub-

paragraph (A); and

1	"(C) a summary of the guidance or policy
2	to which changes were determined appropriate
3	during the review and what the changes in-
4	clude.
5	"(f) Automated Standard Implementation
6	VERIFICATION.—When the Director of the National Insti-
7	tute of Standards and Technology issues a proposed
8	standard pursuant to paragraphs (2) and (3) of section
9	20(a) of the National Institute of Standards and Tech-
10	nology Act (15 U.S.C. 278g–3(a)), the Director of the Na-
11	tional Institute of Standards and Technology shall con-
12	sider developing and, if appropriate and practical, develop,
13	in consultation with the Director of the Cybersecurity and
14	Infrastructure Security Agency, specifications to enable
15	the automated verification of the implementation of con-
16	trols.".
17	SEC. 103. ACTIONS TO ENHANCE FEDERAL INCIDENT RE-
18	SPONSE.
19	(a) Responsibilities of the Cybersecurity and
20	Infrastructure Security Agency.—
21	(1) In general.—Not later than 180 days
22	after the date of the enactment of this Act, the Di-
23	rector of the Cybersecurity and Infrastructure Secu-
24	rity Agency shall—

1	(A) develop a plan for the development of
2	the analysis required under section 3597(a) of
3	title 44, United States Code, as added by this
4	Act, and the report required under subsection
5	(b) of that section that includes—
6	(i) a description of any challenges the
7	Director anticipates encountering; and
8	(ii) the use of automation and ma-
9	chine-readable formats for collecting, com-
10	piling, monitoring, and analyzing data; and
11	(B) provide to the appropriate congres-
12	sional committees a briefing on the plan devel-
13	oped under subparagraph (A).
14	(2) Briefing.—Not later than 1 year after the
15	date of the enactment of this Act, the Director of
16	the Cybersecurity and Infrastructure Security Agen-
17	cy shall provide to the appropriate congressional
18	committees a briefing on—
19	(A) the execution of the plan required
20	under paragraph (1)(A); and
21	(B) the development of the report required
22	under section 3597(b) of title 44, United States
23	Code, as added by this Act.
24	(b) Responsibilities of the Director of the
25	Office of Management and Budget.—

- (1) FISMA.—Section 2 of the Federal Informa-tion Security Modernization Act of 2014 (Public Law 113–283; 44 U.S.C. 3554 note) is amended— (A) by striking subsection (b); and by redesignating subsections (c) through (f) as subsections (b) through (e), re-spectively. (2) IN GENERAL.—The Director shall develop guidance, to be updated not less frequently than
  - (2) IN GENERAL.—The Director shall develop guidance, to be updated not less frequently than once every 2 years, on the content, timeliness, and format of the information provided by agencies under section 3594(a) of title 44, United States Code, as added by this Act.
  - (3) Guidance on Responding to Information Requests.—Not later than 1 year after the date of the enactment of this Act, the Director shall develop guidance for agencies to implement the requirement under section 3594(c) of title 44, United States Code, as added by this Act, to provide information to other agencies experiencing incidents.
  - (4) STANDARD GUIDANCE AND TEMPLATES.—
    Not later than 1 year after the date of the enactment of this Act, the Director, in consultation with the Director of the Cybersecurity and Infrastructure Security Agency, shall develop guidance and tem-

plates, to be reviewed and, if necessary, updated not less frequently than once every 2 years, for use by Federal agencies in the activities required under sections 3592, 3593, and 3596 of title 44, United States Code, as added by this Act.

## (5) CONTRACTOR AND AWARDEE GUIDANCE.—

(A) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, the Director, in coordination with the Secretary of Homeland Security, the Secretary of Defense, the Administrator of General Services, and the heads of other agencies determined appropriate by the Director, shall issue guidance to Federal agencies on how to deconflict, to the greatest extent practicable, existing regulations, policies, and procedures relating to the responsibilities of contractors and awardees established under section 3595 of title 44, United States Code, as added by this Act.

(B) EXISTING PROCESSES.—To the greatest extent practicable, the guidance issued under subparagraph (A) shall allow contractors and awardees to use existing processes for notifying Federal agencies of incidents involving information of the Federal Government.

1	(6) UPDATED BRIEFINGS.—Not less frequently
2	than once every 2 years, the Director shall provide
3	to the appropriate congressional committees an up-
4	date on the guidance and templates developed under
5	paragraphs (2) through (4).
6	(c) Update to the Privacy Act of 1974.—Sec-
7	tion 552a(b) of title 5, United States Code (commonly
8	known as the "Privacy Act of 1974") is amended—
9	(1) in paragraph (11), by striking "or" at the
10	end;
11	(2) in paragraph (12), by striking the period at
12	the end and inserting "; or"; and
13	(3) by adding at the end the following:
14	"(13) to another agency in furtherance of a re-
15	sponse to an incident (as defined in section 3552 of
16	title 44) and pursuant to the information sharing re-
17	quirements in section 3594 of title 44, if the head
18	of the requesting agency has made a written request
19	to the agency that maintains the record specifying
20	the particular portion desired and the activity for
21	which the record is sought.".

1	SEC. 104. ADDITIONAL GUIDANCE TO AGENCIES ON FISMA
2	UPDATES.
3	Not later than 1 year after the date of the enactment
4	of this Act, the Director shall issue guidance for agencies
5	on—
6	(1) performing the ongoing and continuous
7	agency system risk assessment required under sec-
8	tion 3554(a)(1)(A) of title 44, United States Code,
9	as amended by this Act;
10	(2) implementing additional cybersecurity pro-
11	cedures, which shall include resources for shared
12	services;
13	(3) establishing a process for providing the sta-
14	tus of each remedial action under section 3554(b)(7)
15	of title 44, United States Code, as amended by this
16	Act, to the Director and the Director of the Cyberse-
17	curity and Infrastructure Security Agency using au-
18	tomation and machine-readable data, as practicable,
19	which shall include—
20	(A) specific guidance for the use of auto-
21	mation and machine-readable data; and
22	(B) templates for providing the status of
23	the remedial action;
24	(4) interpreting the definition of "high value
25	asset" under section 3552 of title 44, United States
26	Code, as amended by this Act; and

