AMENDMENT NO	Calendar No.
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Purpose: To modernize Federal information security management, to amend the Homeland Security Act of 2002 to require reporting of cyber incidents to the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security, and to make technical corrections to the Homeland Security Act of 2002.

IN THE SENATE OF THE UNITED STATES-117th Cong., 1st Sess.

H.R.4350

To author activ	AMENDMENT Nº 4799	y
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ment stren	To: Amct. No. 3867	1
Referred	2n6	
• (Page(s) GPO: 2018 33-682 (mac)	

AMENDMENT intended to be proposed by Mr. Peters (for himself, Mr. PORTMAN, Mr. WARNER, Ms. COLLINS Mr. King and Mr. REED to the amendment (No. 3867) proposed by Mr. REED

Viz:

- At the end, add the following: 1
- DIVISION E-FEDERAL INFOR-
- **MATION SECURITY** MOD-3
- **ERNIZATION ACT OF 2021** 4
- SEC. 5101. SHORT TITLE.
- This division may be cited as the "Federal Informa-6
- 7 tion Security Modernization Act of 2021".

1	SEC. 5102. DEFINITIONS.
2	In this division, unless otherwise specified:
3	(1) Additional cybersecurity proce-
4	DURE.—The term "additional cybersecurity proce-
5	dure" has the meaning given the term in section
6	3552(b) of title 44, United States Code, as amended
7	by this division.
8	(2) AGENCY.—The term "agency" has the
9	meaning given the term in section 3502 of title 44,
10	United States Code.
11	(3) Appropriate congressional commit-
12	TEES.—The term "appropriate congressional com-
13	mittees" means—
14	(A) the Committee on Homeland Security
15	and Governmental Affairs of the Senate;
16	(B) the Committee on Oversight and Re-
17	form of the House of Representatives; and
18	(C) the Committee on Homeland Security
19	of the House of Representatives.
20	(4) Director.—The term "Director" means
21	the Director of the Office of Management and Budg-
22	et.
23	(5) Incident.—The term "incident" has the
24	meaning given the term in section 3552(b) of title
25	44, United States Code.

1	(6) NATIONAL SECURITY SYSTEM.—The term
2	"national security system" has the meaning given
3	the term in section 3552(b) of title 44, United
4	States Code.
5	(7) PENETRATION TEST.—The term "penetra-
6	tion test" has the meaning given the term in section
7	3552(b) of title 44, United States Code, as amended
8	by this division.
9	(8) Threat hunting.—The term "threat
10	hunting" means proactively and iteratively searching
11	for threats to systems that evade detection by auto-
12	mated threat detection systems.
13	TITLE LI—UPDATES TO FISMA
14	SEC. 5121. TITLE 44 AMENDMENTS.
15	(a) Subchapter I Amendments.—Subchapter I of
16	chapter 35 of title 44, United States Code, is amended—
17	(1) in section 3504—
18	(A) in subsection (a)(1)(B)—
19	
	(i) by striking clause (v) and inserting
20	(i) by striking clause (v) and inserting the following:
2021	
	the following:
21	the following: "(v) confidentiality, privacy, disclosure,

1	(iii) by inserting after clause (v) the
2	following:
3	"(vi) in consultation with the National
4	Cyber Director and the Director of the Cyberse-
5	curity and Infrastructure Security Agency, se-
6	curity of information; and"; and
7	(B) in subsection (g), by striking para-
8	graph (1) and inserting the following:
9	"(1) develop, and in consultation with the Di-
10	rector of the Cybersecurity and Infrastructure Secu-
11	rity Agency and the National Cyber Director, over-
12	see the implementation of policies, principles, stand-
13	ards, and guidelines on privacy, confidentiality, secu-
14	rity, disclosure and sharing of information collected
15	or maintained by or for agencies; and";
16	(2) in section 3505—
17	(A) in paragraph (3) of the first subsection
18	designated as subsection (c)—
19	(i) in subparagraph (B)—
20	(I) by inserting "the Director of
21	the Cybersecurity and Infrastructure
22	Security Agency, the National Cyber
23	Director, and" before "the Comp-
24	troller General"; and
25	(II) by striking "and" at the end;

1	(ii) in subparagraph (C)(v), by strik-
2	ing the period at the end and inserting ";
3	and"; and
4	(iii) by adding at the end the fol-
5	lowing:
6	"(D) maintained on a continual basis through
7	the use of automation, machine-readable data, and
8	scanning."; and
9	(B) by striking the second subsection des-
0	ignated as subsection (c);
1	(3) in section 3506—
12	(A) in subsection (b)(1)(C), by inserting ",
13	availability" after "integrity"; and
14	(B) in subsection (h)(3), by inserting "se-
15	curity," after "efficiency,"; and
16	(4) in section 3513—
17	(A) by redesignating subsection (c) as sub-
18	section (d); and
19	(B) by inserting after subsection (b) the
20	following:
21	"(c) Each agency providing a written plan under sub-
22	section (b) shall provide any portion of the written plan
23	addressing information security or cybersecurity to the Di-
24	rector of the Cybersecurity and Infrastructure Security
25	Agency.".

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

1	"(8) The term 'major incident' has the meaning
2	given the term in guidance issued by the Director
3	under section 3598(a).";
4	(D) by inserting after paragraph (9), as so
5	redesignated, the following:
6	"(10) The term 'penetration test' means a spe-
7	cialized type of assessment that—
8	"(A) is conducted on an information sys-
9	tem or a component of an information system;
10	and
11	"(B) emulates an attack or other exploi-
12	tation capability of a potential adversary, typi-
13	cally under specific constraints, in order to
14	identify any vulnerabilities of an information
15	system or a component of an information sys-
16	tem that could be exploited."; and
17	(E) by inserting after paragraph (11), as
18	so redesignated, the following:
19	"(12) The term 'shared service' means a cen-
20	tralized business or mission capability that is pro-
21	vided to multiple organizations within an agency or
22	to multiple agencies.".
23	(2) Conforming amendments.—
24	(A) HOMELAND SECURITY ACT OF 2002.—
25	Section 1001(c)(1)(A) of the Homeland Secu-

1	rity Act of 2002 (6 U.S.C. $511(1)(A)$) is
2	amended by striking "section 3552(b)(5)" and
3	inserting "section 3552(b)".
4	(B) TITLE 10.—
5	(i) Section 2222.—Section 2222(i)(8)
6	of title 10, United States Code, is amended
7	by striking "section 3552(b)(6)(A)" and
8	inserting "section 3552(b)(9)(A)".
9	(ii) Section 2223.—Section
10	2223(c)(3) of title 10, United States Code,
11	is amended by striking "section
12	3552(b)(6)" and inserting "section
13	3552(b)".
14	(iii) Section 2315.—Section 2315 of
15	title 10, United States Code, is amended
16	by striking "section 3552(b)(6)" and in-
17	serting "section 3552(b)".
18	(iv) SECTION 2339A.—Section
19	2339a(e)(5) of title 10, United States
20	Code, is amended by striking "section
21	3552(b)(6)" and inserting "section
22	3552(b)".
23	(C) High-performance computing act
24	of the High-Perform-
25	ance Computing Act of 1991 (15 U.S.C.

