# [DISCUSSION DRAFT]

**H.R**.

117th CONGRESS 2D Session

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

M\_\_\_\_ introduced the following bill; which was referred to the Committee on \_\_\_\_\_

# 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".

# 6 SEC. 2. TABLE OF CONTENTS.

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 principles.
- Sec. 207. GAO automation report.
- Sec. 208. Extension of Federal Acquisition Security Council.
- Sec. 209. Federal chief information security officer.
- Sec. 210. Council of the inspectors general on integrity and efficiency dashboard.
- Sec. 211. 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 shared service pilot.

### 1 SEC. 3. DEFINITIONS.

- 2 In this Act, unless otherwise specified:
- 3 (1) ADDITIONAL CYBERSECURITY PROCE4 DURE.—The term "additional cybersecurity proce5 dure" has the meaning given the term in section
  6 3552(b) of title 44, United States Code, as amended
  7 by this Act.
  8 (2) AGENCY.—The term "agency" has the
- 9 meaning given the term in section 3502 of title 44,10 United States Code.

1	(3) Appropriate congressional commit-
2	TEES.—The term "appropriate congressional com-
3	mittees" means—
4	(A) the Committee on Homeland Security
5	and Governmental Affairs of the Senate;
6	(B) the Committee on Oversight and Re-
7	form of the House of Representatives; and
8	(C) the Committee on Homeland Security
9	of the House of Representatives.
10	(4) DIRECTOR.—The term "Director" means
11	the Director of the Office of Management and Budg-
12	et.
13	(5) INCIDENT.—The term "incident" has the
14	meaning given the term in section 3552(b) of title
15	44, United States Code.
16	(6) NATIONAL SECURITY SYSTEM.—The term
17	"national security system" has the meaning given
18	the term in section 3552(b) of title 44, United
19	States Code.
20	(7) PENETRATION TEST.—The term "penetra-
21	tion test" has the meaning given the term in section
22	3552(b) of title 44, United States Code, as amended
23	by this Act.
24	(8) THREAT HUNTING.—The term "threat
25	hunting" means iteratively searching for threats to

4 systems that evade detection by automated threat 1 2 detection systems. TITLE I—UPDATES TO FISMA 3 SEC. 101. TITLE 44 AMENDMENTS. 4 5 (a) SUBCHAPTER I AMENDMENTS.—Subchapter I of 6 chapter 35 of title 44, United States Code, is amended— 7 (1) in subsection (a)(1)(B) of section 3504— 8 (A) by striking clause (v) and inserting the 9 following: "(v) confidentiality, privacy, 10 disclo-11 sure, and sharing of information;"; 12 (B) by redesignating clause (vi) as clause 13 (vii); and 14 (C) by inserting after clause (v) the fol-15 lowing: "(vi) in consultation with the National 16 17 Cyber Director, security of information; 18 and"; 19 (2) in section 3505— 20 (A) in paragraph (2) of the first subsection 21 designated as subsection (c) by adding "dis-22 covery of internet-accessible information sys-23 tems and assets, as well as" after "an inventory

24 under this subsection shall include";

1	(B) in paragraph (3) of the first subsection
2	designated as subsection (c)—
3	(i) in subparagraph (B)—
4	(I) by inserting "the Secretary of
5	Homeland Security acting through the
6	Director of the Cybersecurity and In-
7	frastructure Security Agency, the Na-
8	tional Cyber Director, and" before
9	"the Comptroller General"; and
10	(II) by striking "and" at the end;
11	(ii) in subparagraph (C)(v), by strik-
12	ing the period at the end and inserting ";
13	and"; and
14	(iii) by adding at the end the fol-
15	lowing:
16	"(D) maintained on a continual basis
17	through the use of automation, machine-read-
18	able data, and scanning wherever practicable.";
19	and
20	(C) by striking the second subsection des-
21	ignated as subsection (c);
22	(3) in section 3506—
23	(A) in subsection $(a)(3)$ , by inserting "In
24	carrying out these duties, the Chief Information
25	Officer shall coordinate, as appropriate, with

1	the Chief Data Officer in accordance with the
2	designated functions under section 3520(c)."
3	after "reduction of information collection bur-
4	dens on the public.";
5	(B) in subsection $(b)(1)(C)$ , by inserting ",
6	availability" after "integrity";
7	(C) in subsection (g)—
8	(i) in paragraph (1), by striking
9	"and" at the end; and
10	(ii) in paragraph (2), by striking the
11	period at the end and inserting "; and";
12	and
13	(D) in subsection $(h)(3)$ , by inserting "se-
14	curity," after "efficiency,"; and
15	(4) in section 3513—
16	(A) by redesignating subsection (c) as sub-
17	section (d); and
18	(B) by inserting after subsection (b) the
19	following:
20	"(c) Each agency providing a written plan under sub-
21	section (b) shall provide any portion of the written plan
22	addressing information security to the National Cyber Di-
23	rector.".
24	(b) Subchapter II Definitions.—

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1	(1) IN GENERAL.—Section 3552(b) of title 44,
2	United States Code, is amended—
3	(A) by redesignating paragraphs $(1)$ , $(2)$ ,
4	(3), (4), (5), (6), and (7) as paragraphs (2),
5	(4), (5), (6), (7), (9), and (11), respectively;
6	(B) by inserting before paragraph (2), as
7	so redesignated, the following:
8	"(1) The term 'additional cybersecurity proce-
9	dure' means a process, procedure, or other activity
10	that is established in excess of the information secu-
11	rity standards promulgated under section 11331(b)
12	of title 40 to increase the security and reduce the cy-
13	bersecurity risk of agency systems.";
14	(C) by inserting after paragraph (2), as so
15	redesignated, the following:
16	"(3) The term 'high value asset' means infor-
17	mation or an information system that the head of an
18	agency determines, using policies, principles, stand-
19	ards, or guidelines issued by the Director under sec-
20	tion 3553(a), to be so critical to the agency that the
21	loss or corruption of the information or the loss of
22	access to the information system would have a seri-
23	ous impact on the ability of the agency to perform
24	the mission of the agency or conduct business.";

1	(D) by inserting after paragraph (7), as so
2	redesignated, the following:
3	"(8) The term 'major incident' has the meaning
4	given the term in guidance issued by the Director
5	under section 3598(a).";
6	(E) by inserting after paragraph (9), as so
7	redesignated, the following:
8	((10) The term 'penetration test' has the mean-
9	ing given the term in guidance issued by the Direc-
10	tor."; and
11	(F) by inserting after paragraph (11), as
12	so redesignated, the following:
13	"(12) The term 'shared service' means a cen-
14	tralized business or mission capability that is pro-
15	vided to multiple organizations within an agency or
16	to multiple agencies.".
17	(2) Conforming Amendments.—
18	(A) Homeland security act of 2002.—
19	Section $1001(c)(1)(A)$ of the Homeland Secu-
20	rity Act of 2002 (6 U.S.C. 511(1)(A)) is
21	amended by striking "section $3552(b)(5)$ " and
22	inserting "section 3552(b)".
23	(B) TITLE 10.—
24	(i) Section 2222.—Section 2222(i)(8)
25	of title 10, United States Code, is amended

1	by striking "section 3552(b)(6)(A)" and
2	inserting "section 3552(b)(9)(A)".
3	(ii) SECTION 2223.—Section
4	2223(c)(3) of title 10, United States Code,
5	is amended by striking "section
6	3552(b)(6)" and inserting "section
7	3552(b)".
8	(iii) Section 2315.—Section 2315 of
9	title 10, United States Code, is amended
10	by striking "section 3552(b)(6)" and in-
11	serting "section 3552(b)".
12	(iv) SECTION 2339A.—Section
13	2339a(e)(5) of title 10, United States
14	Code, is amended by striking "section
15	3552(b)(6)" and inserting "section
16	3552(b)".
17	(C) HIGH-PERFORMANCE COMPUTING ACT
18	OF 1991.—Section 207(a) of the High-Perform-
19	ance Computing Act of 1991 (15 U.S.C.
20	5527(a)) is amended by striking "section
21	3552(b)(6)(A)(i)" and inserting "section
22	3552(b)(9)(A)(i)".
23	(D) INTERNET OF THINGS CYBERSECU-
24	RITY IMPROVEMENT ACT OF 2020.—Section 3(5)
25	of the Internet of Things Cybersecurity Im-

1	provement Act of 2020 (15 U.S.C. 278g–3a) is
2	amended by striking "section $3552(b)(6)$ " and
3	inserting "section 3552(b)".
4	(E) NATIONAL DEFENSE AUTHORIZATION
5	ACT FOR FISCAL YEAR 2013.—Section
6	933(e)(1)(B) of the National Defense Author-
7	ization Act for Fiscal Year 2013 (10 U.S.C.
8	2224 note) is amended by striking "section
9	3542(b)(2)" and inserting "section $3552(b)$ ".
10	(F) IKE SKELTON NATIONAL DEFENSE AU-
11	THORIZATION ACT FOR FISCAL YEAR 2011.—The
12	Ike Skelton National Defense Authorization Act
13	for Fiscal Year 2011 (Public Law 111–383) is
14	amended—
15	(i) in section 806(e)(5) (10 U.S.C.
16	2304 note), by striking "section 3542(b)"
17	and inserting "section 3552(b)";
18	(ii) in section 931(b)(3) (10 U.S.C.
19	2223 note), by striking "section
20	3542(b)(2)" and inserting "section
21	3552(b)"; and
22	(iii) in section 932(b)(2) (10 U.S.C.
23	2224 note), by striking "section
24	3542(b)(2)" and inserting "section
25	3552(b)".

1	(G) E-government act of 2002.—Sec-
2	tion $301(c)(1)(A)$ of the E-Government Act of
3	2002 (44 U.S.C. $3501$ note) is amended by
4	striking "section 3542(b)(2)" and inserting
5	"section 3552(b)".
6	(H) NATIONAL INSTITUTE OF STANDARDS
7	AND TECHNOLOGY ACT.—Section 20 of the Na-
8	tional Institute of Standards and Technology
9	Act (15 U.S.C. 278g–3) is amended—
10	(i) in subsection $(a)(2)$ , by striking
11	"section $3552(b)(5)$ " and inserting "sec-
12	tion 3552(b)"; and
13	(ii) in subsection (f)—
14	(I) in paragraph (3), by striking
15	"section $3532(1)$ " and inserting "sec-
16	tion 3552(b)"; and
17	(II) in paragraph (5), by striking
18	"section $3532(b)(2)$ " and inserting
19	"section 3552(b)".
20	(c) Subchapter II Amendments.—Subchapter II
21	of chapter 35 of title 44, United States Code, is amend-
22	ed—
23	(1) in section 3551—

1	(A) in paragraph (4), by striking "diag-
2	nose and improve" and inserting "integrate, de-
3	liver, diagnose, and improve";
4	(B) in paragraph (5), by striking "and" at
5	the end;
6	(C) in paragraph (6), by striking the pe-
7	riod at the end and inserting a semicolon; and
8	(D) by adding at the end the following:
9	"(7) recognize that each agency has specific
10	mission requirements and, at times, unique cyberse-
11	curity requirements to meet the mission of the agen-
12	cy;
13	"(8) recognize that each agency does not have
14	the same resources to secure agency systems, and an
15	agency should not be expected to have the capability
16	to secure the systems of the agency from advanced
17	adversaries alone; and
18	"(9) recognize that a holistic Federal cybersecu-
19	rity model is necessary to account for differences be-
20	tween the missions and capabilities of agencies.";
21	(2) in section 3553—
22	(A) in subsection (a)—
23	(i) in paragraph (5), by striking
24	"and" at the end;