1	(5) a requirement to coordinate with inspectors
2	general of agencies to ensure consistent under-
3	standing and application of agency policies for the
4	purpose of evaluations by inspectors general.
5	SEC. 105. AGENCY REQUIREMENTS TO NOTIFY PRIVATE
6	SECTOR ENTITIES IMPACTED BY INCIDENTS.
7	(a) Definitions.—In this section:
8	(1) Reporting entity.—The term "reporting
9	entity" means private organization or governmental
10	unit that is required by statute or regulation to sub-
11	mit sensitive information to an agency.
12	(2) Sensitive information.—The term "sen-
13	sitive information" has the meaning given the term
14	by the Director in guidance issued under subsection
15	(b).
16	(b) Guidance on Notification of Reporting En-
17	TITIES.—Not later than 180 days after the date of the
18	enactment of this Act, the Director shall issue guidance
19	requiring the head of each agency to notify a reporting
20	entity of an incident that is likely to substantially affect—
21	(1) the confidentiality or integrity of sensitive
22	information submitted by the reporting entity to the
23	agency pursuant to a statutory or regulatory re-
24	quirement; or

1	(2) the agency information system or systems
2	used in the transmission or storage of the sensitive
3	information described in paragraph (1).
4	TITLE II—IMPROVING FEDERAL
5	<b>CYBERSECURITY</b>
6	SEC. 201. MOBILE SECURITY STANDARDS.
7	(a) In General.—Not later than 1 year after the
8	date of the enactment of this Act, the Director shall—
9	(1) evaluate mobile application security guid-
10	ance promulgated by the Director; and
11	(2) issue guidance to secure mobile devices, in-
12	cluding for mobile applications, for every agency.
13	(b) Contents.—The guidance issued under sub-
14	section (a)(2) shall include—
15	(1) a requirement, pursuant to section
16	3506(b)(4) of title 44, United States Code, for every
17	agency to maintain a continuous inventory of
18	every—
19	(A) mobile device operated by or on behalf
20	of the agency; and
21	(B) vulnerability identified by the agency
22	associated with a mobile device; and
23	(2) a requirement for every agency to perform
24	continuous evaluation of the vulnerabilities described

- 1 in paragraph (1)(B) and other risks associated with
- 2 the use of applications on mobile devices.
- 3 (c) Information Sharing.—The Director, in co-
- 4 ordination with the Director of the Cybersecurity and In-
- 5 frastructure Security Agency, shall issue guidance to
- 6 agencies for sharing the inventory of the agency required
- 7 under subsection (b)(1) with the Director of the Cyberse-
- 8 curity and Infrastructure Security Agency, using automa-
- 9 tion and machine-readable data to the greatest extent
- 10 practicable.
- 11 (d) Briefing.—Not later than 60 days after the date
- 12 on which the Director issues guidance under subsection
- 13 (a)(2), the Director, in coordination with the Director of
- 14 the Cybersecurity and Infrastructure Security Agency,
- 15 shall provide to the appropriate congressional committees
- 16 a briefing on the guidance.
- 17 SEC. 202. DATA AND LOGGING RETENTION FOR INCIDENT
- 18 RESPONSE.
- 19 (a) RECOMMENDATIONS.—Not later than 2 years
- 20 after the date of the enactment of this Act, and not less
- 21 frequently than every 2 years thereafter, the Director of
- 22 the Cybersecurity and Infrastructure Security Agency, in
- 23 consultation with the Attorney General, shall submit to
- 24 the Director recommendations on requirements for logging

1	events on agency systems and retaining other relevant
2	data within the systems and networks of an agency.
3	(b) Contents.—The recommendations provided
4	under subsection (a) shall include—
5	(1) the types of logs to be maintained;
6	(2) the duration that logs and other relevant
7	data should be retained;
8	(3) the time periods for agency implementation
9	of recommended logging and security requirements
10	(4) how to ensure the confidentiality, integrity
11	and availability of logs;
12	(5) requirements to ensure that, upon request
13	in a manner that excludes or otherwise reasonably
14	protects personally identifiable information, and to
15	the extent permitted by applicable law (including
16	privacy and statistical laws), agencies provide logs
17	to—
18	(A) the Director of the Cybersecurity and
19	Infrastructure Security Agency for a cybersecu-
20	rity purpose; and
21	(B) the Director of the Federal Bureau of
22	Investigation, or the appropriate Federal law
23	enforcement agency, to investigate potential
24	criminal activity: and

- 1 (6) requirements to ensure that, subject to com-
- 2 pliance with statistical laws and other relevant data
- 3 protection requirements, the highest level security
- 4 operations center of each agency has visibility into
- 5 all agency logs.
- 6 (c) GUIDANCE.—Not later than 90 days after receiv-
- 7 ing the recommendations submitted under subsection (a),
- 8 the Director, in consultation with the Director of the Cy-
- 9 bersecurity and Infrastructure Security Agency and the
- 10 Attorney General, shall, as determined to be appropriate
- 11 by the Director, update guidance to agencies regarding re-
- 12 quirements for logging, log retention, log management,
- 13 sharing of log data with other appropriate agencies, or any
- 14 other logging activity determined to be appropriate by the
- 15 Director.
- 16 (d) Sunset.—This section will cease to be in effect
- 17 on the date that is 10 years after the date of the enact-
- 18 ment of this Act.
- 19 SEC. 203. FEDERAL PENETRATION TESTING POLICY.
- 20 (a) In General.—Subchapter II of chapter 35 of
- 21 title 44, United States Code, is amended by adding at the
- 22 end the following:
- 23 "§ 3559A. Federal penetration testing
- 24 "(a) Guidance.—