1	5527(a)) is amended by striking "section
2	3552(b)(6)(A)(i)" and inserting "section
3	3552(b)(9)(A)(i)".
4	(D) Internet of things cybersecu-
5	RITY IMPROVEMENT ACT OF 2020.—Section 3(5)
6	of the Internet of Things Cybersecurity Im-
7	provement Act of 2020 (15 U.S.C. 278g-3a) is
8	amended by striking "section 3552(b)(6)" and
9	inserting "section 3552(b)".
10	(E) NATIONAL DEFENSE AUTHORIZATION
11	ACT FOR FISCAL YEAR 2013.—Section
12	933(e)(1)(B) of the National Defense Author-
13	ization Act for Fiscal Year 2013 (10 U.S.C.
14	2224 note) is amended by striking "section
15	3542(b)(2)" and inserting "section 3552(b)".
16	(F) IKE SKELTON NATIONAL DEFENSE AU-
17	THORIZATION ACT FOR FISCAL YEAR 2011.—The
18	Ike Skelton National Defense Authorization Act
19	for Fiscal Year 2011 (Public Law 111–383) is
20	amended—
21	(i) in section 806(e)(5) (10 U.S.C.
22	2304 note), by striking "section 3542(b)"
23	and inserting "section 3552(b)";
24	(ii) in section 931(b)(3) (10 U.S.C.
25	2223 note), by striking "section

1	3542(b)(2)" and inserting "section
2	3552(b)"; and
3	(iii) in section 932(b)(2) (10 U.S.C.
4	2224 note), by striking "section
5	3542(b)(2)" and inserting "section
6	3552(b)".
7	(G) E-GOVERNMENT ACT OF 2002.—Sec-
8	tion 301(c)(1)(A) of the E-Government Act of
9	2002 (44 U.S.C. 3501 note) is amended by
10	striking "section 3542(b)(2)" and inserting
11	"section 3552(b)".
12	(H) NATIONAL INSTITUTE OF STANDARDS
13	AND TECHNOLOGY ACT.—Section 20 of the Na-
14	tional Institute of Standards and Technology
15	Act (15 U.S.C. 278g-3) is amended—
16	(i) in subsection (a)(2), by striking
17	"section 3552(b)(5)" and inserting "sec-
18	tion 3552(b)"; and
19	(ii) in subsection (f)—
20	(I) in paragraph (3), by striking
21	"section 3532(1)" and inserting "sec-
22	tion 3552(b)"; and
23	(II) in paragraph (5), by striking
24	"section 3532(b)(2)" and inserting
25	"section 3552(b)".

1	(c) SUBCHAPTER II AMENDMENTS.—Subchapter II
2	of chapter 35 of title 44, United States Code, is amend-
3	ed —
4	(1) in section 3551—
5	(A) in paragraph (4), by striking "diag-
6	nose and improve" and inserting "integrate, de-
7	liver, diagnose, and improve";
8	(B) in paragraph (5), by striking "and" at
9	the end;
10	(C) in paragraph (6), by striking the pe-
11	riod at the end and inserting a semi colon; and
12	(D) by adding at the end the following:
13	"(7) recognize that each agency has specific
14	mission requirements and, at times, unique cyberse-
15	curity requirements to meet the mission of the agen-
16	$\mathrm{ey};$
17	"(8) recognize that each agency does not have
18	the same resources to secure agency systems, and an
19	agency should not be expected to have the capability
20	to secure the systems of the agency from advanced
21	adversaries alone; and
22	"(9) recognize that a holistic Federal cybersecu-
23	rity model is necessary to account for differences be-
24	tween the missions and capabilities of agencies.";
25	(2) in section 3553—

1	(A) by striking the section heading and in-
2	serting "Authority and functions of the
3	Director and the Director of the Cy-
4	bersecurity and Infrastructure Secu-
5	rity Agency".
6	(B) in subsection (a)—
7	(i) in paragraph (1), by inserting ", in
8	consultation with the Director of the Cy-
9	bersecurity and Infrastructure Security
10	Agency and the National Cyber Director,"
11	before "overseeing";
12	(ii) in paragraph (5), by striking
13	"and" at the end; and
14	(iii) by adding at the end the fol-
15	lowing:
16	"(8) promoting, in consultation with the Direc-
17	tor of the Cybersecurity and Infrastructure Security
18	Agency and the Director of the National Institute of
19	Standards and Technology—
20	"(A) the use of automation to improve
21	Federal cybersecurity and visibility with respect
22	to the implementation of Federal cybersecurity;
23	and
24	"(B) the use of presumption of com-
25	promise and least privilege principles to improve

Ţ	,	resulency and timely response actions to inci-
2		dents on Federal systems.";
3		(C) in subsection (b)—
4		(i) by striking the subsection heading
5		and inserting "Cybersecurity and In-
6		FRASTRUCTURE SECURITY AGENCY";
7		(ii) in the matter preceding paragraph
8		(1), by striking "The Secretary, in con-
9		sultation with the Director" and inserting
10		"The Director of the Cybersecurity and In-
11		frastructure Security Agency, in consulta-
12		tion with the Director and the National
13		Cyber Director";
14		(iii) in paragraph (2)—
15		(I) in subparagraph (A), by in-
16		serting "and reporting requirements
17		under subchapter IV of this title"
18		after "section 3556"; and
9		(II) in subparagraph (D), by
20		striking "the Director or Secretary"
21		and inserting "the Director of the Cy-
22		bersecurity and Infrastructure Secu-
23		rity Agency";

1	(iv) in paragraph (5), by striking "co-
2	ordinating" and inserting "leading the co-
3	ordination of";
4	(v) in paragraph (8), by striking "the
5	Secretary's discretion" and inserting "the
6	Director of the Cybersecurity and Infra-
7	structure Security Agency's discretion";
8	and
9	(vi) in paragraph (9), by striking "as
10	the Director or the Secretary, in consulta-
11	tion with the Director," and inserting "as
12	the Director of the Cybersecurity and In-
13	frastructure Security Agency";
14	(D) in subsection (c)—
15	(i) in the matter preceding paragraph
16	(1), by striking "each year" and inserting
17	"each year during which agencies are re-
18	quired to submit reports under section
19	3554(c)";
20	(ii) by striking paragraph (1);
21	(iii) by redesignating paragraphs (2),
22	(3), and (4) as paragraphs (1), (2), and
23	(3), respectively;
24	(iv) in paragraph (3), as so redesig-
25	nated, by striking "and" at the end;

1	(v) by inserting after paragraph (3),
2	as so redesignated the following:
3	"(4) a summary of each assessment of Federal
4	risk posture performed under subsection (i);"; and
5	(vi) in paragraph (5), by striking the
6	period at the end and inserting "; and";
7	(E) by redesignating subsections (i), (j),
8	(k), and (l) as subsections (j), (k), (l), and (m)
9	respectively;
10	(F) by inserting after subsection (h) the
11	following:
12	"(i) Federal Risk Assessments.—On an ongoing
13	and continuous basis, the Director of the Cybersecurity
14	and Infrastructure Security Agency shall perform assess-
15	ments of Federal risk posture using any available informa-
16	tion on the cybersecurity posture of agencies, and brief
17	the Director and National Cyber Director on the findings
18	of those assessments including—
9	"(1) the status of agency cybersecurity remedial
20	actions described in section 3554(b)(7);
21	"(2) any vulnerability information relating to
22	the systems of an agency that is known by the agen-
23	$\mathrm{ey};$
24	"(3) analysis of incident information under sec-
25	tion 3597;

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

1	"(2) the trends identified in the Federal risk
2	assessment performed under subsection (i)."; and
3	(H) by adding at the end the following:
4	"(n) BINDING OPERATIONAL DIRECTIVES.—If the
5	Director of the Cybersecurity and Infrastructure Security
6	Agency issues a binding operational directive or an emer-
7	gency directive under this section, not later than 2 days
8	after the date on which the binding operational directive
9	requires an agency to take an action, the Director of the
10	Cybersecurity and Infrastructure Security Agency shall
11	provide to the appropriate reporting entities the status of
12	the implementation of the binding operational directive at
13	the agency.";
14	(3) in section 3554—
15	(A) in subsection (a)—
16	(i) in paragraph (1)—
17	(I) by redesignating subpara-
18	graphs (A), (B), and (C) as subpara-
19	graphs (B), (C), and (D), respectively;
20	(II) by inserting before subpara-
21	graph (B), as so redesignated, the fol-
22	lowing:
23	"(A) on an ongoing and continuous basis,
24	performing agency system risk assessments
25	that—

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1	"(1) 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;

1	"(III) information provided to
2	the agency through the vulnerability
3	disclosure program of the agency
4	under section 3559B;
5	"(IV) incidents; and
6	"(V) any other vulnerability in-
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
12	described in clauses (ii) and (iv) and the
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-

1	mation from the assessment con-
2	ducted under subparagraph (A), pro-
3	viding, in consultation with the Direc-
4	tor of the Cybersecurity and Infra-
5	structure Security Agency, informa-
6	tion";
7	(IV) in subparagraph (C), as so
8	${f redesignated}$ —
9	(aa) in clause (ii) by insert-
10	ing "binding" before "oper-
11	ational"; and
12	(bb) in clause (vi), by strik-
13	ing "and" at the end; and
14	(V) by adding at the end the fol-
15	lowing:
16	"(E) providing an update on the ongoing
17	and continuous assessment performed under
18	subparagraph (A)—
19	"(i) upon request, to the inspector
20	general of the agency or the Comptroller
21	General of the United States; and
22	"(ii) on a periodic basis, as deter-
23	mined by guidance issued by the Director
24	but not less frequently than annually, to—
25	"(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;