1	(ii) in paragraph (6), by striking the
2	period at the end and inserting "; and";
3	and
4	(iii) by adding at the end the fol-
5	lowing:
6	"(7) promoting, in consultation with the Direc-
7	tor of the Cybersecurity and Infrastructure Security
8	Agency, the National Cyber Director, and the Direc-
9	tor of the National Institute of Standards and Tech-
10	nology—
11	"(A) the use of automation to improve
12	Federal cybersecurity and visibility with respect
13	to the implementation of Federal cybersecurity;
14	and
15	"(B) the use of zero trust architecture
16	principles to improve resiliency and timely re-
17	sponse actions to incidents on Federal sys-
18	tems.";
19	(B) in subsection (b)—
20	(i) in the matter preceding paragraph
21	(1), by striking "The Secretary, in con-
22	sultation with the Director' and inserting
23	"The Secretary of Homeland Security, act-
24	ing through the Director of the Cybersecu-
25	rity and Infrastructure Security Agency

1	and in consultation with the Director and
2	the National Cyber Director";
3	(ii) in paragraph (2)(A), by inserting
4	"and reporting requirements under sub-
5	chapter IV of this chapter" after "section
6	3556'';
7	(iii) redesignate paragraphs (8) and
8	(9) as paragraphs $(9)$ and $(10)$ ; and
9	(iv) insert a new paragraph (8):
10	"(8) expeditiously seek opportunities to reduce
11	costs, administrative burdens, and other barriers to
12	information technology security and modernization
13	for Federal agencies, including through—
14	"(A) central shared services contracts for
15	cybersecurity capabilities identified as optimal
16	by the Director, in coordination with the Sec-
17	retary acting through the Director of the Cy-
18	bersecurity and Infrastructure Security Agency
19	and other agencies as appropriate; and
20	"(B) offering technical assistance and ex-
21	pertise to agencies on the selection and success-
22	ful engagement of highly adaptive cybersecurity
23	service contracts and other relevant contracts
24	provided by the U.S. General Services Adminis-
25	tration.";

1	(C) in subsection (c)—
2	(i) in the matter preceding paragraph
3	(1), by striking "each year" and inserting
4	"each year during which agencies are re-
5	quired to submit reports under section
6	3554(c)" and by striking "preceding year"
7	and inserting "preceding two years";
8	(ii) by striking paragraph (1);
9	(iii) by redesignating paragraphs (2),
10	(3), and $(4)$ as paragraphs $(1)$ , $(2)$ , and
11	(3), respectively;
12	(iv) in paragraph (3), as so redesig-
13	nated, by striking "and" at the end; and
14	(v) by inserting after paragraph (3),
15	as so redesignated, the following:
16	"(4) a summary of each assessment of Federal
17	risk posture performed under subsection (i); and";
18	(D) by redesignating subsections (i), (j),
19	(k), and (l) as subsections (j), (k), (l), and (m)
20	respectively;
21	(E) in subsection (h)—
22	(i) in paragraph (2), subparagraph
23	(A) adding "and the National Cyber Direc-
24	tor" after "in coordination with the Direc-
25	tor";

	10
1	(ii) in paragraph (2), subparagraph
2	(D) adding ", the National Cyber Direc-
3	tor," after "notify the Director"; and
4	(iii) in paragraph (3), subparagraph
5	(A), clause (iv) adding ", the National
6	Cyber Director," after "the Secretary pro-
7	vides prior notice to the Director";
8	(F) by inserting after subsection (h) the
9	following:
10	"(i) Federal Risk Assessments.—On an ongoing
11	and continuous basis, the Director of the Cybersecurity
12	and Infrastructure Security Agency shall perform assess-
13	ments of Federal risk posture using any available informa-
14	tion on the cybersecurity posture of agencies, and brief
15	the Director and National Cyber Director on the findings
16	of those assessments including—
17	"(1) the status of agency cybersecurity remedial
18	actions described in section $3554(b)(7)$ ;
19	((2) any vulnerability information relating to
20	the systems of an agency that is known by the agen-
21	cy;
22	"(3) analysis of incident information under sec-
23	tion 3597;
24	"(4) evaluation of penetration testing per-
25	formed under section 3559A;

1	"(5) evaluation of vulnerability disclosure pro-
2	gram information under section 3559B;
-	"(6) evaluation of agency threat hunting re-
4	sults;
5	"(7) evaluation of Federal and non-Federal
6	cyber threat intelligence;
7	"(8) data on agency compliance with standards
8	issued under section 11331 of title 40;
9	"(9) agency system risk assessments performed
10	under section $3554(a)(1)(A)$ ; and
11	"(10) any other information the Director of the
12	Cybersecurity and Infrastructure Security Agency
13	determines relevant.";
14	(G) in subsection (j), as so redesignated—
15	(i) by striking "regarding the spe-
16	cific" and inserting "that includes a sum-
17	mary of—
18	"(1) the specific";
19	(ii) in paragraph (1), as so des-
20	ignated, by striking the period at the end
21	and inserting "; and"; and
22	(iii) by adding at the end the fol-
23	lowing:
24	((2)) the trends identified in the Federal risk
25	assessments performed under subsection (i)."; and

18

(H) by adding at the end the following:

"(n) BINDING OPERATIONAL DIRECTIVES.—If the 2 Director of the Cybersecurity and Infrastructure Security 3 Agency issues a binding operational directive or an emer-4 5 gency directive under this section, not later than 7 days 6 after the date on which the binding operational directive 7 requires an agency to take an action, the Director of the 8 Cybersecurity and Infrastructure Security Agency shall 9 provide to the Director and National Cyber Director the status of the implementation of the binding operational 10 directive at the agency."; 11

12	(3) in section 3554—
13	(A) in subsection (a)—
14	(i) in paragraph (1)—
15	(I) by redesignating subpara-
16	graphs (A), (B), and (C) as subpara-
17	graphs (B), (C), and (D), respectively;

18 (II) by inserting before subpara19 graph (B), as so redesignated, the fol20 lowing:

21 "(A) on an ongoing and continuous basis,
22 performing agency system risk assessments
23 that—

1	"(i) identify and document the high
2	value assets of the agency using guidance
3	from the Director;
4	"(ii) evaluate the data assets inven-
5	toried under section 3511 for sensitivity to
6	compromises in confidentiality, integrity,
7	and availability;
8	"(iii) identify agency systems that
9	have access to or hold the data assets
10	inventoried under section 3511;
11	"(iv) evaluate the threats facing agen-
12	cy systems and data, including high value
13	assets, based on Federal and non-Federal
14	cyber threat intelligence products, where
15	available;
16	"(v) evaluate the vulnerability of
17	agency systems and data, including high
18	value assets, including by analyzing—
19	"(I) the results of penetration
20	testing performed by the Department
21	of Homeland Security under section
22	3553(b)(9);
23	"(II) the results of penetration
24	testing performed under section
25	3559A;

20

"(III) information provided to

2 the agency through the vulnerability disclosure program of the agency 3 4 under section 3559B; "(IV) incidents; and 5 "(V) any other vulnerability in-6 7 formation relating to agency systems 8 that is known to the agency; 9 "(vi) assess the impacts of potential 10 agency incidents to agency systems, data, 11 and operations based on the evaluations described in clauses (ii) and (iv) and the 12 13 agency systems identified under clause 14 (iii); and 15 "(vii) assess the consequences of po-16 tential incidents occurring on agency sys-17 tems that would impact systems at other 18 agencies, including due to interconnectivity 19 between different agency systems or oper-20 ational reliance on the operations of the 21 system or data in the system;"; 22 (III) in subparagraph (B), as so 23 redesignated, in the matter preceding 24 clause (i), by striking "providing in-25 formation" and inserting "using infor-

mation from the assessment con-
ducted under subparagraph (A), pro-
viding information";
(IV) in subparagraph (C), as so
redesignated—
(aa) in clause (ii) by insert-
ing "binding" before "oper-
ational"; and
(bb) in clause (vi), by strik-
ing "and" at the end; and
(V) by adding at the end the fol-
lowing:
"(E) providing an update on the ongoing
and continuous assessment performed under
subparagraph (A)—
"(i) upon request, to the inspector
general of the agency or the Comptroller
General of the United States; and
"(ii) on a periodic basis, as deter-
mined by guidance issued by the Director
but not less frequently than every 2 years,
to—
"(I) the Director;

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

	20
1	"(ii) the Director; and
2	"(iii) the National Cyber Director;
3	and
4	"(H) if the head of the agency determines
5	there is need for additional cybersecurity proce-
6	dures, ensuring that those additional cybersecu-
7	rity procedures are reflected in the budget re-
8	quest of the agency;";
9	(ii) in paragraph (2)—
10	(I) in subparagraph (A), by in-
11	serting "in accordance with the agen-
12	cy system risk assessment performed
13	under paragraph (1)(A)" after "infor-
14	mation systems";
15	(II) in subparagraph (B)—
16	(aa) by striking "in accord-
17	ance with standards" and insert-
18	ing "in accordance with—
19	"(i) standards"; and
20	(bb) by adding at the end
21	the following:
22	"(ii) the evaluation performed under
23	paragraph $(1)(F)$ ; and
24	"(iii) the implementation plan de-
25	scribed in paragraph (1)(G);"; and

1	(III) in subparagraph (D), by in-
2	serting ", through the use of penetra-
3	tion testing, the vulnerability disclo-
4	sure program established under sec-
5	tion 3559B, and other means," after
6	"periodically"; and
7	(B) in subsection (b)—
8	(i) by striking paragraph (1) and in-
9	serting the following:
10	"(1) pursuant to subsection $(a)(1)(A)$ , per-
11	forming ongoing and continuous agency system risk
12	assessments, which may include using guidelines and
13	automated tools consistent with standards and
14	guidelines promulgated under section 11331 of title
15	40, as applicable;";
16	(ii) in paragraph $(2)(D)$ —
17	(I) by redesignating clauses (iii)
18	and (iv) as clauses (iv) and (v), re-
19	spectively;
20	(II) by inserting after clause (ii)
21	the following:
22	"(iii) binding operational directives
23	and emergency directives promulgated by
24	the Director of the Cybersecurity and In-

frastructure Security Agency under section
3553;"; and
(III) in clause (iv), as so redesig-
nated, by striking "as determined by
the agency; and" and inserting "as
determined by the agency, considering
the agency risk assessment performed
under subsection (a)(1)(A).";
(iii) in paragraph (5)(A), by inserting
", including penetration testing, as appro-
priate," after "shall include testing";
(iv) by redesignating paragraphs $(7)$
and (8) as paragraphs (8) and (9), respec-
tively;
(v) by inserting after paragraph $(6)$
the following:
"(7) a process for providing the status of every
remedial action, as well as unremediated identified
system vulnerabilities, to the Director and the Direc-
tor of the Cybersecurity and Infrastructure Security
Agency, using automation and machine-readable
data to the greatest extent practicable;"; and
(vi) in paragraph (8)(C), as so redes-
ignated—

(I) by striking clause (ii) and in-
serting the following:
"(ii) notifying and consulting with the
Federal information security incident cen-
ter established under section 3556 pursu-
ant to the requirements of section 3594;";
(II) by redesignating clause (iii)
as clause (iv);
(III) by inserting after clause (ii)
the following:
"(iii) performing the notifications and
other activities required under subchapter
IV of this chapter; and"; and
(IV) in clause (iv), as so redesig-
nated—
(aa) in subclause (I), by
striking "and relevant offices of
inspectors general";
(bb) in subclause (II), by
adding "and" at the end;
(cc) by striking subclause
(III); and
(dd) by redesignating sub-
clause (IV) as subclause (III);
(C) in subsection (c)—

1	(i) by redesignating paragraph (2) as
2	paragraph (5);
3	(ii) by striking paragraph (1) and in-
4	serting the following:
5	"(1) BIANNUAL REPORT.—Not later than 2
6	years after the date of the enactment of the Federal
7	Information Security Modernization Act of 2022 and
8	not less frequently than once every 2 years there-
9	after, using the continuous and ongoing agency sys-
10	tem risk assessment under subsection $(a)(1)(A)$ , the
11	head of each agency shall submit to the Director,
12	the Director of the Cybersecurity and Infrastructure
13	Security Agency, the majority and minority leaders
14	of the Senate, the Speaker and minority leader of
15	the House of Representatives, the Committee on
16	Homeland Security and Governmental Affairs of the
17	Senate, the Committee on Oversight and Reform of
18	the House of Representatives, the Committee on
19	Homeland Security of the House of Representatives,
20	the Committee on Commerce, Science, and Trans-
21	portation of the Senate, the Committee on Science,
22	Space, and Technology of the House of Representa-
23	tives, the appropriate authorization and appropria-
24	tions committees of Congress, the National Cyber