1	"(1) In general.—The Director shall, in con-
2	sultation with the Secretary of the Department of
3	Homeland Security acting through the Director of
4	the Cybersecurity and Infrastructure Security Agen-
5	cy, issue guidance to agencies that—
6	"(A) requires agencies to use, when and
7	where appropriate, penetration testing on agen-
8	cy systems by both Federal and non-Federal en-
9	tities, with a focus on high value assets;
10	"(B) provides policies governing agency de-
11	velopment of an operational plan, rules of en-
12	gagement for utilizing penetration testing, and
13	procedures to utilize the results of penetration
14	testing to improve the cybersecurity and risk
15	management of the agency; and
16	"(C) establishes a program under the Cy-
17	bersecurity and Infrastructure Security Agency
18	to ensure that penetration testing is being per-
19	formed appropriately by agencies and to provide
20	operational support or a shared service.
21	"(b) RESPONSIBILITIES OF OMB.—The Director, in
22	coordination with the Director of the Cybersecurity and
23	Infrastructure Security Agency, shall—
24	"(1) not less frequently than annually, inven-
25	tory all Federal penetration testing assets; and

- 1 "(2) develop and maintain a standardized proc-
- 2 ess for the use of penetration testing.
- 3 "(c) Exception for National Security Sys-
- 4 TEMS.—The guidance issued under subsection (a) shall
- 5 not apply to national security systems.
- 6 "(d) Delegation of Authority for Certain
- 7 Systems.—The authorities of the Director described in
- 8 subsection (a) shall be delegated—
- 9 "(1) to the Secretary of Defense in the case of
- systems described in section 3553(e)(2); and
- "(2) to the Director of National Intelligence in
- the case of systems described in 3553(e)(3).".
- 13 (b) DEADLINE FOR GUIDANCE.—Not later than 180
- 14 days after the date of the enactment of this Act, the Direc-
- 15 tor shall issue the guidance required under section
- 16 3559A(a) of title 44, United States Code, as added by sub-
- 17 section (a).
- 18 (c) Sunset.—This section shall sunset on the date
- 19 that is 10 years after the date of the enactment of this
- 20 Act.
- 21 (d) Clerical Amendment.—The table of sections
- 22 for chapter 35 of title 44, United States Code, is amended
- 23 by adding after the item relating to section 3559 the fol-
- 24 lowing:

<sup>&</sup>quot;3559A. Federal penetration testing.".

1 (e) Penetration Testing by the Secretary of HOMELAND SECURITY.—Section 3553(b) of title 44, 3 United States Code, as amended by section 5121, is further amended— (1) in paragraph (8)(B), by striking "and" at 5 6 the end; 7 (2) by redesignating paragraph (9) as para-8 graph (10); and (3) by inserting after paragraph (8) the fol-9 10 lowing: 11 "(9) performing penetration testing to identify vulnerabilities within Federal information systems; 12 13 and". 14 SEC. 204. ONGOING THREAT HUNTING PROGRAM. 15 (a) Threat Hunting Program.— 16 (1) In General.—Not later than 540 days 17 after the date of the enactment of this Act, the Di-18 rector of the Cybersecurity and Infrastructure Secu-19 rity Agency shall, in accordance with the authorities 20 granted the Secretary under sections 3553(b)(7)–(8) 21 and 3553(m) of title 44, United States Code (as re-22 designated by this Act), establish a program to pro-23 vide ongoing, hypothesis-driven threat-hunting serv-24 ices on the network of each agency.

1	(2) Plan.—Not later than 180 days after the
2	date of the enactment of this Act, the Director of
3	the Cybersecurity and Infrastructure Security Agen-
4	cy shall develop a plan to establish the program re-
5	quired under paragraph (1) that describes how the
6	Director of the Cybersecurity and Infrastructure Se-
7	curity Agency plans to—
8	(A) determine the method for collecting,
9	storing, accessing, analyzing, and safeguarding
10	appropriate agency data;
11	(B) provide on-premises support to agen-
12	cies;
13	(C) staff threat hunting services;
14	(D) allocate available human and financial
15	resources to implement the plan; and
16	(E) provide input to the heads of agencies
17	on the use of—
18	(i) more stringent standards under
19	section 11331(c)(1) of title 40, United
20	States Code; and
21	(ii) additional cybersecurity proce-
22	dures under section 3554 of title 44,
23	United States Code.
24	(b) Reports.—The Director of the Cybersecurity
25	and Infrastructure Security Agency, in consultation with

- 1 the Director, shall submit to the appropriate congressional
- 2 committees—

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- 3 (1) not later than 30 days after the date on 4 which the Director of the Cybersecurity and Infra-5 structure Security Agency completes the plan re-6 quired under subsection (a)(2), a report on the plan 7 to provide threat hunting services to agencies;
  - (2) not less than 30 days before the date on which the Director of the Cybersecurity and Infrastructure Security Agency begins providing threat hunting services under the program under subsection (a)(1), a report providing any updates to the plan developed under subsection (a)(2); and
- 14 (3) not later than 1 year after the date on
  15 which the Director of the Cybersecurity and Infra16 structure Security Agency begins providing threat
  17 hunting services to agencies other than the Cyberse18 curity and Infrastructure Security Agency, a report
  19 describing lessons learned from providing those serv20 ices.
- 21 SEC. 205. CODIFYING VULNERABILITY DISCLOSURE PRO-
- GRAMS.
- 23 (a) IN GENERAL.—Subchapter II of Chapter 35 of
- 24 title 44, United States Code, is amended by inserting after
- 25 section 3559A, as added by section 204, the following:

## "§ 3559B. Federal vulnerability disclosure programs 1 "(a) Definitions.—In this section: 2 3 "(1) Report.—The term 'report' means a vul-4 nerability disclosure made to an agency by a re-5 porter. "(2) REPORTER.—The term 'reporter' means 6 7 an individual that submits a vulnerability report 8 pursuant to the vulnerability disclosure process of an 9 agency. "(b) Responsibilities of OMB.— 10 "(1) Limitation on legal action.—The Di-11 12 rector of the Office of Management and Budget, in 13 consultation with the Attorney General, shall issue 14 guidance to agencies to not recommend or pursue 15 legal action against a reporter or an individual that 16 conducts a security research activity that the head 17 of the agency determines— "(A) represents a good faith effort to fol-18 19 low the vulnerability disclosure policy of the 20 agency developed under subsection (d)(2); and "(B) is authorized under the vulnerability 21 22 disclosure policy of the agency developed under 23 subsection (d)(2). 24 "(2) SHARING INFORMATION WITH CISA.—The 25 Director of the Office of Management and Budget, 26 in coordination with the Director of the Cybersecu-