Ţ	"(11) 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 in accordance with the risk-
9	based cyber budget model developed pursuant
10	to section 3553(a)(7);";
11	(ii) in paragraph (2)—
12	(I) in subparagraph (A), by in-
13	serting "in accordance with the agen-
14	cy system risk assessment performed
15	under paragraph (1)(A)" after "infor-
16	mation systems";
17	(II) in subparagraph (B)—
18	(aa) by striking "in accord-
19	ance with standards" and insert-
20	ing "in accordance with—
21	"(i) standards"; and
22	(bb) by adding at the end
23	the following:
24	"(ii) the evaluation performed under
25	paragraph (1)(F); and

1	"(111) the implementation plan de-
2	scribed in paragraph (1)(G);"; and
3	(III) in subparagraph (D), by in-
4	serting ", through the use of penetra-
5	tion testing, the vulnerability disclo-
6	sure program established under sec-
7	tion 3559B, and other means," after
8	"periodically";
9	(iii) in paragraph (3)—
10	(I) in subparagraph (A)—
11	(aa) in clause (iii), by strik-
12	ing "and" at the end;
13	(bb) in clause (iv), by add-
14	ing "and" at the end; and
15	(cc) by adding at the end
16	the following:
17	"(v) ensure that—
18	"(I) senior agency information
19	security officers of component agen-
20	cies carry out responsibilities under
21	this subchapter, as directed by the
22	senior agency information security of-
23	ficer of the agency or an equivalent
24	official; and

Ţ	"(11) senior agency information
2	security officers of component agen-
3	cies report to—
4	"(aa) the senior information
5	security officer of the agency or
6	an equivalent official; and
7	"(bb) the Chief Information
8	Officer of the component agency
9	or an equivalent official;"; and
10	(iv) in paragraph (5), by inserting
11	"and the Director of the Cybersecurity and
12	Infrastructure Security Agency' before
13	"on the effectiveness";
14	(B) in subsection (b)—
15	(i) by striking paragraph (1) and in-
16	serting the following:
17	"(1) pursuant to subsection (a)(1)(A), per-
18	forming ongoing and continuous agency system risk
19	assessments, which may include using guidelines and
20	automated tools consistent with standards and
21	guidelines promulgated under section 11331 of title
22	40, as applicable;";
23	(ii) in paragraph (2)—
24	(I) by striking subparagraph (B)
25	and inserting the following:

1	"(B) comply with the risk-based cyber
2	budget model developed pursuant to section
3	3553(a)(7);"; and
4	(II) in subparagraph (D)—
5	(aa) by redesignating
6	clauses (iii) and (iv) as clauses
7	(iv) and (v), respectively;
8	(bb) by inserting after
9	clause (ii) the following:
10	"(iii) binding operational directives
11	and emergency directives promulgated by
12	the Director of the Cybersecurity and In-
13	frastructure Security Agency under section
14	3553;"; and
15	(cc) in clause (iv), as so re-
16	designated, by striking "as deter-
17	mined by the agency; and" and
18	inserting "as determined by the
19	agency, considering—
20	"(I) the agency risk assessment
21	performed under subsection (a)(1)(A);
22	and
23	"(II) the determinations of ap-
24	plying more stringent standards and
25	additional cybersecurity procedures

1	pursuant to section $11331(c)(1)$ or
2	title 40; and";
3	(iii) in paragraph (5)(A), by inserting
4	", including penetration testing, as appro-
5	priate," after "shall include testing";
6	(iv) in paragraph (6), by striking
7	"planning, implementing, evaluating, and
8	documenting" and inserting "planning and
9	implementing and, in consultation with the
10	Director of the Cybersecurity and Infra-
11	structure Security Agency, evaluating and
12	documenting";
13	(v) by redesignating paragraphs (7)
14	and (8) as paragraphs (8) and (9), respec-
15	tively;
16	(vi) by inserting after paragraph (6)
17	the following:
18	"(7) a process for providing the status of every
19	remedial action and known system vulnerability to
20	the Director and the Director of the Cybersecurity
21	and Infrastructure Security Agency, using automa-
22	tion and machine-readable data to the greatest ex-
23	tent practicable;"; and
24	(vii) in paragraph (8)(C), as so redes-
25	ignated—

1	(1) by striking clause (ii) and in-
2	serting the following:
3	"(ii) notifying and consulting with the
4	Federal information security incident cen-
5	ter established under section 3556 pursu-
6	ant to the requirements of section 3594;";
7	(II) by redesignating clause (iii)
8	as clause (iv);
9	(III) by inserting after clause (ii)
10	the following:
11	"(iii) performing the notifications and
12	other activities required under subchapter
13	IV of this title; and"; and
14	(IV) in clause (iv), as so redesig-
15	nated—
16	(aa) in subclause (I), by
17	striking "and relevant offices of
18	inspectors general";
19	(bb) in subclause (II), by
20	adding "and" at the end;
21	(ce) by striking subclause
22	(III); and
23	(dd) by redesignating sub-
24	clause (IV) as subclause (III);
25	(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 enactment of the Federal In-
7	formation Security Modernization Act of 2021 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

1	Director, and the Comptroller General of the United
2	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	assessment performed 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));
16	"(C) summarizes the evaluation and imple-
17	mentation plans described in subparagraphs (F)
18	and (G) of subsection (a)(1) and whether those
19	evaluation and implementation plans call for
20	the use of additional cybersecurity procedures
21	determined to be appropriate by the agency;
22	and
23	"(D) summarizes the status of remedial
24	actions identified by inspector general of the
25	agency, the Comptroller General of the United

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 striking the period at the end
22	and inserting ", including the reporting
23	procedures established under section
24	11315(d) of title 40 and subsection
25	(a)(3)(A)(v) of this section."; and

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

1	(D) in subsection (e)(1), by inserting "dur-
2	ing which a report is required to be submitted
3	under section 3553(c)" after "Each year";
4	(E) by striking subsection (f) and inserting
5	the following:
6	"(f) Protection of Information.—(1) Agencies,
7	evaluators, and other recipients of information that, if dis-
8	closed, may cause grave harm to the efforts of Federal
9	information security officers shall take appropriate steps
10	to ensure the protection of that information, including
11	safeguarding the information from public disclosure.
12	"(2) The protections required under paragraph (1)
13	shall be commensurate with the risk and comply with all
14	applicable laws and regulations.
15	"(3) With respect to information that is not related
16	to national security systems, agencies and evaluators shall
17	make a summary of the information unclassified and pub-
18	licly available, including information that does not iden-
19	tify—
20	"(A) specific information system incidents; or
21	"(B) specific information system
22	vulnerabilities.";
23	(F) in subsection $(g)(2)$ —
24	(i) by striking "this subsection shall"
25	and inserting "this subsection—

1	"(A) shall";
2	(ii) in subparagraph (A), as so des-
3	ignated, by striking the period at the end
4	and inserting "; and; and
5	(iii) by adding at the end the fol-
6	lowing:
7	"(B) identify any entity that performs an inde-
8	pendent evaluation under subsection (b)."; and
9	(G) by striking subsection (j) and inserting
10	the following:
11	"(j) Guidance.—
12	"(1) IN GENERAL.—The Director, in consulta-
13	tion with the Director of the Cybersecurity and In-
14	frastructure Security Agency, the Chief Information
15	Officers Council, the Council of the Inspectors Gen-
16	eral on Integrity and Efficiency, and other interested
17	parties as appropriate, shall ensure the development
18	of guidance for evaluating the effectiveness of an in-
19	formation security program and practices
20	"(2) Priorities.—The guidance developed
21	under paragraph (1) shall prioritize the identifica-
22	tion of—
23	"(A) the most common threat patterns ex-
24	perienced by each agency;