Director, and the Comptroller General of the United
 States a report that—

3 "(A) summarizes the agency system risk
4 assessment performed under subsection
5 (a)(1)(A);

6 "(B) evaluates the adequacy and effective-7 ness of information security policies, proce-8 dures, and practices of the agency to address 9 the risks identified in the agency system risk 10 performed assessment under subsection 11 (a)(1)(A), including an analysis of the agency's 12 cybersecurity and incident response capabilities 13 using the metrics established under section 14 224(c) of the Cybersecurity Act of 2015 (6) 15 U.S.C. 1522(c);

"(C) summarizes the evaluation and implementation plans described in subparagraphs (F) and (G) of subsection (a)(1) and whether those evaluation and implementation plans call for the use of additional cybersecurity procedures determined to be appropriate by the agency; and

"(D) summarizes the status of remedial actions identified by inspector general of the agency, the Comptroller General of the United

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1	States, and any other source determined appro-
2	priate by the head of the agency.
3	"(2) Unclassified reports.—Each report
4	submitted under paragraph (1)—
5	"(A) shall be, to the greatest extent prac-
6	ticable, in an unclassified and otherwise uncon-
7	trolled form; and
8	"(B) may include a classified annex.
9	"(3) Access to information.—The head of
10	an agency shall ensure that, to the greatest extent
11	practicable, information is included in the unclassi-
12	fied form of the report submitted by the agency
13	under paragraph (2)(A).
14	"(4) BRIEFINGS.—During each year during
15	which a report is not required to be submitted under
16	paragraph (1), the Director shall provide to the con-
17	gressional committees described in paragraph $(1)$ a
18	briefing summarizing current agency and Federal
19	risk postures."; and
20	(iii) in paragraph (5), as so redesig-
21	nated, by inserting ", including the report-
22	ing procedures established under section
23	11315(d) of title 40 and subsection
24	(a)(3)(A)(v) of this section," after "poli-
25	cies, procedures, and practices"; and

1	(4) in section 3555—
2	(A) in the section heading, by striking
3	"ANNUAL INDEPENDENT" and inserting
4	"INDEPENDENT";
5	(B) in subsection (a)—
6	(i) in paragraph (1), by inserting
7	"during which a report is required to be
8	submitted under section 3553(c)," after
9	"Each year";
10	(ii) in paragraph $(2)(A)$ , by inserting
11	", including by penetration testing and
12	analyzing the vulnerability disclosure pro-
13	gram of the agency" after "information
14	systems"; and
15	(iii) by adding at the end the fol-
16	lowing:
17	"(3) An evaluation under this section may in-
18	clude recommendations for improving the cybersecu-
19	rity posture of the agency.";
20	(C) in subsection $(b)(1)$ , by striking "an-
21	nual";
22	(D) in subsection $(e)(1)$ , by inserting "dur-
23	ing which a report is required to be submitted
24	under section 3553(c)" after "Each year";

(E) by striking subsection (f) and inserting
 the following:

3 "(f) PROTECTION OF INFORMATION.—(1) Agencies,
4 evaluators, and other recipients of information that, if dis5 closed, may cause grave harm to the efforts of Federal
6 information security officers, shall take appropriate steps
7 to ensure the protection of that information, including
8 safeguarding the information from public disclosure.

9 "(2) The protections required under paragraph (1)
10 shall be commensurate with the risk and comply with all
11 applicable laws and regulations.

12 "(3) With respect to information that is not related 13 to national security systems, agencies and evaluators shall 14 make a summary of the information unclassified and pub-15 licly available, including information that does not iden-16 tify—

17 "(A) specific information system incidents; or
18 "(B) specific information system
19 vulnerabilities.";

20 (F) in subsection (g)(2)—
21 (i) by striking "this subsection shall"
22 and inserting "this subsection—
23 "(A) shall";

1	(ii) in subparagraph (A), as so des-
2	ignated, by striking the period at the end
3	and inserting "; and"; and
4	(iii) by adding at the end the fol-
5	lowing:
6	"(B) identify any entity that performs an
7	independent evaluation under subsection (b).";
8	and
9	(G) striking subsection (j); and
10	(5) in section $3556(a)(4)$ by striking " $3554(b)$ "
11	and inserting "3554(a)(1)(A)".
12	(d) Conforming Amendments.—
13	(1) TABLE OF SECTIONS.—The table of sections
14	for chapter 35 of title 44, United States Code, is
15	amended—
16	(A) by striking the item relating to section
17	3553 and inserting the following:
	"3553. Authority and functions of the Director and the Director of the Cyberse- curity and Infrastructure Security Agency."; and
18	(B) by striking the item relating to section
19	3555 and inserting the following:
	"3555. Independent evaluation.".
20	(2) OMB REPORTS.—Section 226(c) of the Cy-
21	bersecurity Act of $2015$ (6 U.S.C. $1524(c)$ ) is
22	amended—

1	(A) in paragraph $(1)(B)$ , in the matter
2	preceding clause (i), by striking "annually
3	thereafter" and inserting "thereafter during the
4	years during which a report is required to be
5	submitted under section 3553(c) of title 44,
6	United States Code"; and
7	(B) in paragraph $(2)(B)$ , in the matter
8	preceding clause (i)—
9	(i) by striking "annually thereafter"
10	and inserting "thereafter during the years
11	during which a report is required to be
12	submitted under section 3553(c) of title
13	44, United States Code"; and
14	(ii) by striking "the report required
15	under section 3553(c) of title 44, United
16	States Code" and inserting "that report".
17	(3) NIST RESPONSIBILITIES.—Section
18	20(d)(3)(B) of the National Institute of Standards
19	and Technology Act (15 U.S.C. 278g–3(d)(3)(B)) is
20	amended by striking "annual".
21	(e) Federal System Incident Response.—
22	(1) IN GENERAL.—Chapter 35 of title 44,
23	United States Code, is amended by adding at the
24	end the following:

	34
1	"SUBCHAPTER IV—FEDERAL SYSTEM
2	INCIDENT RESPONSE
3	"§ 3591. Definitions
4	"(a) IN GENERAL.—Except as provided in subsection
5	(b), the definitions under sections 3502 and 3552 shall
6	apply to this subchapter.
7	"(b) Additional Definitions.—As used in this
8	subchapter:
9	"(1) Appropriate reporting entities.—The
10	term 'appropriate reporting entities' means—
11	"(A) the majority and minority leaders of
12	the Senate;
13	"(B) the Speaker and minority leader of
14	the House of Representatives;
15	"(C) the Committee on Homeland Security
16	and Governmental Affairs of the Senate;
17	"(D) the Committee on Oversight and Re-
18	form of the House of Representatives;
19	"(E) the Committee on Homeland Security
20	of the House of Representatives;
21	"(F) the appropriate authorization and ap-
22	propriations committees of Congress;
23	"(G) the Director;
24	"(H) the Director of the Cybersecurity and
25	Infrastructure Security Agency;

1	"(I) the National Cyber Director;
2	"(J) the Comptroller General of the United
3	States; and
4	"(K) the inspector general of any impacted
5	agency.
6	"(2) AWARDEE.—The term 'awardee'—
7	"(A) means a person, business, or other
8	entity that receives a grant from, or is a party
9	to a cooperative agreement or an other trans-
10	action agreement with, an agency; and
11	"(B) includes any subgrantee of a person,
12	business, or other entity described in subpara-
13	graph (A).
14	"(3) BREACH.—The term 'breach' shall be de-
15	fined by the Director.
16	"(4) CONTRACTOR.—The term 'contractor'
17	means a prime contractor of an agency or a subcon-
18	tractor of a prime contractor of an agency.
19	"(5) Federal information.—The term 'Fed-
20	eral information' means information created, col-
21	lected, processed, maintained, disseminated, dis-
22	closed, or disposed of by or for the Federal Govern-
23	ment in any medium or form.
24	"(6) FEDERAL INFORMATION SYSTEM.—The
25	term 'Federal information system' means an infor-

mation system used or operated by an agency, a con tractor, or another organization on behalf of an
 agency.

4 "(7) INTELLIGENCE COMMUNITY.—The term
5 'intelligence community' has the meaning given the
6 term in section 3 of the National Security Act of
7 1947 (50 U.S.C. 3003).

8 "(8) NATIONWIDE CONSUMER REPORTING
9 AGENCY.—The term 'nationwide consumer reporting
10 agency' means a consumer reporting agency de11 scribed in section 603(p) of the Fair Credit Report12 ing Act (15 U.S.C. 1681a(p)).

13 "(9) VULNERABILITY DISCLOSURE.—The term
14 'vulnerability disclosure' means a vulnerability iden15 tified under section 3559B.

# 16 "§ 3592. Notification of breach

17 "(a) NOTIFICATION.—As expeditiously as practicable 18 and without unreasonable delay, and in any case not later 19 than 45 days after an agency has a reasonable basis to 20 conclude that a breach has occurred, the head of the agen-21 cy, in consultation with the chief privacy officer of the 22 agency, shall—

23 "(1) determine whether notice to any individual24 potentially affected by the breach is appropriate
1	based on an assessment of the risk of harm to the
2	individual that considers—
3	"(A) the nature and sensitivity of the per-
4	sonally identifiable information affected by the
5	breach;
6	"(B) the likelihood of access to and use of
7	the personally identifiable information affected
8	by the breach;
9	"(C) the type of breach; and
10	"(D) any other factors determined by the
11	Director; and
12	((2) as appropriate, provide written notice in
13	accordance with subsection (b) to each individual po-
14	tentially affected by the breach—
15	"(A) to the last known mailing address of
16	the individual; or
17	"(B) through an appropriate alternative
18	method of notification that the head of the
19	agency or a designated senior-level individual of
20	the agency selects based on factors determined
21	by the Director.
22	"(b) CONTENTS OF NOTICE.—Each notice of a
23	breach provided to an individual under subsection $(a)(2)$
24	shall include—
25	"(1) a brief description of the breach;

1	"(2) if possible, a description of the types of
2	personally identifiable information affected by the
3	breach;
4	"(3) contact information of the agency that
5	may be used to ask questions of the agency, which—
6	"(A) shall include an e-mail address or an-
7	other digital contact mechanism; and
8	"(B) may include a telephone number,
9	mailing address, or a website;
10	"(4) information on any remedy being offered
11	by the agency;
12	"(5) any applicable educational materials relat-
13	ing to what individuals can do in response to a
14	breach that potentially affects their personally iden-
15	tifiable information, including relevant contact infor-
16	mation for Federal law enforcement agencies and
17	each nationwide consumer reporting agency; and
18	"(6) any other appropriate information, as de-
19	termined by the head of the agency or established in
20	guidance by the Director.
21	"(c) Delay of Notification.—
22	"(1) IN GENERAL.—The Attorney General, the
23	Director of National Intelligence, or the Secretary of
24	Homeland Security may delay a notification required
25	under subsection (a) if the notification would—

1	"(A) impede a criminal investigation or a
2	national security activity;
3	"(B) reveal sensitive sources and methods;
4	"(C) cause damage to national security; or
5	"(D) hamper security remediation actions.
6	"(2) Documentation.—
7	"(A) IN GENERAL.—Any delay under para-
8	graph (1) shall be reported in writing to the Di-
9	rector, the Attorney General, the Director of
10	National Intelligence, the Secretary of Home-
11	land Security, the National Cyber Director, the
12	Director of the Cybersecurity and Infrastruc-
13	ture Security Agency, and the head of the agen-
14	cy and the inspector general of the agency that
15	experienced the breach.
16	"(B) CONTENTS.—A report required under
17	subparagraph (A) shall include a written state-
18	ment from the entity that delayed the notifica-
19	tion explaining the need for the delay.
20	"(C) FORM.—The report required under
21	subparagraph (A) shall be unclassified but may
22	include a classified annex.
23	"(3) RENEWAL.—A delay under paragraph (1)
24	shall be for a period of 60 days and may be renewed.