1	rity and Infrastructure Security Agency and in con-
2	sultation with the National Cyber Director, shall
3	issue guidance to agencies on sharing relevant infor-
4	mation in a consistent, automated, and machine
5	readable manner with the Director of the Cybersecu-
6	rity and Infrastructure Security Agency, including—
7	"(A) any valid or credible reports of newly
8	discovered or not publicly known vulnerabilities
9	(including misconfigurations) on Federal infor-
10	mation systems that use commercial software or
11	services;
12	"(B) information relating to vulnerability
13	disclosure, coordination, or remediation activi-
14	ties of an agency, particularly as those activities
15	relate to outside organizations—
16	"(i) with which the head of the agency
17	believes the Director of the Cybersecurity
18	and Infrastructure Security Agency can as-
19	sist; or
20	"(ii) about which the head of the
21	agency believes the Director of the Cyber-
22	security and Infrastructure Security Agen-
23	cy should know; and
24	"(C) any other information with respect to
25	which the head of the agency determines helpful

1	or necessary to involve the Director of the Cy-
2	bersecurity and Infrastructure Security Agency.
3	"(3) Agency vulnerability disclosure
4	POLICIES.—The Director shall issue guidance to
5	agencies on the required minimum scope of agency
6	systems covered by the vulnerability disclosure policy
7	of an agency required under subsection $(d)(2)$ .
8	"(c) Responsibilities of CISA.—The Director of
9	the Cybersecurity and Infrastructure Security Agency
10	shall—
11	"(1) provide support to agencies with respect to
12	the implementation of the requirements of this sec-
13	tion;
14	"(2) develop tools, processes, and other mecha-
15	nisms determined appropriate to offer agencies capa-
16	bilities to implement the requirements of this sec-
17	tion; and
18	"(3) upon a request by an agency, assist the
19	agency in the disclosure to vendors of newly identi-
20	fied vulnerabilities in vendor products and services.
21	"(d) Responsibilities of Agencies.—
22	"(1) Public information.—The head of each
23	agency shall make publicly available, with respect to
24	each internet domain under the control of the agen-
25	cy that is not a national security system—

1	"(A) an appropriate security contact; and
2	"(B) the component of the agency that is
3	responsible for the internet accessible services
4	offered at the domain.
5	"(2) Vulnerability disclosure policy.—
6	The head of each agency shall develop and make
7	publicly available a vulnerability disclosure policy for
8	the agency, which shall—
9	"(A) describe—
10	"(i) the scope of the systems of the
11	agency included in the vulnerability disclo-
12	sure policy;
13	"(ii) the type of information system
14	testing that is authorized by the agency;
15	"(iii) the type of information system
16	testing that is not authorized by the agen-
17	cy; and
18	"(iv) the disclosure policy of the agen-
19	cy for sensitive information;
20	"(B) with respect to a report to an agency,
21	describe—
22	"(i) how the reporter should submit
23	the report; and
24	"(ii) if the report is not anonymous,
25	when the reporter should anticipate an ac-

1	knowledgment of receipt of the report by
2	the agency;
3	"(C) include any other relevant informa-
4	tion; and
5	"(D) be mature in scope, covering all inter-
6	net accessible Federal information systems used
7	or operated by that agency or on behalf of that
8	agency.
9	"(3) Identified vulnerabilities.—The head
10	of each agency shall incorporate any vulnerabilities
11	reported under paragraph (2) into the vulnerability
12	management process of the agency in order to track
13	and remediate the vulnerability.
14	"(e) Congressional Reporting.—Not later than
15	90 days after the date of the enactment of the Federal
16	Information Security Modernization Act of 2022, and an-
17	nually thereafter for a 3-year period, the Director of the
18	Cybersecurity and Infrastructure Security Agency, in con-
19	sultation with the Director, shall provide to the Committee
20	on Homeland Security and Governmental Affairs of the
21	Senate and the Committee on Oversight and Reform of
22	the House of Representatives a briefing on the status of
23	the use of vulnerability disclosure policies under this sec-
24	tion at agencies, including, with respect to the guidance

- 1 issued under subsection (b)(3), an identification of the
- 2 agencies that are compliant and not compliant.
- 3 "(f) Exemptions.—The authorities and functions of
- 4 the Director and Director of the Cybersecurity and Infra-
- 5 structure Security Agency under this section shall not
- 6 apply to national security systems.
- 7 "(g) Delegation of Authority for Certain
- 8 Systems.—The authorities of the Director and the Director
- 9 tor of the Cybersecurity and Infrastructure Security Agen-
- 10 cy described in this section shall be delegated—
- 11 "(1) to the Secretary of Defense in the case of
- systems described in section 3553(e)(2); and
- "(2) to the Director of National Intelligence in
- 14 the case of systems described in section
- 15 3553(e)(3).".
- 16 (b) Sunset.—This section shall sunset on the date
- 17 that is 10 years after the date of the enactment of this
- 18 Act.
- 19 (c) Clerical Amendment.—The table of sections
- 20 for chapter 35 of title 44, United States Code, is amended
- 21 by adding after the item relating to section 3559A, as
- 22 added by this Act, the following:
  - "3559B. Federal vulnerability disclosure programs.".
- 23 SEC. 206. IMPLEMENTING ZERO TRUST ARCHITECTURE.
- 24 (a) Guidance.—The Director shall maintain guid-
- 25 ance on the adoption of zero trust architecture and not