1	"(B) the security controls that address the
2	threat patterns described in subparagraph (A);
3	and
4	"(C) any other security risks unique to the
5	networks of each agency."; and
6	(5) in section 3556(a)—
7	(A) in the matter preceding paragraph (1),
8	by inserting "within the Cybersecurity and In-
9	frastructure Security Agency" after "incident
10	center"; and
11	(B) in paragraph (4), by striking
12	"3554(b)" and inserting "3554(a)(1)(A)".
13	(d) Conforming Amendments.—
14	(1) Table of sections.—The table of sections
15	for chapter 35 of title 44, United States Code, is
16	amended—
17	(A) by striking the item relating to section
18	3553 and inserting the following:
	"3553. Authority and functions of the Director and the Director of the Cyberse- curity and Infrastructure Security Agency."; and
19	(B) by striking the item relating to section
20	3555 and inserting the following:
	"3555. Independent evaluation.".
21	(2) OMB REPORTS.—Section 226(c) of the Cy-
22	bersecurity Act of 2015 (6 U.S.C. 1524(c)) is
23	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:

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' means—
15	"(A) a compromise of the security, con-
16	fidentiality, or integrity of data in electronic
17	form that results in unauthorized access to, or
18	an acquisition of, personal information; or
19	"(B) a loss of data in electronic form that
20	results in unauthorized access to, or an acquisi-
21	tion of, personal information.
22	"(4) Contractor.—The term 'contractor'
23	means—

1	"(A) a prime contractor of an agency or a
2	subcontractor of a prime contractor of an agen-
3	cy; and
4	"(B) any person or business that collects
5	or maintains information, including personally
6	identifiable information, on behalf of an agency.
7	"(5) FEDERAL INFORMATION.—The term 'Fed-
8	eral information' means information created, col-
9	lected, processed, maintained, disseminated, dis-
10	closed, or disposed of by or for the Federal Govern-
11	ment in any medium or form.
12	"(6) FEDERAL INFORMATION SYSTEM.—The
13	term 'Federal information system' means an infor-
14	mation system used or operated by an agency, a con-
15	tractor, an awardee, or another organization on be-
16	half of an agency.
17	"(7) Intelligence community.—The term
18	'intelligence community' has the meaning given the
19	term in section 3 of the National Security Act of
20	1947 (50 U.S.C. 3003).
21	"(8) NATIONWIDE CONSUMER REPORTING
22	AGENCY.—The term 'nationwide consumer reporting
23	agency' means a consumer reporting agency de-
24	scribed in section 603(p) of the Fair Credit Report-
25	ing Act (15 U.S.C. 1681a(p)).

1	"(9) VULNERABILITY DISCLOSURE.—The term
2	'vulnerability disclosure' means a vulnerability iden
3	tified under section 3559B.
4	"§ 3592. Notification of breach
5	"(a) Notification.—As expeditiously as practicable
6	and without unreasonable delay, and in any case not later
7	than 45 days after an agency has a reasonable basis to
8	conclude that a breach has occurred, the head of the agen-
9	cy, in consultation with a senior privacy officer of the
10	agency, shall—
11	"(1) determine whether notice to any individual
12	potentially affected by the breach is appropriate
13	based on an assessment of the risk of harm to the
14	individual that considers—
15	"(A) the nature and sensitivity of the per-
16	sonally identifiable information affected by the
17	breach;
18	"(B) the likelihood of access to and use of
19	the personally identifiable information affected
20	by the breach;
21	"(C) the type of breach; and
22	"(D) any other factors determined by the
23	Director; and

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

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

1	National Intelligence, the Secretary of Home-
2	land Security, the Director of the Cybersecurity
3	and Infrastructure Security Agency, and the
4	head of the agency and the inspector general of
5	the agency that experienced the breach.
6	"(B) Contents.—A report required under
7	subparagraph (A) shall include a written state-
8	ment from the entity that delayed the notifica-
9	tion explaining the need for the delay.
10	"(C) FORM.—The report required under
11	subparagraph (A) shall be unclassified but may
12	include a classified annex.
13	"(3) Renewal.—A delay under paragraph (1)
14	shall be for a period of 60 days and may be renewed.
15	"(d) UPDATE NOTIFICATION.—If an agency deter-
16	mines there is a significant change in the reasonable basis
17	to conclude that a breach occurred, a significant change
18	to the determination made under subsection (a)(1), or that
19	it is necessary to update the details of the information pro-
20	vided to impacted individuals as described in subsection
21	(b), the agency shall as expeditiously as practicable and
22	without unreasonable delay, and in any case not later than
23	30 days after such a determination, notify each individual
24	who received a notification pursuant to subsection (a) of
25	those changes.

1	"(e) Exemption From Notification.—
2	"(1) IN GENERAL.—The head of an agency, in
3	consultation with the inspector general of the agen-
4	cy, may request an exemption from the Director
5	from complying with the notification requirements
6	under subsection (a) if the information affected by
7	the breach is determined by an independent evalua-
8	tion to be unreadable, including, as appropriate, in-
9	stances in which the information is—
10	"(A) encrypted; and
11	"(B) determined by the Director of the Cy-
12	bersecurity and Infrastructure Security Agency
13	to be of sufficiently low risk of exposure.
14	"(2) APPROVAL.—The Director shall determine
15	whether to grant an exemption requested under
16	paragraph (1) in consultation with—
17	"(A) the Director of the Cybersecurity and
18	Infrastructure Security Agency; and
19	"(B) the Attorney General.
20	"(3) Documentation.—Any exemption grant-
21	ed by the Director under paragraph (1) shall be re-
22	ported in writing to the head of the agency and the
23	inspector general of the agency that experienced the
24	breach and the Director of the Cybersecurity and In-
25	frastructure Security Agency.

1	"(f) Rule of Construction.—Nothing in this sec-
2	tion shall be construed to limit—
3	"(1) the Director from issuing guidance relat-
4	ing to notifications or the head of an agency from
5	notifying individuals potentially affected by breaches
6	that are not determined to be major incidents; or
7	"(2) the Director from issuing guidance relat-
8	ing to notifications of major incidents or the head of
9	an agency from providing more information than de-
10	scribed in subsection (b) when notifying individuals
11	potentially affected by breaches.
10	((0.000 G)
12	"§ 3593. Congressional and Executive Branch reports
13	"§ 3593. Congressional and Executive Branch reports "(a) INITIAL REPORT.—
13	"(a) Initial Report.—
13 14	"(a) Initial Report.— "(1) In general.—Not later than 72 hours
13 14 15	"(a) Initial Report.— "(1) In General.—Not later than 72 hours after an agency has a reasonable basis to conclude
13 14 15 16	"(a) Initial Report.— "(1) In general.—Not later than 72 hours after an agency has a reasonable basis to conclude that a major incident occurred, the head of the
13 14 15 16 17	"(a) Initial Report.— "(1) In general.—Not later than 72 hours after an agency has a reasonable basis to conclude that a major incident occurred, the head of the agency impacted by the major incident shall submit
13 14 15 16 17 18	"(a) Initial Report.— "(1) In general.—Not later than 72 hours after an agency has a reasonable basis to conclude that a major incident occurred, the head of the agency impacted by the major incident shall submit to the appropriate reporting entities a written report
13 14 15 16 17 18 19	"(a) Initial Report.— "(1) In general.—Not later than 72 hours after an agency has a reasonable basis to conclude that a major incident occurred, the head of the agency impacted by the major incident shall submit to the appropriate reporting entities a written report and, to the extent practicable, provide a briefing to
13 14 15 16 17 18 19 20	"(a) Initial Report.— "(1) In General.—Not later than 72 hours after an agency has a reasonable basis to conclude that a major incident occurred, the head of the agency impacted by the major incident shall submit to the appropriate reporting entities a written report and, to the extent practicable, provide a briefing to the Committee on Homeland Security and Govern-
13 14 15 16 17 18 19 20 21	"(a) Initial Report.— "(1) In General.—Not later than 72 hours after an agency has a reasonable basis to conclude that a major incident occurred, the head of the agency impacted by the major incident shall submit to the appropriate reporting entities a written report and, to the extent practicable, provide a briefing to the Committee on Homeland Security and Governmental Affairs of the Senate, the Committee on