1 "(d) UPDATE NOTIFICATION.—If an agency deter-2 mines there is a significant change in the reasonable basis to conclude that a breach occurred, a significant change 3 4 to the determination made under subsection (a)(1), or that it is necessary to update the details of the information pro-5 vided to potentially affected individuals as described in 6 subsection (b), the agency shall as expeditiously as prac-7 8 ticable and without unreasonable delay, and in any case 9 not later than 30 days after such a determination, notify each individual who received a notification pursuant to 10 11 subsection (a) of those changes.

12 "(e) RULE OF CONSTRUCTION.—Nothing in this sec-13 tion shall be construed to limit—

"(1) the Director from issuing guidance relating to notifications or the head of an agency from
notifying individuals potentially affected by breaches
that are not determined to be major incidents; or

18 "(2) the Director from issuing guidance relat-19 ing to notifications of major incidents or the head of 20 an agency from providing more information than de-21 scribed in subsection (b) when notifying individuals 22 potentially affected by breaches.

## 23 "§ 3593. Congressional and executive branch reports

24 "(a) INITIAL REPORT.—

1 "(1) IN GENERAL.—Not later than 72 hours 2 after an agency has a reasonable basis to conclude 3 that a major incident occurred, the head of the 4 agency impacted by the major incident shall submit 5 to the appropriate reporting entities a written re-6 port. Within 7 days of a major incident determina-7 tion, the head of the agency impacted shall coordi-8 nate with the National Cyber Director, or their des-9 ignee, to provide a briefing, along with any other 10 Federal entity determined appropriate by the Na-11 tional Cyber Director, to the Committee on Home-12 land Security and Governmental Affairs of the Sen-13 ate, the Committee on Oversight and Reform of the 14 House of Representatives, the Committee on Home-15 land Security of the House of Representatives, and the appropriate authorization and appropriations 16 17 committees of Congress, in the manner requested by 18 the Congressional entities, taking into account— 19 "(A) the information known at the time of 20 the report, including the threat having likely 21 caused the major incident; 22 "(B) the sensitivity of the details associ-23 ated with the major incident; and 24 "(C) the classification level of the informa-

tion contained in the report.

"(2) CONTENTS.—A report required under
paragraph (1) shall include, in a manner that excludes or otherwise reasonably protects personally
identifiable information and to the extent permitted
by applicable law, including privacy and statistical
laws—

"(A) a summary of the information available about the major incident, including how
the major incident occurred and, if applicable,
information relating to the major incident as a
breach, based on information available to agency
cy officials as of the date on which the agency
submits the report;

"(B) if applicable, a description and any
associated documentation of any circumstances
necessitating a delay in notification to individuals potentially affected by the major incident
under subsection (c) of section 3592; and

"(C) if applicable, an assessment of the
impacts to the agency, the Federal Government,
or the security of the United States, based on
information available to agency officials on the
date on which the agency submits the report.

24 "(3) COMPONENTS OF BRIEFING.—The 7 day
25 briefing required under paragraph (1)—

"(A) shall, to the greatest extent prac ticable, include an unclassified component; and
 "(B) may include a classified component.

"(b) SUPPLEMENTAL REPORT.—Within a reasonable 4 amount of time, but not later than 30 days after the date 5 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 briefing to the congressional committees described in sub-10 11 section (a)(1), including summaries of—

12 "(1) vulnerabilities, means by which the major
13 incident occurred, and impacts to the agency relat14 ing to the major incident;

15 "(2) any risk assessment and subsequent risk16 based security implementation of the affected infor17 mation system before the date on which the major
18 incident occurred;

"(3) an estimate of the number of individuals
potentially affected by the major incident based on
information available to agency officials as of the
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; 3 "(5) an update to the assessment of the risk to 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 8 the update; and 9 "(6) the detection, response, and remediation

actions of the agency, including any support provided by the Cybersecurity and Infrastructure Security Agency under section 3594(d) and status updates on the notification process described in section
3592(a), including any delay described in subsection
(c) of section 3592, if applicable.

16 "(c) UPDATE REPORT.—If the agency, or the National Cyber Director, determines that there is any signifi-17 cant change in the understanding of the agency of the 18 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 ap-22 propriate reporting entities that includes information re-23 lating to the change in understanding.

24 "(d) ANNUAL REPORT.—Each agency shall submit as25 part of the annual report required under section

3554(c)(1) of this title a description of each major inci dent that occurred during the 1-year period preceding the
 date on which the annual report is submitted.

- 4 "(e) Delay Report.—
- 5 "(1) IN GENERAL.—The Director shall submit
  6 to the appropriate reporting entities an annual re7 port on all notification delays granted pursuant to
  8 subsection (c) of section 3592.
- 9 "(2) COMPONENT OF OTHER REPORT.—The Di10 rector may submit the report required under para11 graph (1) as a component of the annual report sub12 mitted under section 3597(b).
- 13 "(f) REPORT DELIVERY.—Any written report re14 quired to be submitted under this section may be sub15 mitted in a paper or electronic format.
- 16 "(g) RULE OF CONSTRUCTION.—Nothing in this sec-17 tion shall be construed to limit—
- 18 "(1) the ability of an agency to provide addi-19 tional reports or briefings to Congress; or
- 20 "(2) Congress from requesting additional infor21 mation from agencies through reports, briefings, or
  22 other means.

## 23 "§3594. Government information sharing and inci-

- 24 dent response
- 25 "(a) IN GENERAL.—

1	"(1) Incident reporting.—Subject to limita-
2	tions in subsection (b), the head of each agency shall
3	provide any information relating to any incident af-
4	fecting their agency, whether the information is ob-
5	tained by the Federal Government directly or indi-
6	rectly, to the Cybersecurity and Infrastructure Secu-
7	rity Agency, the Office of Management and Budget,
8	and the Office of the National Cyber Director.
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 share in-
13	formation relating to an incident with any agencies
14	that may be impacted by the incident, or are poten-
15	tially susceptible or similarly targeted.
16	"(4) NATIONAL SECURITY SYSTEMS.—Each
17	agency operating or exercising control of a national
18	security system shall share information about inci-
19	dents that occur on national security systems with
20	the Director of the Cybersecurity and Infrastructure
21	Security Agency to the extent consistent with stand-
22	ards and guidelines for national security systems
23	issued in accordance with law and as directed by the
24	President.

1 "(b) COMPLIANCE.—The information provided under 2 subsection (a) shall take into account the level of classi-3 fication of the information and any information sharing 4 limitations and protections, such as limitations and protec-5 tions relating to law enforcement, national security, pri-6 vacy, statistical confidentiality, or other factors deter-7 mined by the Director.

8 "(c) INCIDENT RESPONSE.—Each agency that has a 9 reasonable basis to conclude that a major incident occurred involving Federal information in electronic medium 10 11 or form, as defined by the Director and not involving a 12 national security system, regardless of delays from notification granted for a major incident, shall coordinate with 13 the Cybersecurity and Infrastructure Security Agency to 14 15 facilitate asset response activities and recommendations for mitigating future incidents, and with the Federal Bu-16 reau of Investigation to facilitate threat response activi-17 ties, consistent with relevant policies, principles, stand-18 19 ards, and guidelines on information security.

20 "§3595. Responsibilities of contractors and awardees

21 "(a) Reporting.—

"(1) IN GENERAL.—Unless otherwise specified
in a contract, grant, cooperative agreement, or any
other transaction agreement, any contractor or
awardee of an agency shall report to the agency

within the same amount of time such agency is re quired to report an incident to the Cybersecurity
 and Infrastructure Security Agency, if the con tractor or awardee has a reasonable basis to suspect
 or conclude that—

6 "(A) an incident or breach has occurred 7 with respect to Federal information collected, 8 used, or maintained by the contractor or award-9 ee in connection with the contract, grant, coop-10 erative agreement, or other transaction agree-11 ment of the contractor or awardee;

"(B) an incident or breach has occurred
with respect to a Federal information system
used or operated by the contractor or awardee
in connection with the contract, grant, cooperative agreement, or other transaction agreement
of the contractor or awardee; or

18 "(C) the contractor or awardee has re-19 ceived information from the agency that the 20 contractor or awardee is not authorized to re-21 ceive in connection with the contract, grant, co-22 operative agreement, or other transaction agree-23 ment of the contractor or awardee.

24 "(2) PROCEDURES.—

1 "(A) MAJOR INCIDENT.—Following a re-2 port of a breach or major incident by a con-3 tractor or awardee under paragraph (1), the 4 agency, in consultation with the contractor or 5 awardee, shall carry out the requirements under 6 sections 3592, 3593, and 3594 with respect to 7 the major incident.

8 "(B) INCIDENT.—Following a report of an 9 incident by a contractor or awardee under para-10 graph (1), an agency, in consultation with the 11 contractor or awardee, shall carry out the re-12 quirements under section 3594 with respect to 13 the incident.

14 "(b) EFFECTIVE DATE.—This section shall apply on 15 and after the date that is 1 year after the date of the 16 enactment of the Federal Information Security Mod-17 ernization Act of 2022 and shall apply with respect to any 18 contract entered into on or after such effective date.

#### 19 **"§ 3596. Training**

20 "(a) COVERED INDIVIDUAL DEFINED.—In this sec-21 tion, the term 'covered individual' means an individual 22 who obtains access to Federal information or Federal in-23 formation systems because of the status of the individual 24 as an employee, contractor, awardee, volunteer, or intern 25 of an agency.

"(b) REQUIREMENT.—The head of each agency shall
 develop training for covered individuals on how to identify
 and respond to an incident, including—

4 "(1) the internal process of the agency for re-5 porting an incident; and

6 "(2) the obligation of a covered individual to re-7 port to the agency a confirmed major incident and 8 any suspected incident involving information in any 9 medium or form, including paper, oral, and elec-10 tronic.

"(c) INCLUSION IN ANNUAL TRAINING.—The training developed under subsection (b) may be included as
part of an annual privacy or security awareness training
of an agency.