- 1 later than 2 years after the date of the enactment of this
- 2 Act, provide an update to the appropriate congressional
- 3 committees on progress in increasing the internal defenses
- 4 of agency systems through such adoption across the gov-
- 5 ernment, including—
- 6 (1) shifting away from "trusted networks" to
- 7 implement security controls based on a presumption
- 8 of compromise;
- 9 (2) implementing principles of least privilege in
- administering information security programs;
- 11 (3) limiting the ability of entities that cause in-
- cidents to move laterally through or between agency
- 13 systems;
- 14 (4) identifying incidents quickly;
- 15 (5) isolating and removing unauthorized entities
- from agency systems as quickly as practicable, ac-
- 17 counting for intelligence or law enforcement pur-
- poses;
- 19 (6) otherwise increasing the resource costs for
- entities that cause incidents to be successful; and
- 21 (7) a summary of the agency progress reports
- required under subsection (b).
- 23 (b) Agency Progress Reports.—Not later than
- 24 270 days after the date of the enactment of this Act, the
- 25 head of each agency shall submit to the Director a

- 1 progress report on implementing an information security
- 2 program based on a zero trust architecture, which shall
- 3 include—
- 4 (1) a description of any steps the agency has
- 5 completed, including progress toward achieving any
- 6 requirements issued by the Director, including the
- 7 adoption of any models or reference architecture;
- 8 (2) an identification of activities that have not
- 9 yet been completed and that would have the most
- 10 immediate security impact; and
- 11 (3) a schedule to implement any planned activi-
- ties.

#### 13 SEC. 207. GAO AUTOMATION REPORT.

- Not later than 2 years after the date of the enact-
- 15 ment of this Act, the Comptroller General of the United
- 16 States shall perform a study on the use of automation and
- 17 machine-readable data across the Federal Government for
- 18 cybersecurity purposes, including the automated updating
- 19 of cybersecurity tools, sensors, or processes employed by
- 20 agencies under paragraphs (1), (5)(C), and (8)(B) of sec-
- 21 tion 3554(b) of title 44, United States Code.

1	SEC. 208. EXTENSION OF FEDERAL ACQUISITION SECURITY
2	COUNCIL.
3	(a) Extension.—Section 1328 of title 41, United
4	States Code, is amended by striking "the date that" and
5	all that follows and inserting "December 31, 2026".
6	(b) Designation.—Section 1322(c)(1) of title 41,
7	United States Code, is amended by striking "Not later
8	than" and all that follows through the end of the para-
9	graph and inserting the following: "The Director of OMB
10	shall designate the Federal Chief Information Security Of-
11	ficer appointed by the President under section 3607 of
12	title 44, or an equivalent senior-level official from the Of-
13	fice of Management and Budget if the position is vacant,
14	to serve as the Chairperson of the Council.".
15	(c) Requirement.—Subsection 1326(b) of title 41,
16	United States Code, is amended—
17	(1) in paragraph (5), by striking "; and and
18	inserting a semicolon;
19	(2) by redesignating paragraph (6) as para-
20	graph (7); and
21	(3) by inserting after paragraph (5) the fol-
22	lowing new paragraph:
23	"(6) maintaining an up-to-date and accurate in-
24	ventory of software in use by the agency and, when
25	available, the components of such software, including
26	any available Software Bills of Materials, as applica-

- 1 ble, that can be communicated when requested to 2 the Federal Acquisition Security Council, the Na-3 tional Cybersecurity Director, or the Secretary of 4 Homeland Security acting through the Director of 5 Cybersecurity and Infrastructure Security Agency.". SEC. 209. FEDERAL CHIEF INFORMATION SECURITY OFFI-7 CER. 8 (a) AMENDMENT.—Chapter 36 of title 44, United States Code, is amended by inserting at the end: 10 "§ 3607. Federal chief information security officer 11 "(a) Establishment.—There is established in the 12 Office of the Federal Chief Information Officer of the Office of Management and Budget a Federal Chief Informa-
- 16 "(b) Duties.—The Federal Chief Information Secu-

tion Security Officer, who shall be appointed by the Presi-

- 17 rity Officer shall report to the Federal Chief Information
- 18 Officer, and assist the Chief Information Officer in car-
- 19 rying out—

dent.

- 20 "(1) all functions under this chapter;
- 21 "(2) all functions assigned to the Director
- 22 under title II of the E–Government Act of 2002;
- 23 "(3) other electronic government initiatives,
- consistent with other statutes;

1	"(4) assisting the Director with carrying out
2	budget formation duties under subtitle II of title 31
3	as it pertains to the information technology, oper-
4	ations, and workforce resources of Federal agencies
5	to fulfill cybersecurity responsibilities under section
6	3554, and the duties of the Department of Home-
7	land Security duties designated under section 3553;
8	and
9	"(5) other initiatives determined by the Chief
10	Information Officer.
11	"(c) Additional Duties.—The Federal Chief Infor-
12	mation Security Officer shall work with the Chief Informa-
13	tion Officer to oversee implementation of electronic Gov-
14	ernment under the E–Government Act of 2002, and other
15	relevant statutes, in a manner consistent with law, relating
16	to—
17	"(1) cybersecurity strategy, policy, and oper-
18	ations, including the performance of the duties of
19	the Director under subchapter II of chapter 35;
20	"(2) the development of enterprise architec-
21	tures;
22	"(3) information security;
23	"(4) privacy;
24	"(5) access to, dissemination of, and preserva-
25	tion of Government information; and

1	"(6) other areas of electronic Government as
2	determined by the Administrator.
3	"(d) Assistance.—The Federal Chief Information
4	Security Officer shall assist the Administrator in the per-
5	formance of electronic Government functions as described
6	in section 3602(f).".
7	(b) Deputy National Cyber Director.—Section
8	1752 of the William M. (Mac) Thornberry National De-
9	fense Authorization Act for Fiscal Year 2021 (6 U.S.C.
10	1500; 134 Stat. 4144) is amended by adding at the end
11	the following new subsection:
12	"(d) DEPUTY DIRECTOR.—There shall be a Deputy
13	National Cyber Director for Agency Strategy, Capabilities,
14	and Budget, who shall be the Federal Chief Information
15	Security Officer appointed by the President under section
16	3607 of title 44, United States Code, and shall report to
17	the Director and assist the office in carrying out the fol-
18	lowing duties as it applies to the protection of Federal in-
19	formation systems by the agencies—
20	"(1) the preparation and oversight over the im-
21	plementation of national cyber policy and strategy
22	under subsection (e)(1)(C)(i);
23	"(2) the formation and issuance of rec-
24	ommendations to agencies on resource allocations
25	and policies under subsection (c)(1)(C)(ii);