1	thorization and appropriations committees of Con-
2	gress, taking into account—
3	"(A) the information known at the time of
4	the report;
5	"(B) the sensitivity of the details associ-
6	ated with the major incident; and
7	"(C) the classification level of the informa-
8	tion contained in the report.
9	"(2) Contents.—A report required under
10	paragraph (1) shall include, in a manner that ex-
11	cludes or otherwise reasonably protects personally
12	identifiable information and to the extent permitted
13	by applicable law, including privacy and statistical
14	laws
15	"(A) a summary of the information avail-
16	able about the major incident, including how
17	the major incident occurred, information indi-
18	cating that the major incident may be a breach,
19	and information relating to the major incident
20	as a breach, based on information available to
21	agency officials as of the date on which the
22	agency submits the report;
23	"(B) if applicable, a description and any
24	associated documentation of any circumstances
25	necessitating a delay in or exemption to notifi-

1	cation to individuals potentially affected by the
2	major incident under subsection (c) or (e) of
3	section 3592; and
4	"(C) if applicable, an assessment of the
5	impacts to the agency, the Federal Government,
6	or the security of the United States, based on
7	information available to agency officials on the
8	date on which the agency submits the report.
9	"(b) Supplemental Report.—Within a reasonable
10	amount of time, but not later than 30 days after the date
11	on which an agency submits a written report under sub-
12	section (a), the head of the agency shall provide to the
13	appropriate reporting entities written updates on the
14	major incident and, to the extent practicable, provide a
15	briefing to the congressional committees described in sub-
16	section (a)(1), including summaries of—
17	"(1) vulnerabilities, means by which the major
18	incident occurred, and impacts to the agency relat-
19	ing to the major incident;
20	"(2) any risk assessment and subsequent risk-
21	based security implementation of the affected infor-
22	mation system before the date on which the major
23	incident occurred;

1	"(3) the status of compliance of the affected in-
2	formation system with applicable security require-
3	ments at the time of the major incident;
4	"(4) an estimate of the number of individuals
5	potentially affected by the major incident based on
6	information available to agency officials as of the
7	date on which the agency provides the update;
8	"(5) an assessment of the risk of harm to indi-
9	viduals potentially affected by the major incident
10	based on information available to agency officials as
11	of the date on which the agency provides the update;
12	"(6) an update to the assessment of the risk to
13	agency operations, or to impacts on other agency or
14	non-Federal entity operations, affected by the major
15	incident based on information available to agency of-
16	ficials as of the date on which the agency provides
17	the update; and
18	"(7) the detection, response, and remediation
19	actions of the agency, including any support pro-
20	vided by the Cybersecurity and Infrastructure Secu-
21	rity Agency under section 3594(d) and status up-
22	dates on the notification process described in section
23	3592(a), including any delay or exemption described
24	in subsection (c) or (e), respectively, of section 3592,
25	if applicable.

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1	"(c) UPDATE REPORT.—If the agency determines
2	that there is any significant change in the understanding
3	of the agency of the scope, scale, or consequence of a
4	major incident for which an agency submitted a written
5	report under subsection (a), the agency shall provide an
6	updated report to the appropriate reporting entities that
7	includes information relating to the change in under-
8	standing.
9	"(d) Annual Report.—Each agency shall submit as
10	part of the annual report required under section
11	3554(c)(1) of this title a description of each major inci-
12	dent that occurred during the 1-year period preceding the
13	date on which the report is submitted.
14	"(e) DELAY AND EXEMPTION REPORT.—
15	"(1) In general.—The Director shall submit
16	to the appropriate notification entities an annual re-
17	port on all notification delays and exemptions grant-

ed pursuant to subsections (c) and (d) of section

rector may submit the report required under para-

graph (1) as a component of the annual report sub-

mitted under section 3597(b).

"(2) Component of other report.—The Di-

1	"(f) REPORT DELIVERY.—Any written report re-
2	quired to be submitted under this section may be sub-
3	mitted in a paper or electronic format.
4	"(g) Threat Briefing.—
5	"(1) IN GENERAL.—Not later than 7 days after
6	the date on which an agency has a reasonable basis
7	to conclude that a major incident occurred, the head
8	of the agency, jointly with the National Cyber Direc-
9	tor and any other Federal entity determined appro-
10	priate by the National Cyber Director, shall provide
11	a briefing to the congressional committees described
12	in subsection (a)(1) on the threat causing the major
13	incident.
14	"(2) Components.—The briefing required
15	under paragraph (1)—
16	"(A) shall, to the greatest extent prac-
17	ticable, include an unclassified component; and
18	"(B) may include a classified component.
19	"(h) Rule of Construction.—Nothing in this sec-
20	tion shall be construed to limit—
21	"(1) the ability of an agency to provide addi-
22	tional reports or briefings to Congress; or
23	"(2) Congress from requesting additional infor-
24	mation from agencies through reports, briefings, or
25	other means.

1	"§ 3594. Government information sharing and inci-
2	dent response
3	"(a) In General.—
4	"(1) Incident reporting.—The head of each
5	agency shall provide any information relating to any
6	incident, whether the information is obtained by the
7	Federal Government directly or indirectly, to the Cy-
8	bersecurity and Infrastructure Security Agency and
9	the Office of Management and Budget.
10	"(2) Contents.—A provision of information
11	relating to an incident made by the head of an agen-
12	cy under paragraph (1) shall—
13	"(A) include detailed information about
14	the safeguards that were in place when the inci-
15	dent occurred;
16	"(B) whether the agency implemented the
17	safeguards described in subparagraph (A) cor-
18	rectly;
19	"(C) in order to protect against a similar
20	incident, identify—
21	"(i) how the safeguards described in
22	subparagraph (A) should be implemented
23	differently; and
24	"(ii) additional necessary safeguards;
25	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.
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.
15	"(4) NATIONAL SECURITY SYSTEMS.—Each
16	agency operating or exercising control of a national
17	security system shall share information about inci-
18	dents that occur on national security systems with
19	the Director of the Cybersecurity and Infrastructure
20	Security Agency to the extent consistent with stand-
21	ards and guidelines for national security systems
22	issued in accordance with law and as directed by the
23	President.
24	"(b) Compliance.—The information provided under
25	subsection (a) shall take into account the level of classi-

- 1 fication of the information and any information sharing
- 2 limitations and protections, such as limitations and protec-
- 3 tions relating to law enforcement, national security, pri-
- 4 vacy, statistical confidentiality, or other factors deter-
- 5 mined by the Director
- 6 "(e) Incident Response.—Each agency that has a
- 7 reasonable basis to conclude that a major incident oc-
- 8 curred involving Federal information in electronic medium
- 9 or form, as defined by the Director and not involving a
- 10 national security system, regardless of delays from notifi-
- 11 cation granted for a major incident, shall coordinate with
- 12 the Cybersecurity and Infrastructure Security Agency re-
- 13 garding—
- "(1) incident response and recovery; and
- 15 "(2) recommendations for mitigating future in-
- 16 cidents.

17 "§ 3595. Responsibilities of contractors and awardees

- 18 "(a) NOTIFICATION.—
- 19 "(1) IN GENERAL.—Unless otherwise specified
- in a contract, grant, cooperative agreement, or an
- 21 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-
- 24 quired to report an incident to the Cybersecurity
- and Infrastructure Security Agency, if the con-

1	tractor or awardee has a reasonable basis to con-
2	clude that—
3	"(A) an incident or breach has occurred
4	with respect to Federal information collected,
5	used, or maintained by the contractor or award-
6	ee in connection with the contract, grant, coop-
7	erative agreement, or other transaction agree-
8	ment of the contractor or awardee;
9	"(B) an incident or breach has occurred
10	with respect to a Federal information system
11	used or operated by the contractor or awardee
12	in connection with the contract, grant, coopera-
13	tive agreement, or other transaction agreement
14	of the contractor or awardee; or
15	"(C) the contractor or awardee has re-
16	ceived information from the agency that the
17	contractor or awardee is not authorized to re-
18	ceive in connection with the contract, grant, co-
19	operative agreement, or other transaction agree-
20	ment of the contractor or awardee.
21	"(2) Procedures.—
22	"(A) Major incident.—Following a re-
23	port of a breach or major incident by a con-
24	tractor or awardee under paragraph (1), the
25	agency, in consultation with the contractor or