## 15 "§ 3597. Analysis and report on Federal incidents

16 "(a) Analysis of Federal Incidents.—

"(1) QUANTITATIVE AND QUALITATIVE ANAL"(1) QUANTITATIVE AND QUALITATIVE ANALYSES.—The Director of the Cybersecurity and Infrastructure Security Agency shall develop, in consultation with the Director and the National Cyber Director, and perform continuous monitoring and quantitative and qualitative analyses of incidents at agencies, including major incidents, including—

24 "(A) the causes of incidents, including—

1	"(i) attacker tactics, techniques, and
2	procedures; and
3	"(ii) system vulnerabilities, including
4	zero day exploitations, unpatched systems,
5	and information system misconfigurations;
6	"(B) the scope and scale of incidents at
7	agencies;
8	"(C) common root causes of incidents
9	across multiple agencies;
10	"(D) agency incident response, recovery,
11	and remediation actions and the effectiveness of
12	those actions, as applicable;
13	"(E) lessons learned and recommendations
14	in responding to, recovering from, remediating,
15	and mitigating future incidents; and
16	"(F) trends across multiple Federal agen-
17	cies to address intrusion detection and incident
18	response capabilities using the metrics estab-
19	lished under section 224(c) of the Cybersecurity
20	Act of 2015 (6 U.S.C. 1522(c)).
21	"(2) AUTOMATED ANALYSIS.—The analyses de-
22	veloped under paragraph (1) shall, to the greatest
23	extent practicable, use machine readable data, auto-
24	mation, and machine learning processes.
25	"(3) Sharing of data and analysis.—

1	"(A) IN GENERAL.—The Director shall
2	share on an ongoing basis the analyses required
3	under this subsection with agencies and the Na-
4	tional Cyber Director to—
5	"(i) improve the understanding of cy-
6	bersecurity risk of agencies; and
7	"(ii) support the cybersecurity im-
8	provement efforts of agencies.
9	"(B) FORMAT.—In carrying out subpara-
10	graph (A), the Director shall share the anal-
11	yses—
12	"(i) in human-readable written prod-
13	ucts; and
14	"(ii) to the greatest extent practicable,
15	in machine-readable formats in order to
16	enable automated intake and use by agen-
17	cies.
18	"(b) ANNUAL REPORT ON FEDERAL INCIDENTS.—
19	Not later than 2 years after the date of the enactment
20	of this section, and not less frequently than annually
21	thereafter, the Director of the Cybersecurity and Infra-
22	structure Security Agency, in consultation with the Direc-
23	tor, the National Cyber Director, and the heads of other
24	agencies as appropriate, shall submit to the appropriate
25	reporting entities a report that includes—

1	"(1) a summary of causes of incidents from
2	across the Federal Government that categorizes
3	those incidents as incidents or major incidents;
4	"(2) the quantitative and qualitative analyses of
5	incidents developed under subsection $(a)(1)$ on an
6	agency-by-agency basis and comprehensively across
7	the Federal Government, including—
8	"(A) a specific analysis of breaches; and
9	"(B) an analysis of the Federal Govern-
10	ment's performance against the metrics estab-
11	lished under section 224(c) of the Cybersecurity
12	Act of 2015 (6 U.S.C. 1522(c)); and
13	"(3) an annex for each agency that includes—
14	"(A) a description of each major incident;
15	and
16	"(B) an analysis of the agency's perform-
17	ance against the metrics established under sec-
18	tion $224(c)$ of the Cybersecurity Act of $2015$ (6
19	U.S.C. 1522(c)).
20	"(c) Publication.—To the extent that publication
21	is consistent with national security interests, a version of
22	each report submitted under subsection (b) shall be made
23	publicly available on the website of the Cybersecurity and
24	Infrastructure Security Agency during the year in which
25	the report is submitted.

1	"(d) Information Provided by Agencies.—
2	"(1) IN GENERAL.—The analysis required
3	under subsection (a) and each report submitted
4	under subsection (b) shall use information provided
5	by agencies under section 3594(a).
6	"(2) NATIONAL SECURITY SYSTEM REPORTS.—
7	"(A) IN GENERAL.—Annually, the head of
8	an agency that operates or exercises control of
9	a national security system shall submit a report
10	that includes the information described in sub-
11	section (b) with respect to the agency to the ex-
12	tent that the submission is consistent with
13	standards and guidelines for national security
14	systems issued in accordance with law and as
15	directed by the President to—
16	"(i) the majority and minority leaders
17	of the Senate,
18	"(ii) the Speaker and minority leader
19	of the House of Representatives;
20	"(iii) the Committee on Homeland Se-
21	curity and Governmental Affairs of the
22	Senate;
23	"(iv) the Select Committee on Intel-
24	ligence of the Senate;

1	"(v) the Committee on Armed Serv-
2	ices of the Senate;
3	"(vi) the Committee on Appropria-
4	tions of the Senate;
5	"(vii) the Committee on Oversight and
6	Reform of the House of Representatives;
7	"(viii) the Committee on Homeland
8	Security of the House of Representatives;
9	"(ix) the Permanent Select Committee
10	on Intelligence of the House of Represent-
11	atives;
12	"(x) the Committee on Armed Serv-
13	ices of the House of Representatives; and
14	"(xi) the Committee on Appropria-
15	tions of the House of Representatives.
16	"(B) CLASSIFIED FORM.—A report re-
17	quired under subparagraph (A) may be sub-
18	mitted in a classified form.
19	"(e) Requirement for Compiling Informa-
20	TION.—In publishing the public report required under
21	subsection (c), the Director of the Cybersecurity and In-
22	frastructure Security Agency shall sufficiently compile in-
23	formation such that no specific incident of an agency can
24	be identified, except with the concurrence of the Director
25	of the Office of Management and Budget, the National

Cyber Director, and in consultation with the impacted
 agency.

#### 3 "§ 3598. Major incident definition

4 "(a) IN GENERAL.—Not later than 180 days after the date of the enactment of the Federal Information Se-5 curity Modernization Act of 2022, the Director, in coordi-6 7 nation with the Director of the Cybersecurity and Infra-8 structure Security Agency and the National Cyber Direc-9 tor, shall develop and promulgate guidance on the definition of the term 'major incident' for the purposes of sub-10 chapter II and this subchapter. 11

12 "(b) REQUIREMENTS.—With respect to the guidance
13 issued under subsection (a), the definition of the term
14 'major incident' shall—

15 "(1) include, with respect to any information 16 collected or maintained by or on behalf of an agency 17 or an information system used or operated by an 18 agency or by a contractor of an agency or another 19 organization on behalf of an agency—

20 "(A) any incident the head of the agency
21 determines is likely to result in demonstrable
22 harm to—

23 "(i) the national security interests,
24 foreign relations or the economy of the
25 United States; or

1	"(ii) the public confidence, civil lib-
2	erties, or public health and safety of the
3	people of the United States;
4	"(B) any incident the head of the agency
5	determines may have a significant impact on
6	the confidentiality, integrity, or availability of a
7	high value asset; and
8	"(C) any other type of incident determined
9	appropriate by the Director; and
10	"(2) stipulate that the Director, in coordination
11	with the National Cyber Director, shall declare a
12	major incident at each agency impacted by an inci-
13	dent if it is determined that an incident—
14	"(A) occurs at not less than 2 agencies;
15	and
16	"(B) is enabled by—
17	"(i) a common technical root cause,
18	such as a supply chain compromise or a
19	common software or hardware vulner-
20	ability; or
21	"(ii) the related activities of a com-
22	mon threat actor.
23	"(c) Evaluation and Updates.—Not later than 2
24	years after the date of the enactment of the Federal Infor-
25	mation Security Modernization Act of 2022, and not less

1	frequently than every 2 years thereafter, the Director shall
2	submit to the Committee on Homeland Security and Gov-
3	ernmental Affairs of the Senate and the Committee on
4	Oversight and Reform of the House of Representatives an
5	evaluation, which shall include—
6	((1) an update, if necessary, to the guidance
7	issued under subsection (a);
8	((2) the definition of the term 'major incident'
9	included in the guidance issued under subsection (a);
10	and
11	"(3) an explanation of, and the analysis that
12	led to, the definition described in paragraph (2).".
13	(2) CLERICAL AMENDMENT.—The table of sec-
14	tions for chapter 35 of title 44, United States Code,
15	is amended by adding at the end the following:
	"SUBCHAPTER IV—FEDERAL SYSTEM INCIDENT RESPONSE
	<ul> <li>"3591. Definitions.</li> <li>"3592. Notification of breach.</li> <li>"3593. Congressional and executive branch reports.</li> <li>"3594. Government information sharing and incident response.</li> <li>"3595. Responsibilities of contractors and awardees.</li> <li>"3596. Training.</li> <li>"3597. Analysis and report on Federal incidents.</li> <li>"3598. Major incident definition.".</li> </ul>
16	SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40.
17	(a) Modernizing Government Technology
18	Subtitle G of title X of Division A of the National Defense
19	Authorization Act for Fiscal Year 2018 (Public Law 115–
20	91; 40 U.S.C. 11301 note) is amended in section 1078—

1	(1) by striking subsection (a) and inserting the
2	following:
3	"(a) DEFINITIONS.—In this section:
4	"(1) AGENCY.—The term 'agency' has the
5	meaning given the term in section 551 of title 5,
6	United States Code.
7	"(2) HIGH VALUE ASSET.—The term 'high
8	value asset' has the meaning given the term in sec-
9	tion 3552 of title 44, United States Code."; and
10	(2) in subsection (c)—
11	(A) in paragraph (2)(A)(i), by inserting ",
12	including a consideration of the impact on high
13	value assets" after "operational risks";
14	(B) in paragraph (5)—
15	(i) in subparagraph (A), by striking
16	"and" at the end;
17	(ii) in subparagraph (B), by striking
18	the period at the end and inserting "and";
19	and
20	(iii) by adding at the end the fol-
21	lowing:
22	"(C) a senior official from the Cybersecu-
23	rity and Infrastructure Security Agency of the
24	Department of Homeland Security, appointed
25	by the Director."; and

1	(C) in paragraph (6)(A), by striking "shall
2	be—" and all that follows through "4 employ-
3	ees" and inserting "shall be 4 employees".
4	(b) SUBCHAPTER I.—Subchapter I of chapter 113 of
5	subtitle III of title 40, United States Code, is amended—
6	(1) in section 11302—
7	(A) in subsection (b), by striking "use, se-
8	curity, and disposal of" and inserting "use, and
9	disposal of, and, in consultation with the Direc-
10	tor of the Cybersecurity and Infrastructure Se-
11	curity Agency and the National Cyber Director,
12	promote and improve the security of,";
13	(B) in subsection $(c)(3)(B)$ , by adding at
14	the end the following:
15	"(iii) The Director may make avail-
16	able, upon request, to the National Cyber
17	Director any cybersecurity funding infor-
18	mation described in subparagraph (A)(ii)
19	that is provided to the Director under
20	clause (ii) of this subparagraph.";
21	(C) in subsection (f), by striking "The Di-
22	rector shall' and inserting "The Director
23	shall—
24	"(1) encourage the heads of the executive agen-
25	cies to develop and use the best practices in the ac-

1	quisition of information technology, including supply
2	chain security best practices; and
3	"(2) consult with the Federal Chief Information
4	Security Officer appointed by the President under
5	section 3607 of title 44, United States Code, for the
6	development and use of supply chain security best
7	practices."; and
8	(D) in subsection (h), by inserting ", in-
9	cluding cybersecurity performances," after "the
10	performances"; and
11	(2) in section $11303(b)$ , in paragraph (2)(B)—
12	(A) in clause (i), by striking "or" at the
13	end;
14	(B) in clause (ii), by adding "or" at the
15	end; and
16	(C) by adding at the end the following:
17	"(iii) whether the function should be
18	performed by a shared service offered by
19	another executive agency.".
20	(c) Subchapter II.—Subchapter II of chapter 113
21	of subtitle III of title 40, United States Code, is amend-
22	ed—
23	(1) in section 11312(a), by inserting ", includ-
24	ing security risks" after "managing the risks";

1	(2) in section $11313(1)$ , by striking "efficiency
2	and effectiveness" and inserting "efficiency, security,
3	and effectiveness'';
4	(3) in section 11315, by adding at the end the
5	following:
6	"(d) Component Agency Chief Information Of-
7	FICERS.—The Chief Information Officer or an equivalent
8	official of a component agency shall report to—
9	"(1) the Chief Information Officer designated
10	under section $3506(a)(2)$ of title 44 or an equivalent
11	official of the agency of which the component agency
12	is a component; and
13	"(2) the head of the component agency.";
14	(4) in section 11317, by inserting "security,"
15	before "or schedule"; and
16	(5) in section $11319(b)(1)$ , in the paragraph
17	heading, by striking "CIOS" and inserting "CHIEF
18	INFORMATION OFFICERS".
19	(d) SUBCHAPTER III.—Section 11331 of title 40,
20	United States Code, is amended—
21	(1) in subsection (a), by striking "section
22	3532(b)(1)" and inserting "section 3552(b)";
23	(2) in subsection $(b)(1)(A)$ , by striking "the
24	Secretary of Homeland Security" and inserting "the

Director of the Cybersecurity and Infrastructure Se-
curity Agency";
(3) by adding at the end the following:
"(e) Review of Office of Management and
BUDGET GUIDANCE AND POLICY.—
"(1) Conduct of review.—
"(A) IN GENERAL.—Not less frequently
than once every 3 years, the Director of the Of-
fice of Management and Budget, in consultation
with, as available, the Chief Information Offi-
cers Council, the Director of the Cybersecurity
and Infrastructure Security Agency, the Na-
tional Cyber Director, the Comptroller General
of the United States, and the Council of the In-
spectors General on Integrity and Efficiency,
shall review the efficacy of the guidance and
policy promulgated by the Director in reducing
cybersecurity risks, including an assessment of
the requirements for agencies to report infor-
mation to the Director, and determine whether
any changes to that guidance or policy is appro-
priate.
"(B) FEDERAL RISK ASSESSMENTS.—In
conducting the review described in subpara-
graph (A), the Director shall consider the Fed-

eral risk assessments performed under section
 3553(i) of title 44.