	97
1	"(3) reviewing annual budget proposals and
2	making related recommendations under subsection
3	(e)(1)(C)(iii);
4	"(4) the functions, as determined necessary, of
5	the National Cyber Director under subchapter II of
6	chapter 35 of title 44, United States Code; and
7	"(5) other initiatives determined by the Direc-
8	tor, or to be necessary to coordinate with the Office
9	by the Federal Chief Information Officer.".
10	(c) Clerical Amendment.—The table of sections
11	for chapter 36 of title 44, United States Code, is amended
12	by adding after the item relating to section 3606 the fol-
13	lowing:
	"3607. Federal chief information security officer.".
14	SEC. 210. EXTENSION OF CHIEF DATA OFFICER COUNCIL.
15	Section 2520A(e)(2) of title 44, United States Code,
16	is amended by striking "upon the expiration of the 2-year
17	period that begins on the date the Comptroller General
18	submits the report under paragraph (1) to Congress" and
19	inserting "January 31, 2030".
20	SEC. 211. COUNCIL OF THE INSPECTORS GENERAL ON IN-
21	TEGRITY AND EFFICIENCY DASHBOARD.
22	Section 11(e)(2) of the Inspector General Act of 1978

(1) in subparagraph (A), by striking "and" at

(5 U.S.C. App.) is amended—

25 the end;

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1	(2) by redesignating subparagraph (B) as sub-
2	paragraph (C); and
3	(3) by inserting after subparagraph (A) the fol-
4	lowing:
5	"(B) that shall include a dashboard of
6	open information security recommendations
7	identified in the independent evaluations re-
8	quired by section 3555(a) of title 44, United
9	States Code; and".
10	SEC. 212. QUANTITATIVE CYBERSECURITY METRICS.
11	(a) Definition of Covered Metrics.—In this sec-
12	tion, the term "covered metrics" means the metrics estab-
13	lished, reviewed, and updated under section 224(c) of the
14	Cybersecurity Act of 2015 (6 U.S.C. 1522(c)).
15	(b) Updating and Establishing Metrics.—Not
16	later than 1 year after the date of the enactment of this
17	Act, the Director of the Cybersecurity and Infrastructure
18	Security Agency, in coordination with the Director and
19	consulting with the Director of the National Institute of
20	Standards and Technology, shall—
21	(1) evaluate any covered metrics established as
22	of the date of the enactment of this Act; and
23	(2) as appropriate and pursuant to section
24	224(c) of the Cybersecurity Act of 2015 (6 U.S.C.
25	1522(e))—

- 1 (A) update the covered metrics; and
- 2 (B) establish new covered metrics.

### (c) Implementation.—

- (1) IN GENERAL.—Not later than 540 days after the date of the enactment of this Act, the Director, in coordination with the Director of the Cybersecurity and Infrastructure Security Agency, shall promulgate guidance that requires each agency to use covered metrics to track trends in the cybersecurity and incident response capabilities of the agency.
- (2) Performance Demonstration.—The guidance issued under paragraph (1) and any subsequent guidance shall require agencies to share with the Director of the Cybersecurity and Infrastructure Security Agency data demonstrating the performance of the agency using the covered metrics included in the guidance.
- (3) Penetration tests.—On not less than 2 occasions during the 2-year period following the date on which guidance is promulgated under paragraph (1), the Director shall ensure that not less than 3 agencies are subjected to substantially similar penetration tests, as determined by the Director, in coordination with the Director of the Cybersecurity

- and Infrastructure Security Agency, in order to validate the utility of the covered metrics.
- 3 (4) Analysis capacity.—The Director of the
  4 Cybersecurity and Infrastructure Security Agency
  5 shall develop a capability that allows for the analysis
  6 of the covered metrics, including cross-agency per7 formance of agency cybersecurity and incident re8 sponse capability trends.

### (d) Congressional Reports.—

- (1) UTILITY OF METRICS.—Not later than 1 year after the date of the enactment of this Act, the Director of the Cybersecurity and Infrastructure Security Agency, in coordination with the Director, shall submit to the appropriate congressional committees a report on the utility of the covered metrics.
- (2) USE OF METRICS.—Not later than 180 days after the date on which the Director promulgates guidance under subsection (c)(1), the Director shall submit to the appropriate congressional committees a report on the results of the use of the covered metrics by agencies.
- 22 (e) Federal Cybersecurity Enhancement Act 23 of 2015 Updates.—The Federal Cybersecurity Enhance-24 ment Act of 2015 (6 U.S.C. 1521 et seq.) is amended—

1	(1) in section 222(3)(B), by inserting "and the
2	Committee on Oversight and Reform" before "of the
3	House of Representatives"; and
4	(2) in section 224—
5	(A) by amending subsection (c) to read as
6	follows:
7	"(c) Improved Metrics.—The Director of the Cy-
8	bersecurity and Infrastructure Security Agency, in coordi-
9	nation with the Director, shall establish, review, and up-
10	date metrics to measure the cybersecurity and incident re-
11	sponse capabilities of agencies in accordance with the re-
12	sponsibilities of agencies under section 3554 of title 44,
13	United States Code.";
14	(B) by striking subsection (e); and
15	(C) by redesignating subsection (f) as sub-
16	section (e).
17	TITLE III—PILOT PROGRAMS TO
18	ENHANCE FEDERAL CYBER-
19	SECURITY
20	SEC. 301. RISK-BASED BUDGET PILOT.
21	(a) Definitions.—In this section:
22	(1) Appropriate congressional commit-
23	TEES.—The term "appropriate congressional com-
24	mittees" means—