1	awardee, shall carry out the requirements under
2	sections 3592, 3593, and 3594 with respect to
3	the major incident.
4	"(B) Incident.—Following a report of an
5	incident by a contractor or awardee under para-
6	graph (1), an agency, in consultation with the
7	contractor or awardee, shall carry out the re-
8	quirements under section 3594 with respect to
9	the incident.
10	"(b) Effective Date.—This section shall apply on
11	and after the date that is 1 year after the date of enact-
12	ment of the Federal Information Security Modernization
13	Act of 2021.
14	"§ 3596. Training
15	"(a) COVERED INDIVIDUAL DEFINED.—In this sec-
16	tion, the term 'covered individual' means an individual
17	who obtains access to Federal information or Federal in-
18	formation systems because of the status of the individual
19	as an employee, contractor, awardee, volunteer, or intern
20	of an agency.
21	"(b) REQUIREMENT.—The head of each agency shall
22	develop training for covered individuals on how to identify
23	and respond to an incident, including—
24	"(1) the internal process of the agency for re-
25	porting an incident; and

1	(2) the obligation of a covered individual to re-
2	port to the agency a confirmed major incident and
3	any suspected incident involving information in any
4	medium or form, including paper, oral, and elec-
5	tronic.
6	"(c) Inclusion in Annual Training.—The train-
7	ing developed under subsection (b) may be included as
8	part of an annual privacy or security awareness training
9	of an agency.
10	"§ 3597. Analysis and report on Federal incidents
11	"(a) Analysis of Federal Incidents.—
12	"(1) QUANTITATIVE AND QUALITATIVE ANAL-
13	YSES.—The Director of the Cybersecurity and Infra-
14	structure Security Agency shall develop, in consulta-
15	tion with the Director and the National Cyber Direc-
16	tor, and perform continuous monitoring and quan-
17	titative and qualitative analyses of incidents at agen-
18	cies, including major incidents, including—
19	"(A) the causes of incidents, including—
20	"(i) attacker tactics, techniques, and
21	procedures; and
22	"(ii) system vulnerabilities, including
23	zero days, unpatched systems, and infor-
24	mation system misconfigurations;

1	(B) the scope and scale of incidents at
2	agencies;
3	"(C) cross Federal Government root causes
4	of incidents at agencies;
5	"(D) agency incident response, recovery
6	and remediation actions and the effectiveness of
7	those actions, as applicable;
8	"(E) lessons learned and recommendations
9	in responding to, recovering from, remediating,
10	and mitigating future incidents; and
11	"(F) trends in cross-Federal Government
12	cybersecurity and incident response capabilities
13	using the metrics established under section
14	224(e) of the Cybersecurity Act of 2015 (6
15	U.S.C. $1522(c)$).
16	"(2) Automated analysis.—The analyses de-
17	veloped under paragraph (1) shall, to the greatest
18	extent practicable, use machine readable data, auto-
19	mation, and machine learning processes.
20	"(3) Sharing of data and analysis.—
21	"(A) In general.—The Director shall
22	share on an ongoing basis the analyses required
23	under this subsection with agencies and the Na-
24	tional Cyber Director to—

1	"(i) improve the understanding of cy
2	bersecurity risk of agencies; and
3	"(ii) support the cybersecurity im
4	provement efforts of agencies.
5	"(B) Format.—In carrying out subpara
6	graph (A), the Director shall share the anal
7	yses—
8	"(i) in human-readable written prod
9	ucts; and
10	"(ii) to the greatest extent practicable
11	in machine-readable formats in order to
12	enable automated intake and use by agen-
13	cies.
14	"(b) Annual Report on Federal Incidents.—
15	Not later than 2 years after the date of enactment of this
16	section, and not less frequently than annually thereafter,
17	the Director of the Cybersecurity and Infrastructure Secu-
18	rity Agency, in consultation with the Director and other
19	Federal agencies as appropriate, shall submit to the ap-
20	propriate notification entities a report that includes—
21	"(1) a summary of causes of incidents from
22	across the Federal Government that categorizes
23	those incidents as incidents or major incidents;
24	"(2) the quantitative and qualitative analyses of
25	incidents developed under subsection (a)(1) on an

1	agency-by-agency basis and comprehensively across
2	the Federal Government, including—
3	"(A) a specific analysis of breaches; and
4	"(B) an analysis of the Federal Govern-
5	ment's performance against the metrics estab-
6	lished under section 224(c) of the Cybersecurity
7	Act of 2015 (6 U.S.C. 1522(c)); and
8	"(3) an annex for each agency that includes—
9	"(A) a description of each major incident
10	"(B) the total number of compromises of
11	the agency; and
12	"(C) an analysis of the agency's perform-
13	ance against the metrics established under sec-
14	tion 224(c) of the Cybersecurity Act of 2015 (6
15	U.S.C. $1522(e)$).
16	"(c) Publication.—A version of each report sub-
17	mitted under subsection (b) shall be made publicly avail-
18	able on the website of the Cybersecurity and Infrastruc-
19	ture Security Agency during the year in which the report
20	is submitted.
21	"(d) Information Provided by Agencies.—
22	"(1) In general.—The analysis required
23	under subsection (a) and each report submitted
24	under subsection (b) shall use information provided
25	by agencies under section 3594(a).

1	"(2) NONCOMPLIANCE REPORTS.—
2	"(A) In general.—Subject to subpara-
3	graph (B), during any year during which the
4	head of an agency does not provide data for an
5	incident to the Cybersecurity and Infrastructure
6	Security Agency in accordance with section
7	3594(a), the head of the agency, in coordina-
8	tion with the Director of the Cybersecurity and
9	Infrastructure Security Agency and the Direc-
10	tor, shall submit to the appropriate reporting
11	entities a report that includes—
12	"(i) data for the incident; and
13	"(ii) the information described in sub-
14	section (b) with respect to the agency.
15	"(B) EXCEPTION FOR NATIONAL SECURITY
16	SYSTEMS.—The head of an agency that owns or
17	exercises control of a national security system
18	shall not include data for an incident that oc-
19	curs on a national security system in any report
20	submitted under subparagraph (A).
21	"(3) National security system reports.—
22	"(A) IN GENERAL.—Annually, the head of
23	an agency that operates or exercises control of
24	a national security system shall submit a report
25	that includes the information described in sub-

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

1	"(x) the Committee on Armed Serv-
2	ices of the House of Representatives; and
3	"(xi) the Committee on Appropria-
4	tions of the House of Representatives.
5	"(B) Classified form.—A report re-
6	quired under subparagraph (A) may be sub-
7	mitted in a classified form.
8	"(e) REQUIREMENT FOR COMPILING INFORMA-
9	TION.—In publishing the public report required under
10	subsection (c), the Director of the Cybersecurity and In-
11	frastructure Security Agency shall sufficiently compile in-
12	formation such that no specific incident of an agency can
13	be identified, except with the concurrence of the Director
14	of the Office of Management and Budget and in consulta-
15	tion with the impacted agency.
16	"§ 3598. Major incident definition
17	"(a) In General.—Not later than 180 days after
18	the date of enactment of the Federal Information Security
19	Modernization Act of 2021, the Director, in coordination
20	with the Director of the Cybersecurity and Infrastructure
21	Security Agency and the National Cyber Director, shall
22	develop and promulgate guidance on the definition of the
23	term 'major incident' for the purposes of subchapter II
24	and this subchapter.