3 "(C) REQUIREMENTS BURDEN REDUCTION
4 AND CLARITY.—In conducting the review de5 scribed in subparagraph (A), the Director shall
6 consider the cumulative reporting and compli7 ance burden to agencies as well as the clarity
8 of the requirements and deadlines contained in
9 guidance and policy documents.

10 "(2) UPDATED GUIDANCE.—Not later than 90 11 days after the date on which a review is completed 12 under paragraph (1), the Director of the Office of 13 Management and Budget shall issue updated guid-14 ance or policy to agencies determined appropriate by 15 the Director, based on the results of the review.

"(3) Congressional briefing.—Not later 16 17 than 60 days after the date on which a review is 18 completed under paragraph (1), the Director is ex-19 pected to provide to the Committee on Homeland 20 Security and Governmental Affairs of the Senate 21 and the Committee on Oversight and Reform of the 22 House of Representatives a briefing on the review 23 and any newly issued guidance or policy, which shall 24 include-

"(A) an overview of the guidance and pol icy promulgated under this section that is cur rently in effect;

4 "(B) the cybersecurity risk mitigation, or
5 other cybersecurity benefit, offered by each
6 guidance or policy document described in sub7 paragraph (A); and

8 "(C) a summary of the guidance or policy
9 to which changes were determined appropriate
10 during the review and what the changes in11 clude.

12 "(f) AUTOMATED STANDARD IMPLEMENTATION VERIFICATION.—When the Director of the National Insti-13 tute of Standards and Technology issues a proposed 14 15 standard pursuant to paragraphs (2) and (3) of section 20(a) of the National Institute of Standards and Tech-16 17 nology Act (15 U.S.C. 278g–3(a)), the Director of the National Institute of Standards and Technology shall con-18 19 sider developing and, if appropriate and practical, develop, 20 in consultation with the Director of the Cybersecurity and 21 Infrastructure Security Agency, specifications to enable 22 the automated verification of the implementation of the 23 controls within the standard.".

1	67 SEC. 103. ACTIONS TO ENHANCE FEDERAL INCIDENT RE-
2	SPONSE.
3	(a) Responsibilities of the Cybersecurity and
4	INFRASTRUCTURE SECURITY AGENCY.—
5	(1) IN GENERAL.—Not later than 180 days
6	after the date of the enactment of this Act, the Di-
7	rector of the Cybersecurity and Infrastructure Secu-
8	rity Agency shall—
9	(A) develop a plan for the development of
10	the analysis required under section 3597(a) of
11	title 44, United States Code, as added by this
12	Act, and the report required under subsection
13	(b) of that section that includes—
14	(i) a description of any challenges the
15	Director anticipates encountering; and
16	(ii) the use of automation and ma-
17	chine-readable formats for collecting, com-
18	piling, monitoring, and analyzing data; and
19	(B) provide to the appropriate congres-
20	sional committees a briefing on the plan devel-
21	oped under subparagraph (A).
22	(2) BRIEFING.—Not later than 1 year after the
23	date of the enactment of this Act, the Director of
24	the Cybersecurity and Infrastructure Security Agen-
25	cy shall provide to the appropriate congressional
26	committees a briefing on—

(A) the execution of the plan required
 under paragraph (1)(A); and

3 (B) the development of the report required
4 under section 3597(b) of title 44, United States
5 Code, as added by this Act.

6 (b) RESPONSIBILITIES OF THE DIRECTOR OF THE
7 OFFICE OF MANAGEMENT AND BUDGET.—

8 (1) IN GENERAL.—The Director shall develop 9 guidance, to be updated not less frequently than 10 once every 2 years, on the content, timeliness, and 11 format of the information provided by agencies 12 under section 3594(a) of title 44, United States 13 Code, as added by this Act.

14 (2) GUIDANCE ON RESPONDING TO INFORMA15 TION REQUESTS.—Not later than 1 year after the
16 date of the enactment of this Act, the Director shall
17 develop guidance for agencies to implement the re18 quirement under section 3594(c) of title 44, United
19 States Code, as added by this Act, to provide infor20 mation to other agencies experiencing incidents.

(3) 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 sec tions 3592, 3593, and 3596 of title 44, United
 States Code, as added by this Act.

6 (4) CONTRACTOR AND AWARDEE GUIDANCE.—

7 (A) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, the 8 9 Director, in coordination with the Secretary of 10 Homeland Security, the Secretary of Defense, 11 the Administrator of General Services, and the 12 heads of other agencies determined appropriate by the Director, shall issue guidance to Federal 13 14 agencies on how to deconflict, to the greatest 15 extent practicable, existing regulations, policies, 16 and procedures relating to the responsibilities of 17 contractors and awardees established under sec-18 tion 3595 of title 44, United States Code, as 19 added by this Act.

20 (B) EXISTING PROCESSES.—To the great21 est extent practicable, the guidance issued
22 under subparagraph (A) shall allow contractors
23 and awardees to use existing processes for noti24 fying Federal agencies of incidents involving in25 formation of the Federal Government.

1	(5) 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.".

# SEC. 104. ADDITIONAL GUIDANCE TO AGENCIES ON FISMA 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 sec8 tion 3554(a)(1)(A) of title 44, United States Code,
9 as amended by this Act;

10 (2) implementing additional cybersecurity pro11 cedures, which shall include resources for shared
12 services;

(3) establishing a process for providing the status of each remedial action under section 3554(b)(7)
of title 44, United States Code, as amended by this
Act, to the Director and the Director of the Cybersecurity and Infrastructure Security Agency using automation and machine-readable data, as practicable,
which shall include—

20 (A) specific guidance for the use of auto-21 mation and machine-readable data; and

(B) templates for providing the status ofthe remedial action;

(4) interpreting the definition of "high value
asset" under section 3552 of title 44, United States
Code, as amended by this Act; and

(5) a requirement to coordinate with inspectors
 general of agencies to ensure consistent under standing and application of agency policies for the
 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 sub11 mit sensitive information to an agency.

(2) SENSITIVE INFORMATION.—The term "sensitive information" has the meaning given the term
by the Director in guidance issued under subsection
(b).

(b) GUIDANCE ON NOTIFICATION OF REPORTING ENTITIES.—Not later than 180 days after the date of the
enactment of this Act, the Director shall issue guidance
requiring the head of each agency to notify a reporting
entity of an incident that is likely to substantially affect—

(1) the confidentiality or integrity of sensitive
information submitted by the reporting entity to the
agency pursuant to a statutory or regulatory requirement; or
(2) the agency information system or systems
 used in the transmission or storage of the sensitive
 information described in paragraph (1).
 **TITLE II—IMPROVING FEDERAL CYBERSECURITY**

### 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

(2) issue guidance to secure mobile devices, in-cluding for mobile applications, for every agency.

13 (b) CONTENTS.—The guidance issued under sub-14 section (a)(2) shall include—

(1) a requirement, pursuant to section
3506(b)(4) of title 44, United States Code, for every
agency to maintain a continuous inventory of
every—

19 (A) mobile device operated by or on behalf20 of the agency; and

21 (B) vulnerability identified by the agency22 associated with a mobile device; and

23 (2) a requirement for every agency to perform24 continuous evaluation of the vulnerabilities described

in paragraph (1)(B) and other risks associated with
 the use of applications on mobile devices.

3 (c) INFORMATION SHARING.—The Director, in co-4 ordination with the Director of the Cybersecurity and Infrastructure Security Agency, shall issue guidance to 5 agencies for sharing the inventory of the agency required 6 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.

(d) BRIEFING.—Not later than 60 days after the date
on which the Director issues guidance under subsection
(a)(2), the Director, in coordination with the Director of
the Cybersecurity and Infrastructure Security Agency,
shall provide to the appropriate congressional committees
a briefing on the guidance.

# 17 SEC. 202. DATA AND LOGGING RETENTION FOR INCIDENT 18 RESPONSE.

(a) RECOMMENDATIONS.—Not later than 2 years
after the date of the enactment of this Act, and not less
frequently than every 2 years thereafter, the Director of
the Cybersecurity and Infrastructure Security Agency, in
consultation with the Attorney General, shall submit to
the Director recommendations on requirements for logging

events on agency systems and retaining other relevant 1 2 data within the systems and networks of an agency. 3 CONTENTS.—The recommendations provided (b) under subsection (a) shall include— 4 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 to investigate potential criminal 23 activity; and 24 (6) requirements to ensure that, subject to com-25 pliance with statistical laws and other relevant data

protection requirements, the highest level security
 operations center of each agency has visibility into
 all agency logs.

4 (c) GUIDANCE.—Not later than 90 days after receiving the recommendations submitted under subsection (a), 5 the Director, in consultation with the Director of the Cy-6 7 bersecurity and Infrastructure Security Agency and the 8 Attorney General, shall, as determined to be appropriate 9 by the Director, update guidance to agencies regarding requirements for logging, log retention, log management, 10 sharing of log data with other appropriate agencies, or any 11 other logging activity determined to be appropriate by the 12 Director. 13

14 (d) SUNSET.—This section will cease to be in effect
15 on the date that is 10 years after the date of enactment
16 of this Act.

### 17 SEC. 203. FEDERAL PENETRATION TESTING POLICY.

(a) IN GENERAL.—Subchapter II of chapter 35 of
title 44, United States Code, is amended by adding at the
end the following:

# 21 "§ 3559A. Federal penetration testing

- 22 "(a) GUIDANCE.—
- 23 "(1) IN GENERAL.—The Director shall, in con24 sultation with the Secretary of the Department of

Homeland Security, issue guidance to agencies
 that—

3 "(A) requires agencies to use, when and
4 where appropriate, penetration testing on agen5 cy systems by both Federal and non-Federal en6 tities, with a focus on high value assets;

"(B) provides policies governing agency development of an operational plan, rules of engagement for utilizing penetration testing, and
procedures to utilize the results of penetration
testing to improve the cybersecurity and risk
management of the agency; and

"(C) establishes a program under the Cybersecurity and Infrastructure Security Agency
to ensure that penetration testing is being performed appropriately by agencies and to provide
operational support or a shared service.

18 "(b) RESPONSIBILITIES OF OMB.—The Director, in
19 coordination with the Director of the Cybersecurity and
20 Infrastructure Security Agency, shall—

21 "(1) not less frequently than annually, inven22 tory all Federal penetration testing assets; and
23 "(2) develop and maintain a standardized proc24 ess for the use of penetration testing.

"(c) EXCEPTION FOR NATIONAL SECURITY SYS TEMS.—The guidance issued under subsection (a) shall
 not apply to national security systems.

4 "(d) DELEGATION OF AUTHORITY FOR CERTAIN
5 SYSTEMS.—The authorities of the Director described in
6 subsection (a) shall be delegated—

7 "(1) to the Secretary of Defense in the case of
8 systems described in section 3553(e)(2); and

9 "(2) to the Director of National Intelligence in
10 the case of systems described in 3553(e)(3).".

(b) DEADLINE FOR GUIDANCE.—Not later than 180
days after the date of the enactment of this Act, the Director shall issue the guidance required under section
3559A(a) of title 44, United States Code, as added by subsection (a).

(c) SUNSET.—This section shall sunset on the date
that is 10 years after the date of enactment of this Act.
(d) CLERICAL AMENDMENT.—The table of sections
for chapter 35 of title 44, United States Code, is amended
by adding after the item relating to section 3559 the following:

"3559A. Federal penetration testing.".