1	(A) the Committee on Homeland Security
2	and Governmental Affairs and the Committee
3	on Appropriations of the Senate; and
4	(B) the Committee on Homeland Security,
5	the Committee on Oversight and Reform, and
6	the Committee on Appropriations of the House
7	of Representatives.
8	(2) Information technology.—The term
9	"information technology"—
10	(A) has the meaning given the term in sec-
11	tion 11101 of title 40, United States Code; and
12	(B) includes the hardware and software
13	systems of a Federal agency that monitor and
14	control physical equipment and processes of the
15	Federal agency.
16	(3) RISK-BASED BUDGET.—The term "risk-
17	based budget" means a budget—
18	(A) developed by identifying and
19	prioritizing cybersecurity risks and
20	vulnerabilities, including impact on agency oper-
21	ations in the case of a cyber attack, through
22	analysis of cyber threat intelligence, incident
23	data, and tactics, techniques, procedures, and
24	capabilities of cyber threats; and

1		(B) that allocates resources based on the
2		risks identified and prioritized under subpara-
3		graph (A).
4	(b)	ESTABLISHMENT OF RISK-BASED BUDGET
5	Рігот.—	_
6		(1) In general.—
7		(A) Model.—Not later than 1 year after
8		the first publication of the budget submitted by
9		the President under section 1105 of title 31,
10		United States Code, following the date of the
11		enactment of this Act, the Director, in consulta-
12		tion with the Director of the Cybersecurity and
13		Infrastructure Security Agency and the Na-
14		tional Cyber Director and in coordination with
15		the Director of the National Institute of Stand-
16		ards and Technology, shall conduct a pilot for
17		creating a risk-based budget for cybersecurity
18		spending.
19		(B) CONTENTS OF PILOT.—The pilot re-
20		quired to be developed under this paragraph
21		shall—
22		(i) consider Federal and non-Federal
23		cyber threat intelligence products, where
24		available, to identify threats,
25		vulnerabilities, and risks;

1	(ii) consider the impact on agency op-
2	erations of incidents, including the
3	interconnectivity to other agency systems
4	and the operations of other agencies;
5	(iii) indicate where resources should
6	be allocated to have the greatest impact on
7	mitigating current and future threats and
8	current and future cybersecurity capabili-
9	ties;
10	(iv) be used to inform acquisition and
11	sustainment of—
12	(I) information technology and
13	cybersecurity tools;
14	(II) information technology and
15	cybersecurity architectures;
16	(III) information technology and
17	cybersecurity personnel; and
18	(IV) cybersecurity and informa-
19	tion technology concepts of operations;
20	and
21	(v) be used to evaluate and inform
22	government-wide cybersecurity programs of
23	the Department of Homeland Security.
24	(2) Reports.—Not later than 2 years after the
25	first publication of the budget submitted by the

- President under section 1105 of title 31, United States Code, following the date of the enactment of this Act, the Director shall submit a report to Congress on the implementation of the pilot for risk-based budgeting for cybersecurity spending, an assessment of agency implementation, and an evaluation of whether the risk-based budget helps to mitigate cybersecurity vulnerabilities.
  - (3) GAO REPORT.—Not later than 3 years after the date on which the first budget of the President is submitted to Congress containing the validation required under section 1105(a)(35)(A)(i)(V) of title 31, United States Code, as amended by subsection (c), the Comptroller General of the United States shall submit to the appropriate congressional committees a report that includes—
    - (A) an evaluation of the success of pilot agencies in implementing risk-based budgets;
    - (B) an evaluation of whether the riskbased budgets developed by pilot agencies are effective at informing Federal Government-wide cybersecurity programs; and
  - (C) any other information relating to riskbased budgets the Comptroller General determines appropriate.

# 1 SEC. 302. ACTIVE CYBER DEFENSIVE STUDY.

2	(a) Definition.—In this section, the term "active
3	defense technique" has the meaning given in guidance
4	issued by the Director, in coordination with the Attorney
5	General.
6	(b) STUDY.—Not later than 180 days after the date
7	of the enactment of this Act, the Director of the Cyberse-
8	curity and Infrastructure Security Agency, in coordination
9	with the Director and the National Cyber Director, shall
10	perform a study on the use of active defense techniques
11	to enhance the security of agencies, which shall include—
12	(1) a review of legal restrictions on the use of
13	different active cyber defense techniques in Federal
14	environments, in consultation with the Attorney
15	General;
16	(2) an evaluation of—
17	(A) the efficacy of a selection of active de-
18	fense techniques determined by the Director of
19	the Cybersecurity and Infrastructure Security
20	Agency; and
21	(B) factors that impact the efficacy of the
22	active defense techniques evaluated under sub-
23	paragraph (A);
24	(3) recommendations on safeguards and proce-
25	dures that shall be established to require that active
26	defense techniques are adequately coordinated to en-

1	sure	that	active	defense	techniques	do	$\operatorname{not}$	imped	lе

- 2 agency operations and mission delivery, threat re-
- 3 sponse efforts, criminal investigations, and national
- 4 security activities, including intelligence collection;
- 5 and
- 6 (4) the development of a framework for the use
- 7 of different active defense techniques by agencies.
- 8 SEC. 303. SECURITY OPERATIONS CENTER AS A SERVICE
- 9 PILOT.
- 10 (a) Purpose.—The purpose of this section is for the
- 11 Director of the Cybersecurity and Infrastructure Security
- 12 Agency to run a security operation center on behalf of the
- 13 head of another agency, alleviating the need to duplicate
- 14 this function at every agency, and empowering a greater
- 15 centralized cybersecurity capability.
- 16 (b) Plan.—Not later than 1 year after the date of
- 17 the enactment of this Act, the Director of the Cybersecu-
- 18 rity and Infrastructure Security Agency shall develop a
- 19 plan to establish a centralized Federal security operations
- 20 center shared service offering within the Cybersecurity
- 21 and Infrastructure Security Agency.
- (c) Contents.—The plan required under subsection
- 23 (b) shall include considerations for—
- 24 (1) collecting, organizing, and analyzing agency
- 25 information system data in real time;

1	(2)	staffing	and	resources;	and
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- (3) appropriate interagency agreements, concepts of operations, and governance plans.
  - (d) Pilot Program.—

- (1) IN GENERAL.—Not later than 180 days after the date on which the plan required under subsection (b) is developed, the Director of the Cybersecurity and Infrastructure Security Agency, in consultation with the Director of the Office of Management and Budget, shall enter into a 1-year agreement with not less than 2 agencies to offer a security operations center as a shared service.
- (2) Additional agreements.—After the date on which the briefing required under subsection (e)(1) is provided, the Director of the Cybersecurity and Infrastructure Security Agency, in consultation with the Director of the Office of Management and Budget, may enter into additional 1-year agreements described in paragraph (1) with agencies.