(e) PENETRATION TESTING BY THE SECRETARY OF
HOMELAND SECURITY.—Section 3553(b) of title 44,
United States Code, as amended by section 5121, is further amended—

1 (1) in paragraph (8)(B), by striking "and" at 2 the end; 3 (2) by redesignating paragraph (9) as para-4 graph (10); and 5 (3) by inserting after paragraph (8) the fol-6 lowing: 7 "(9) performing penetration testing to identify 8 vulnerabilities within Federal information systems; 9 and". 10 SEC. 204. ONGOING THREAT HUNTING PROGRAM. 11 (a) THREAT HUNTING PROGRAM.— 12 (1) IN GENERAL.—Not later than 540 days after the date of the enactment of this Act, the Di-13 14 rector of the Cybersecurity and Infrastructure Secu-15 rity Agency shall, in accordance with the authorities 16 granted the Secretary under sections 3553(b)(7)-17 (8) and 3553(m) of title 44, United States Code (as 18 redesignated by this Act), establish a program to 19 provide ongoing, hypothesis-driven threat-hunting 20 services on the network of each agency. 21 (2) PLAN.—Not later than 180 days after the 22 date of the enactment of this Act, the Director of 23 the Cybersecurity and Infrastructure Security Agen-24 cy shall develop a plan to establish the program re-25 quired under paragraph (1) that describes how the

1	Director of the Cybersecurity and Infrastructure Se-
2	curity Agency plans to—
3	(A) determine the method for collecting,
4	storing, accessing, analyzing, and safeguarding
5	appropriate agency data;
6	(B) provide on-premises support to agen-
7	cies;
8	(C) staff threat hunting services;
9	(D) allocate available human and financial
10	resources to implement the plan; and
11	(E) provide input to the heads of agencies
12	on the use of—
13	(i) more stringent standards under
14	section 11331(c)(1) of title 40, United
15	States Code; and
16	(ii) additional cybersecurity proce-
17	dures under section 3554 of title 44,
18	United States Code.
19	(b) REPORTS.—The Director of the Cybersecurity
20	and Infrastructure Security Agency, in consultation with
21	the Director, shall submit to the appropriate congressional
22	committees—
23	(1) not later than 30 days after the date on
24	which the Director of the Cybersecurity and Infra-
25	structure Security Agency completes the plan re-

- quired under subsection (a)(2), a report on the plan
   to provide threat hunting services to agencies;
- 3 (2) not less than 30 days before the date on
  4 which the Director of the Cybersecurity and Infra5 structure Security Agency begins providing threat
  6 hunting services under the program under sub7 section (a)(1), a report providing any updates to the
  8 plan developed under subsection (a)(2); and

9 (3) not later than 1 year after the date on 10 which the Director of the Cybersecurity and Infra-11 structure Security Agency begins providing threat 12 hunting services to agencies other than the Cyberse-13 curity and Infrastructure Security Agency, a report 14 describing lessons learned from providing those serv-15 ices.

# 16 SEC. 205. CODIFYING VULNERABILITY DISCLOSURE PRO-17 GRAMS.

(a) IN GENERAL.—Subchapter II of Chapter 35 of
title 44, United States Code, is amended by inserting after
section 3559A, as added by section 204, the following:

# 21 "§ 3559B. Federal vulnerability disclosure programs

22 "(a) DEFINITIONS.—In this section:

23 "(1) REPORT.—The term 'report' means a vul24 nerability disclosure made to an agency by a re25 porter.

"(2) REPORTER.—The term 'reporter' means
 an individual that submits a vulnerability report
 pursuant to the vulnerability disclosure process of an
 agency.

5 "(b) Responsibilities of Omb.—

6 "(1) LIMITATION ON LEGAL ACTION.—The Di-7 rector of the Office of Management and Budget, in 8 consultation with the Attorney General, shall issue 9 guidance to agencies to not recommend or pursue 10 legal action against a reporter or an individual that 11 conducts a security research activity that the head 12 of the agency determines—

"(A) represents a good faith effort to follow the vulnerability disclosure policy of the
agency developed under subsection (d)(2); and
"(B) is authorized under the vulnerability
disclosure policy of the agency developed under
subsection (d)(2).

"(2) SHARING INFORMATION WITH CISA.—The
Director of the Office of Management and Budget,
in coordination with the Director of the Cybersecurity and Infrastructure Security Agency and in consultation with the National Cyber Director, shall
issue guidance to agencies on sharing relevant information in a consistent, automated, and machine

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

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

1	"(2) VULNERABILITY DISCLOSURE POLICY.—
2	The head of each agency shall develop and make
3	publicly available a vulnerability disclosure policy for
4	the agency, which shall—
5	"(A) describe—
6	"(i) the scope of the systems of the
7	agency included in the vulnerability disclo-
8	sure policy;
9	"(ii) the type of information system
10	testing that is authorized by the agency;
11	"(iii) the type of information system
12	testing that is not authorized by the agen-
13	cy; and
14	"(iv) the disclosure policy of the agen-
15	cy for sensitive information;
16	"(B) with respect to a report to an agency,
17	describe—
18	"(i) how the reporter should submit
19	the report; and
20	"(ii) if the report is not anonymous,
21	when the reporter should anticipate an ac-
22	knowledgment of receipt of the report by
23	the agency;
24	"(C) include any other relevant informa-
25	tion; and

"(D) be mature in scope, covering all inter net accessible Federal information systems used
 or operated by that agency or on behalf of that
 agency.

5 "(3) IDENTIFIED VULNERABILITIES.—The head
6 of each agency shall incorporate any vulnerabilities
7 reported under paragraph (2) into the vulnerability
8 management process of the agency in order to track
9 and remediate the vulnerability.

10 "(f) Congressional Reporting.—Not later than 11 90 days after the date of the enactment of the Federal 12 Information Security Modernization Act of 2022, and annually thereafter for a 3-year period, the Director of the 13 Cybersecurity and Infrastructure Security Agency, in con-14 15 sultation with the Director, shall provide to the Committee on Homeland Security and Governmental Affairs of the 16 17 Senate and the Committee on Oversight and Reform of the House of Representatives a briefing on the status of 18 the use of vulnerability disclosure policies under this sec-19 tion at agencies, including, with respect to the guidance 20 21 issued under subsection (b)(3), an identification of the 22 agencies that are compliant and not compliant.

23 "(g) EXEMPTIONS.—The authorities and functions of
24 the Director and Director of the Cybersecurity and Infra-

structure Security Agency under this section shall not
 apply to national security systems.

3 "(h) DELEGATION OF AUTHORITY FOR CERTAIN
4 SYSTEMS.—The authorities of the Director and the Direc5 tor of the Cybersecurity and Infrastructure Security Agen6 cy described in this section shall be delegated—

7 "(1) to the Secretary of Defense in the case of
8 systems described in section 3553(e)(2); and

9 "(2) to the Director of National Intelligence in
10 the case of systems described in section
11 3553(e)(3).".

(b) SUNSET.—This section shall sunset on the date
that is 10 years after the date of enactment of this Act.
(c) CLERICAL AMENDMENT.—The table of sections
for chapter 35 of title 44, United States Code, is amended
by adding after the item relating to section 3559A, as
added by this Act, the following:

"3559B. Federal vulnerability disclosure programs".

## 18 SEC. 206. IMPLEMENTING ZERO TRUST PRINCIPLES.

(a) GUIDANCE.—The Director shall maintain guidance on, and not later than 2 years after the date of the
enactment of this Act, provide an update to the appropriate congressional committees on progress in increasing
the internal defenses of agency systems through the adoption of zero trust cybersecurity principles across the government, including—

1	(1) shifting away from "trusted networks" to
2	implement security controls based on a presumption
3	of compromise;
4	(2) implementing principles of least privilege in
5	administering information security programs;
6	(3) limiting the ability of entities that cause in-
7	cidents to move laterally through or between agency
8	systems;
9	(4) identifying incidents quickly;
10	(5) isolating and removing unauthorized entities
11	from agency systems quickly;
12	(6) otherwise increasing the resource costs for
13	entities that cause incidents to be successful; and
14	(7) a summary of the agency progress reports
15	required under subsection (b).
16	(b) Agency Progress Reports.—Not later than
17	270 days after the date of the enactment of this Act, the
18	head of each agency shall submit to the Director a
19	progress report on implementing an information security
20	program based on a zero trust cybersecurity strategy,
21	which shall include—
22	(1) a description of any steps the agency has
23	completed, including progress toward achieving any
24	requirements issued by the Director, including the

adoption of any models or reference architecture;

(2) an identification of activities that have not
 yet been completed and that would have the most
 immediate security impact; and

4 (3) a schedule to implement any planned activi-5 ties.

### 6 SEC. 207. GAO AUTOMATION REPORT.

7 Not later than 2 years after the date of the enact-8 ment of this Act, the Comptroller General of the United 9 States shall perform a study on the use of automation and 10 machine readable data across the Federal Government for cybersecurity purposes, including the automated updating 11 12 of cybersecurity tools, sensors, or processes employed by 13 agencies under paragraphs (1), (5)(C), and (8)(B) of section 3554(b) of title 44, United States Code. 14

# 15 SEC. 208. EXTENSION OF FEDERAL ACQUISITION SECURITY 16 COUNCIL.

17 (a) EXTENSION.—Section 1328 of title 41, United
18 States Code, is amended by striking "the date that" and
19 all that follows and inserting "December 31, 2026".

(b) DESIGNATION.—Section 1322(c)(1) of title 41,
United States Code, is amended by striking "Not later
than" and all that follows through the end of the paragraph and inserting " The Director of OMB shall designate the Federal Chief Information Security Officer appointed by the President under section 3607 of title 44,

United States Code, or an equivalent senior-level official
 from the Office of Management and Budget if the position
 is vacant, to serve as the Chairperson of the Council.".
 (c) DEFINITION.—Section 1321 of title 41, United
 States Code, is amended by adding the following definition
 and renumbering accordingly:

7 "(8) SOFTWARE BILL OF MATERIALS.—The
8 term 'software bill of materials' shall have the mean9 ing given to it by the Administrator of the National
10 Telecommunications and Information Administra11 tion.".

(d) REQUIREMENT.—Subsection 1326(b) of title 41,
United States Code, is amended by inserting the following
paragraph before paragraph (6) and renumbering all subsequent paragraphs accordingly:

16 "(6) maintaining an inventory of all available 17 Software Bills of Materials for each software prod-18 ucts in use by the agency, as appropriate, to be 19 available to the Federal Acquisition Security Coun-20 cil, the Secretary of Homeland Security acting 21 through the Director of Cybersecurity and Infra-22 structure Security, and the National Cyber Direc-23 tor.".

1 SEC. 209. FEDERAL CHIEF INFORMATION SECURITY OFFI-2 CER.

3 (a) IN GENERAL.—Chapter 36 of title 44, United States Code, is amended by inserting at the end: 4

#### 5 "§ 3607. Federal chief information security officer

6 "(a) ESTABLISHMENT.—There is established in the Office of the Federal Chief Information Officer of the Of-7 8 fice of Management and Budget a Federal Chief Informa-9 tion Security Officer, who shall be appointed by the Presi-10 dent.

11 "(b) DUTIES.—The Federal Chief Information Security Officer shall report to the Federal Chief Information 12 Officer, and assist the Chief Information Officer in car-13 rying out— 14

15 "(1) all functions under this chapter:

16 "(2) all functions assigned to the Director 17 under title II of the E-Government Act of 2002;

18 "(3) other electronic government initiatives, 19 consistent with other statutes; and

20 "(4) other initiatives determined by the Chief 21 Information Officer.