# 20 (e) Briefing and Report.—

(1) Briefing.—Not later than 270 days after the date of the enactment of this Act, the Director of the Cybersecurity and Infrastructure Security Agency shall provide to appropriate congressional committees a briefing on the parameters of any 1-

1	year agreements entered into under subsection
2	(d)(1).
3	(2) Report.—Not later than 90 days after the
4	date on which the first 1-year agreement entered
5	into under subsection (d) expires, the Director of the
6	Cybersecurity and Infrastructure Security Agency
7	shall submit to appropriate congressional committees
8	a report on—
9	(A) the agreement; and
10	(B) any additional agreements entered into
11	with agencies under subsection (d).
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12	SEC. 304. ENDPOINT DETECTION AND RESPONSE AS A
12 13	SEC. 304. ENDPOINT DETECTION AND RESPONSE AS A SERVICE PILOT.
13	SERVICE PILOT.
13 14 15	SERVICE PILOT.  (a) Purpose.—The Cybersecurity and Infrastruc-
13 14 15 16	SERVICE PILOT.  (a) PURPOSE.—The Cybersecurity and Infrastructure Security Agency is directed to establish and conduct
13 14 15 16 17	SERVICE PILOT.  (a) PURPOSE.—The Cybersecurity and Infrastructure Security Agency is directed to establish and conduct a pilot to determine the feasibility, value, and efficacy of
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13 14 15 16 17	SERVICE PILOT.  (a) PURPOSE.—The Cybersecurity and Infrastructure Security Agency is directed to establish and conduct a pilot to determine the feasibility, value, and efficacy of providing endpoint detection and response capabilities as a shared service to Federal agencies to reduce costs, en-
13 14 15 16 17 18	service pilot.  (a) Purpose.—The Cybersecurity and Infrastructure Security Agency is directed to establish and conduct a pilot to determine the feasibility, value, and efficacy of providing endpoint detection and response capabilities as a shared service to Federal agencies to reduce costs, enhance interoperability, and continuously detect and miti-
13 14 15 16 17 18 19 20	service Pilot.  (a) Purpose.—The Cybersecurity and Infrastructure Security Agency is directed to establish and conduct a pilot to determine the feasibility, value, and efficacy of providing endpoint detection and response capabilities as a shared service to Federal agencies to reduce costs, enhance interoperability, and continuously detect and mitigate threat activity on Federal networks.
13 14 15 16 17 18 19 20 21	SERVICE PILOT.  (a) Purpose.—The Cybersecurity and Infrastructure Security Agency is directed to establish and conduct a pilot to determine the feasibility, value, and efficacy of providing endpoint detection and response capabilities as a shared service to Federal agencies to reduce costs, enhance interoperability, and continuously detect and mitigate threat activity on Federal networks.  (b) Plan.—Not later than 90 days after the date of

1	sponse shared service offering within the Cybersecurity
2	and Infrastructure Security Agency.
3	(c) Contents.—The plan required under subsection
4	(b) shall include considerations for—
5	(1) understanding and assessing the full extent
6	of endpoints across the Federal civilian environment;
7	(2) maximizing the value of existing agency in-
8	vestments in endpoint detection and response tools
9	and services;
10	(3) aggregating the available contract vehicles
11	and options that provide agencies with appropriate
12	capability for their environment and architecture;
13	(4) equipping all endpoints and services of pilot
14	agencies with endpoint detection and response pro-
15	grams;
16	(5) aggregating network, cloud, and endpoint
17	data from both within the agency and across agen-
18	cies to provide enterprise-wide monitoring of the net-
19	work to detect abnormal network behavior and auto-
20	mate defensive capabilities; and
21	(6) appropriate interagency agreements, con-
22	cepts of operations, and governance plans.
23	(d) Pilot Program.—
24	(1) In general.—Not later than 180 days
25	after the date on which the plan required under sub-

- section (b) is developed, the Director of the Cybersecurity and Infrastructure Security Agency, in consultation with the Director, shall enter into a 1-year agreement with not less than 2 agencies to offer endpoint detection and response as a shared service.
  - (2) ADDITIONAL AGREEMENTS.—After the date on which the briefing required under subsection (e)(1) is provided, the Director of the Cybersecurity and Infrastructure Security Agency, in consultation with the Director, may enter into additional 1-year agreements described in paragraph (1) with agencies.

#### (e) Briefing and Report.—

- (1) Briefing.—Not later than 270 days after the date of the enactment of this Act, the Director of the Cybersecurity and Infrastructure Security Agency shall provide to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Homeland Security and the Committee on Oversight and Reform of the House of Representatives a briefing on the parameters of any 1-year agreements entered into under subsection (d)(1).
- (2) REPORT.—Not later than 90 days after the date on which the first 1-year agreement entered

1	into under subsection (d) expires, the Director of the
2	Cybersecurity and Infrastructure Security Agency
3	shall submit to the Committee on Homeland Secu-
4	rity and Governmental Affairs of the Senate and the
5	Committee on Homeland Security and the Com-
6	mittee on Oversight and Reform of the House of
7	Representatives a report on—
8	(A) the agreement; and
9	(B) any additional agreements entered into
10	with agencies under subsection (d).

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