22 "(c) ADDITIONAL DUTIES.—The Federal Chief Infor-23 mation Security Officer shall work with the Chief Informa-24 tion Officer to oversee implementation of electronic Government under the E-Government Act of 2002, and other 25

1	relevant statutes, in a manner consistent with law, relating
2	to—
3	"(1) cybersecurity strategy, policy, and oper-
4	ations;
5	"(2) the development of enterprise architec-
6	tures;
7	"(3) information security;
8	"(4) privacy;
9	"(5) access to, dissemination of, and preserva-
10	tion of Government information; and
11	"(6) other areas of electronic Government as
12	determined by the Administrator.
13	"(d) Assistance.—The Federal Chief Information
14	Security Officer shall assist the Administrator in the per-
15	formance of electronic Government functions as described
16	in section 3602(f).".
17	(b) IN GENERAL.—Section 1500 of title 6, United
18	States Code, is amended by adding:
19	"(d) DEPUTY DIRECTOR.—There shall be a Deputy
20	National Cyber Director for Agency Strategy, Capabilities,
21	and Budget, who shall be the Federal Chief Information
22	Security Officer appointed by the President under section
23	3607 of title 44, United States Code, and shall report to
24	the Director and assist the office in carrying out the fol-

lowing duties as it applies to the protection of Federal in formation systems by the agencies—

- 3 "(1) the preparation and oversight over the im4 plementation of the national cyber policy under sub5 section (c)(1)(C)(i);
- 6 "(2) the formation and issuance of rec7 ommendations to agencies on resource allocations
  8 and policies under subsection (c)(1)(C)(ii);
- 9 "(3) reviewing annual budget proposals and
  10 making related recommendations under subsection
  11 (c)(1)(C)(iii); and
- 12 "(4) other initiatives determined by the Direc13 tor, or to be necessary to coordinate with the Office
  14 by the Federal Chief Information Officer.".
- (c) CLERICAL AMENDMENT.—The table of sections
  for chapter 36 of title 44, United States Code, is amended
  by adding after the item relating to section 3606 the following:

"3607. Federal chief information security officer".

# 19 SEC. 210. COUNCIL OF THE INSPECTORS GENERAL ON IN-

# 20 TEGRITY AND EFFICIENCY DASHBOARD.

- 21 Section 11(e)(2) of the Inspector General Act of 1978
- 22 (5 U.S.C. App.) is amended—
- 23 (1) in subparagraph (A), by striking "and" at
- the end;

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. 211. 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,
19	shall—
20	(1) evaluate any covered metrics established as
21	of the date of the enactment of this Act; and
22	(2) as appropriate and pursuant to section
23	224(c) of the Cybersecurity Act of 2015 (6 U.S.C.
24	1522(c))—
25	(A) update the covered metrics; and

95

(B) establish new covered metrics.

2 (c) IMPLEMENTATION.—

3 (1) IN GENERAL.—Not later than 540 days 4 after the date of the enactment of this Act, the Di-5 rector, in coordination with the Director of the Cy-6 bersecurity and Infrastructure Security Agency, 7 shall promulgate guidance that requires each agency 8 to use covered metrics to track trends in the cyber-9 security and incident response capabilities of the 10 agency.

11 (2)Performance DEMONSTRATION.—The 12 guidance issued under paragraph (1) and any subse-13 quent guidance shall require agencies to share with 14 the Director of the Cybersecurity and Infrastructure 15 Security Agency data demonstrating the perform-16 ance of the agency using the covered metrics in-17 cluded 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 vali date 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.

9 (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.

16 (2) USE OF METRICS.—Not later than 180 days
17 after the date on which the Director promulgates
18 guidance under subsection (c)(1), the Director shall
19 submit to the appropriate congressional committees
20 a report on the results of the use of the covered
21 metrics by agencies.

(e) CYBERSECURITY ACT OF 2015 UPDATES.—Section 224 of the Cybersecurity Act of 2015 (6 U.S.C. 1522)
is amended—

1 (1) by amending subsection (c) to read as fol-2 lows:

3 "(c) IMPROVED METRICS.—The Director of the Cy4 bersecurity and Infrastructure Security Agency, in coordi5 nation with the Director, shall establish, review, and up6 date metrics to measure the cybersecurity and incident re7 sponse capabilities of agencies in accordance with the re8 sponsibilities of agencies under section 3554 of title 44,
9 United States Code.";

10 (2) by striking subsection (e); and

(3) by redesignating subsection (f) as sub-section (e).

# **13 TITLE III—PILOT PROGRAMS TO**

# 14 ENHANCE FEDERAL CYBER 15 SECURITY

# 16 SEC. 301. RISK-BASED BUDGET PILOT.

17 (a) DEFINITIONS.—In this section:

18 (1) APPROPRIATE CONGRESSIONAL COMMIT19 TEES.—The term "appropriate congressional com20 mittees" means—

21 (A) the Committee on Homeland Security
22 and Governmental Affairs and the Committee
23 on Appropriations of the Senate; and

24 (B) the Committee on Homeland Security,25 the Committee on Oversight and Reform, and

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

1 (A) MODEL.—Not later than 1 year after 2 the first publication of the budget submitted by the President under section 1105 of title 31, 3 4 United States Code, following the date of the 5 enactment of this Act, the Director, in consulta-6 tion with the Director of the Cybersecurity and 7 Infrastructure Security Agency and the Na-8 tional Cyber Director and in coordination with 9 the Director of the National Institute of Stand-10 ards and Technology, shall conduct a pilot for 11 creating a risk-based budget for cybersecurity spending. 12 13 (B) CONTENTS OF PILOT.—The pilot re-14 quired to be developed under paragraph (1) 15 shall-(i) consider Federal and non-Federal 16 17 cyber threat intelligence products, where 18 available, identify to threats, 19 vulnerabilities, and risks; 20 (ii) consider the impact of agency op-21 erations of compromise of systems, includ-22 ing the interconnectivity to other agency 23 systems and the operations of other agen-24 cies;

1	(iii) indicate where resources should
2	be allocated to have the greatest impact on
3	mitigating current and future threats and
4	current and future cybersecurity capabili-
5	ties;
6	(iv) be used to inform acquisition and
7	sustainment of—
8	(I) information technology and
9	cybersecurity tools;
10	(II) information technology and
11	cybersecurity architectures;
12	(III) information technology and
13	cybersecurity personnel; and
14	(IV) cybersecurity and informa-
15	tion technology concepts of operations;
16	and
17	(v) be used to evaluate and inform
18	government-wide cybersecurity programs of
19	the Department of Homeland Security.
20	(2) REPORTS.—Not later than 2 years after the
21	first publication of the budget submitted by the
22	President under section 1105 of title 31, United
23	States Code, following the date of the enactment of
24	this Act, the Director shall submit a report to Con-
25	gress on the implementation of the pilot for risk-

based budgeting for cybersecurity spending, an as sessment of agency implementation, and an evalua tion of whether the risk-based budget helps to miti gate cybersecurity vulnerabilities.

(3) GAO REPORT.—Not later than 3 years after 5 6 the date on which the first budget of the President 7 is submitted to Congress containing the validation 8 required under section 1105(a)(35)(A)(i)(V) of title 9 31, United States Code, as amended by subsection 10 (c), the Comptroller General of the United States 11 shall submit to the appropriate congressional com-12 mittees a report that includes—

13 (A) an evaluation of the success of pilot
14 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

19 (C) any other information relating to risk20 based budgets the Comptroller General deter21 mines appropriate.

# 22 SEC. 302. ACTIVE CYBER DEFENSIVE STUDY.

(a) DEFINITION.—In this section, the term "activedefense technique" has the meaning given in guidance

issued by the Director, in coordination with the Attorney
 General.

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

agency operations and mission delivery, threat re-

sponse efforts, criminal investigations, and national
 security activities, including intelligence collection;
 and

4 (4) the development of a framework for the use
5 of different active defense techniques by agencies.

6 SEC. 303. SECURITY OPERATIONS CENTER AS A SERVICE
7 PILOT.

8 (a) PURPOSE.—The purpose of this section is for the 9 Director of the Cybersecurity and Infrastructure Security 10 Agency to run a security operation center on behalf of the 11 head of another agency, alleviating the need to duplicate 12 this function at every agency, and empowering a greater 13 centralized cybersecurity capability.

(b) PLAN.—Not later than 1 year after the date of
the enactment of this Act, the Director of the Cybersecurity and Infrastructure Security Agency shall develop a
plan to establish a centralized Federal security operations
center shared service offering within the Cybersecurity
and Infrastructure Security Agency.

20 (c) CONTENTS.—The plan required under subsection
21 (b) shall include considerations for—

(1) collecting, organizing, and analyzing agencyinformation system data in real time;

24 (2) staffing and resources; and

(3) appropriate interagency agreements, con cepts of operations, and governance plans.

3 (d) PILOT PROGRAM.—

4 (1) IN GENERAL.—Not later than 180 days 5 after the date on which the plan required under sub-6 section (b) is developed, the Director of the Cyberse-7 curity and Infrastructure Security Agency, in con-8 sultation with the Director of the Office of Manage-9 ment and Budget, shall enter into a 1-year agree-10 ment with not less than 2 agencies to offer a secu-11 rity 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, may enter into additional 1-year
agreements described in paragraph (1) with agencies.

19 (e) BRIEFING AND REPORT.—

20 (1) BRIEFING.—Not later than 260 days after
21 the date of the enactment of this Act, the Director
22 of the Cybersecurity and Infrastructure Security
23 Agency shall provide to appropriate congressional
24 committees a briefing on the parameters of any 1-

year agreements entered into under subsection
 (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).
12	SEC. 304. ENDPOINT DETECTION AND RESPONSE AS A
13	SHARED SERVICE PILOT.
13 14	<b>SHARED SERVICE PILOT.</b> (a) PURPOSE.—The Cybersecurity and Infrastruc-
14	(a) PURPOSE.—The Cybersecurity and Infrastruc-
14 15	(a) PURPOSE.—The Cybersecurity and Infrastruc- ture Security Agency is directed to establish and conduct
14 15 16	(a) PURPOSE.—The Cybersecurity and Infrastruc- ture Security Agency is directed to establish and conduct a pilot to determine the feasibility, value, and efficacy of
14 15 16 17	(a) PURPOSE.—The Cybersecurity and Infrastruc- ture 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-
14 15 16 17 18	(a) PURPOSE.—The Cybersecurity and Infrastruc- ture 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-
<ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	(a) PURPOSE.—The Cybersecurity and Infrastruc- ture 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- hance interoperability, and continuously detect and miti-

24 to establish a centralized endpoint detection and response

 $23\,$  and Infrastructure Security Agency shall develop a plan  $\,$ 

1 shared service offering within the Cybersecurity and Infrastructure Security Agency. 2 3 (c) CONTENTS.—The plan required under subsection (b) shall include considerations for— 4 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 endpoint data from both within 17 the agency and across agencies to provide enterprise-18 wide monitoring of network to detect abnormal net-19 work behavior; and 20 (6) appropriate interagency agreements, con-21 cepts of operations, and governance plans. 22 (d) PILOT PROGRAM.— 23 (1) IN GENERAL.—Not later than 60 days after 24 the date on which the plan required under sub-25 section (b) is developed, the Director of the Cyberse-

1 curity and Infrastructure Security Agency, in con-2 sultation with the Director, shall enter into a 1-year 3 agreement with not less than 2 agencies to offer 4 endpoint detection and response as a shared service. 5 (2) ADDITIONAL AGREEMENTS.—After the date 6 on which the briefing required under subsection 7 (e)(1) is provided, the Director of the Cybersecurity 8 and Infrastructure Security Agency, in consultation 9 with the Director, may enter into additional 1-year 10 agreements described in paragraph (1) with agen-11 cies.

12 (e) BRIEFING AND REPORT.—

13 (1) BRIEFING.—Not later than 180 days after 14 the date of enactment of this Act, the Director of 15 the Cybersecurity and Infrastructure Security Agen-16 cy shall provide to the Committee on Homeland Se-17 curity and Governmental Affairs of the Senate and 18 the Committee on Homeland Security and the Com-19 mittee on Oversight and Reform of the House of 20 Representatives a briefing on the parameters of any 21 1-year agreements entered into under subsection 22 (d)(1).

(2) REPORT.—Not later than 90 days after the
date on which the first 1-year agreement entered
into under subsection (d) expires, the Director of the

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