1	"(b) REQUIREMENTS.—With respect to the guidance
2	issued under subsection (a), the definition of the term
3	'major incident' shall—
4	"(1) include, with respect to any information
5	collected or maintained by or on behalf of an agency
6	or an information system used or operated by an
7	agency or by a contractor of an agency or another
8	organization on behalf of an agency—
9	"(A) any incident the head of the agency
10	determines is likely to have an impact on—
11	"(i) the national security, homeland
12	security, or economic security of the
13	United States; or
14	"(ii) the civil liberties or public health
15	and safety of the people of the United
16	States;
17	"(B) any incident the head of the agency
18	determines likely to result in an inability for the
19	agency, a component of the agency, or the Fed-
20	eral Government, to provide 1 or more critical
21	services;
22	"(C) any incident that the head of an
23	agency, in consultation with a senior privacy of-
24	ficer of the agency, determines is likely to have

Ţ	a significant privacy impact on 1 or more indi-
2	vidual;
3	"(D) any incident that the head of the
4	agency, in consultation with a senior privacy of-
5	ficial of the agency, determines is likely to have
6	a substantial privacy impact on a significant
7	number of individuals;
8	"(E) any incident the head of the agency
9	determines impacts the operations of a high
10	value asset owned or operated by the agency;
11	"(F) any incident involving the exposure of
12	sensitive agency information to a foreign entity,
13	such as the communications of the head of the
14	agency, the head of a component of the agency,
15	or the direct reports of the head of the agency
16	or the head of a component of the agency; and
17	"(G) any other type of incident determined
18	appropriate by the Director;
19	"(2) stipulate that the National Cyber Director
20	shall declare a major incident at each agency im-
21	pacted by an incident if the Director of the Cyberse-
22	curity and Infrastructure Security Agency deter-
23	mines that an incident—
24	"(A) occurs at not less than 2 agencies;
25	and

1	"(B) is enabled by—
2	"(i) a common technical root cause
3	such as a supply chain compromise, a com-
4	mon software or hardware vulnerability; or
5	"(ii) the related activities of a com-
6	mon threat actor; and
7	"(3) stipulate that, in determining whether an
8	incident constitutes a major incident because that
9	incident—
10	"(A) is any incident described in para-
11	graph (1), the head of an agency shall consult
12	with the Director of the Cybersecurity and In-
13	frastructure Security Agency;
14	"(B) is an incident described in paragraph
15	(1)(A), the head of the agency shall consult
16	with the National Cyber Director; and
17	"(C) is an incident described in subpara-
18	graph (C) or (D) of paragraph (1), the head of
19	the agency shall consult with—
20	"(i) the Privacy and Civil Liberties
21	Oversight Board; and
22	"(ii) the Chair of the Federal Trade
23	Commission.

1	"(c) Significant Number of Individuals.—In de-
2	termining what constitutes a significant number of indi-
3	viduals under subsection (b)(1)(D), the Director—
4	"(1) may determine a threshold for a minimum
5	number of individuals that constitutes a significant
6	amount; and
7	"(2) may not determine a threshold described
8	in paragraph (1) that exceeds 5,000 individuals.
9	"(d) EVALUATION AND UPDATES.—Not later than 2
10	years after the date of enactment of the Federal Informa-
11	tion Security Modernization Act of 2021, and not less fre-
12	quently than every 2 years thereafter, the Director shall
13	submit to the Committee on Homeland Security and Gov-
14	ernmental Affairs of the Senate and the Committee on
15	Oversight and Reform of the House of Representatives an
16	evaluation, which shall include—
17	"(1) an update, if necessary, to the guidance
18	issued under subsection (a);
19	"(2) the definition of the term 'major incident'
20	included in the guidance issued under subsection (a);
21	and
22	"(3) an explanation of, and the analysis that
23	led to, the definition described in paragraph (2).".

1	(2) CLERICAL AMENDMENT.—The table of sec-
2	tions for chapter 35 of title 44, United States Code,
3	is amended by adding at the end the following:
	"SUBCHAPTER IV—FEDERAL SYSTEM INCIDENT RESPONSE
	"3591. Definitions. "3592. Notification of breach. "3593. Congressional and Executive Branch reports. "3594. Government information sharing and incident response. "3595. Responsibilities of contractors and awardees. "3596. Training. "3597. Analysis and report on Federal incidents. "3598. Major incident definition.".
4	SEC. 5122. AMENDMENTS TO SUBTITLE III OF TITLE 40.
5	(a) Modernizing Government Technology.—
6	Subtitle G of title X of Division A of the National Defense
7	Authorization Act for Fiscal Year 2018 (40 U.S.C. 11301
8	note) is amended—
9	(1) in section 1077(b)—
10	(A) in paragraph (5)(A), by inserting "im-
11	proving the cybersecurity of systems and" be-
12	fore "cost savings activities"; and
13	(B) in paragraph (7)—
14	(i) in the paragraph heading, by strik-
15	ing "CIO" and inserting "CIO";
16	(ii) by striking "In evaluating
17	projects" and inserting the following:
18	"(A) CONSIDERATION OF GUIDANCE.—In
19	evaluating projects";
20	(iii) in subparagraph (A), as so des-
21	ignated, by striking "under section

1	1094(b)(1)" and inserting "by the Direc
2	tor''; and
3	(iv) by adding at the end the fol
4	lowing:
5	"(B) Consultation.—In using funds
6	under paragraph (3)(A), the Chief Information
7	Officer of the covered agency shall consult with
8	the necessary stakeholders to ensure the project
9	appropriately addresses cybersecurity risks, in
10	cluding the Director of the Cybersecurity and
11	Infrastructure Security Agency, as appro-
12	priate."; and
13	(2) in section 1078—
14	(A) by striking subsection (a) and insert-
15	ing the following:
16	"(a) Definitions.—In this section:
17	"(1) AGENCY.—The term 'agency' has the
18	meaning given the term in section 551 of title 5,
19	United States Code.
20	"(2) High value asset.—The term 'high
21	value asset' has the meaning given the term in sec-
22	tion 3552 of title 44, United States Code.";
23	(B) in subsection (b), by adding at the end
24	the following:

1	"(8) Proposal evaluation.—The Director
2	shall—
3	"(A) give consideration for the use of
4	amounts in the Fund to improve the security of
5	high value assets; and
6	"(B) require that any proposal for the use
7	of amounts in the Fund includes a cybersecu-
8	rity plan, including a supply chain risk manage-
9	ment plan, to be reviewed by the member of the
10	Technology Modernization Board described in
11	subsection (c)(5)(C)."; and
12	(C) in subsection (c)—
13	(i) in paragraph (2)(A)(i), by insert-
14	ing ", including a consideration of the im-
15	pact on high value assets" after "oper-
16	ational risks";
17	(ii) in paragraph (5)—
18	(I) in subparagraph (A), by strik-
19	ing "and" at the end;
20	(II) in subparagraph (B), by
21	striking the period at the end and in-
22	serting "and"; and
23	(III) by adding at the end the
24	following:

1	"(C) a senior official from the Cybersecu-
2	rity and Infrastructure Security Agency of the
3	Department of Homeland Security, appointed
4	by the Director."; and
5	(iii) in paragraph (6)(A), by striking
6	"shall be—" and all that follows through
7	"4 employees" and inserting "shall be 4
8	employees".
9	(b) Subchapter I.—Subchapter I of subtitle III of
10	title 40, United States Code, is amended—
11	(1) in section 11302—
12	(A) in subsection (b), by striking "use, se-
13	curity, and disposal of" and inserting "use, and
14	disposal of, and, in consultation with the Direc-
15	tor of the Cybersecurity and Infrastructure Se-
16	curity Agency and the National Cyber Director,
17	promote and improve the security of,";
18	(B) in subsection (c)—
19	(i) in paragraph (3)—
20	(I) in subparagraph (A)—
21	(aa) by striking "including
22	data" and inserting "which
23	shall—
24	"(i) include data";

1	(bb) in clause (i), as so des-
2	ignated, by striking ", and per-
3	formance" and inserting "secu-
4	rity, and performance; and"; and
5	(ce) by adding at the end
6	the following:
7	"(ii) specifically denote cybersecurity
8	funding under the risk-based cyber budget
9	model developed pursuant to section
10	3553(a)(7) of title 44."; and
11	(II) in subparagraph (B), adding
12	at the end the following:
13	"(iii) The Director shall provide to the
14	National Cyber Director any cybersecurity
15	funding information described in subpara-
16	graph (A)(ii) that is provided to the Direc-
17	tor under clause (ii) of this subpara-
18	graph."; and
19	(ii) in paragraph (4)(B), in the matter
20	preceding clause (i), by inserting "not later
21	than 30 days after the date on which the
22	review under subparagraph (A) is com-
23	pleted," before "the Administrator";
24	(C) in subsection (f)—

1	(i) by striking "heads of executive
2	agencies to develop" and inserting "heads
3	of executive agencies to—
4	"(1) develop";
5	(ii) in paragraph (1), as so des-
6	ignated, by striking the period at the end
7	and inserting "; and"; and
8	(iii) by adding at the end the fol-
9	lowing:
10	"(2) consult with the Director of the Cybersecu-
11	rity and Infrastructure Security Agency for the de-
12	velopment and use of supply chain security best
13	practices."; and
14	(D) in subsection (h), by inserting ", in-
15	cluding cybersecurity performances," after "the
16	performances"; and
17	(2) in section 11303(b)—
18	(A) in paragraph (2)(B)—
19	(i) in clause (i), by striking "or" at
20	the end;
21	(ii) in clause (ii), by adding "or" at
22	the end; and
23	(iii) by adding at the end the fol-
24	lowing:

1	"(111) whether the function should be
2	performed by a shared service offered by
3	another executive agency;"; and
4	(B) in paragraph (5)(B)(i), by inserting "
5	while taking into account the risk-based cyber
6	budget model developed pursuant to section
7	3553(a)(7) of title 44" after "title 31".
8	(c) Subchapter II.—Subchapter II of subtitle III
9	of title 40, United States Code, is amended—
10	(1) in section 11312(a), by inserting ", includ-
11	ing security risks" after "managing the risks";
12	(2) in section 11313(1), by striking "efficiency
13	and effectiveness" and inserting "efficiency, security,
14	and effectiveness";
15	(3) in section 11315, by adding at the end the
16	following:
17	"(d) Component Agency Chief Information Of-
18	FICERS.—The Chief Information Officer or an equivalent
19	official of a component agency shall report to—
20	"(1) the Chief Information Officer designated
21	under section 3506(a)(2) of title 44 or an equivalent
22	official of the agency of which the component agency
23	is a component; and
24	"(2) the head of the component agency.";

1	(4) in section 11317, by inserting "security,"
2	before "or schedule"; and
3	(5) in section 11319(b)(1), in the paragraph
4	heading, by striking "CIOS" and inserting "CHIEF
5	INFORMATION OFFICERS".
6	(d) Subchapter III.—Section 11331 of title 40,
7	United States Code, is amended—
8	(1) in subsection (a), by striking "section
9	3532(b)(1)" and inserting "section 3552(b)";
10	(2) in subsection (b)(1)(A), by striking "the
11	Secretary of Homeland Security" and inserting "the
12	Director of the Cybersecurity and Infrastructure Se-
13	curity Agency'';
14	(3) by striking subsection (c) and inserting the
15	following:
16	"(c) Application of More Stringent Stand-
17	ARDS.—
18	"(1) IN GENERAL.—The head of an agency
19	shall—
20	"(A) evaluate, in consultation with the sen-
21	ior agency information security officers, the
22	need to employ standards for cost-effective,
23	risk-based information security for all systems,
24	operations, and assets within or under the su-
25	pervision of the agency that are more stringent

1	than the standards promulgated by the Director
2	under this section, if such standards contain, at
3	a minimum, the provisions of those applicable
4	standards made compulsory and binding by the
5	Director; and
6	"(B) to the greatest extent practicable and
7	if the head of the agency determines that the
8	standards described in subparagraph (A) are
9	necessary, employ those standards.
10	"(2) Evaluation of more stringent stand-
11	ARDS.—In evaluating the need to employ more strin-
12	gent standards under paragraph (1), the head of an
13	agency shall consider available risk information,
14	such as—
15	"(A) the status of cybersecurity remedial
16	actions of the agency;
17	"(B) any vulnerability information relating
18	to agency systems that is known to the agency;
19	"(C) incident information of the agency;
20	"(D) information from—
21	"(i) penetration testing performed
22	under section 3559A of title 44; and
23	"(ii) information from the vulner-
24	ability disclosure program established
25	under section 3559B of title 44;

1	"(E) agency threat hunting results under
2	section 5145 of the Federal Information Secu-
3	rity Modernization Act of 2021;
4	"(F) Federal and non-Federal cyber threat
5	intelligence;
6	"(G) data on compliance with standards
7	issued under this section;
8	"(H) agency system risk assessments per-
9	formed under section 3554(a)(1)(A) of title 44;
10	and
11	"(I) any other information determined rel-
12	evant by the head of the agency.";
13	(4) in subsection (d)(2)—
14	(A) in the paragraph heading, by striking
15	"Notice and comment" and inserting "Con-
16	SULTATION, NOTICE, AND COMMENT";
17	(B) by inserting "promulgate," before
18	"significantly modify"; and
19	(C) by striking "shall be made after the
20	public is given an opportunity to comment on
21	the Director's proposed decision." and inserting
22	"shall be made—
23	"(A) for a decision to significantly modify
24	or not promulgate such a proposed standard,

1	after the public is given an opportunity to com
2	ment on the Director's proposed decision;
3	"(B) in consultation with the Chief Infor
4	mation Officers Council, the Director of the Cy
5	bersecurity and Infrastructure Security Agency
6	the National Cyber Director, the Comptroller
7	General of the United States, and the Council
8	of the Inspectors General on Integrity and Effi-
9	ciency;
10	"(C) considering the Federal risk assess-
11	ments performed under section 3553(i) of title
12	44; and
13	"(D) considering the extent to which the
14	proposed standard reduces risk relative to the
15	cost of implementation of the standard."; and
16	(5) by adding at the end the following:
17	"(e) REVIEW OF OFFICE OF MANAGEMENT AND
18	BUDGET GUIDANCE AND POLICY.—
19	"(1) Conduct of Review.—
20	"(A) IN GENERAL.—Not less frequently
21	than once every 3 years, the Director of the Of-
22	fice of Management and Budget, in consultation
23	with the Chief Information Officers Council, the
24	Director of the Cybersecurity and Infrastruc-
25	ture Security Agency, the National Cyber Di-

1	rector, the Comptroller General of the United
2	States, and the Council of the Inspectors Gen-
3	eral on Integrity and Efficiency shall review the
4	efficacy of the guidance and policy promulgated
5	by the Director in reducing cybersecurity risks,
6	including an assessment of the requirements for
7	agencies to report information to the Director,
8	and determine whether any changes to that
9	guidance or policy is appropriate.
10	"(B) Federal risk assessments.—In
11	conducting the review described in subpara-
12	graph (A), the Director shall consider the Fed-
13	eral risk assessments performed under section
14	3553(i) of title 44.
15	"(2) UPDATED GUIDANCE.—Not later than 90
16	days after the date on which a review is completed
17	under paragraph (1), the Director of the Office of
18	Management and Budget shall issue updated guid-
19	ance or policy to agencies determined appropriate by
20	the Director, based on the results of the review.
21	"(3) Public Report.—Not later than 30 days
22	after the date on which a review is completed under
23	paragraph (1), the Director of the Office of Manage-
24	ment and Budget shall make publicly available a re-
25	port that includes—

1	"(A) an overview of the guidance and pol-
2	icy promulgated under this section that is cur-
3	rently in effect;
4	"(B) the cybersecurity risk mitigation, or
5	other cybersecurity benefit, offered by each
6	guidance or policy document described in sub-
7	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 are an-
11	ticipated to include.
12	"(4) Congressional Briefing.—Not later
13	than 30 days after the date on which a review is
14	completed under paragraph (1), the Director shall
15	provide to the Committee on Homeland Security and
16	Governmental Affairs of the Senate and the Com-
17	mittee on Oversight and Reform of the House of
18	Representatives a briefing on the review.
19	"(f) AUTOMATED STANDARD IMPLEMENTATION
20	VERIFICATION.—When the Director of the National Insti-
21	tute of Standards and Technology issues a proposed
22	standard pursuant to paragraphs (2) and (3) of section
23	20(a) of the National Institute of Standards and Tech-
24	nology Act (15 U.S.C. 278g–3(a)), the Director of the Na-
25	tional Institute of Standards and Technology shall con-

1	sider developing and, if appropriate and practical, develop,
2	in consultation with the Director of the Cybersecurity and
3	Infrastructure Security Agency, specifications to enable
4	the automated verification of the implementation of the
5	controls within the standard.".
6	SEC. 5123. ACTIONS TO ENHANCE FEDERAL INCIDENT RE-
7	SPONSE.
8	(a) Responsibilities of the Cybersecurity and
9	INFRASTRUCTURE SECURITY AGENCY.—
10	(1) In general.—Not later than 180 days
11	after the date of enactment of this Act, the Director
12	of the Cybersecurity and Infrastructure Security
13	Agency shall—
14	(A) develop a plan for the development of
15	the analysis required under section 3597(a) of
16	title 44, United States Code, as added by this
17	division, and the report required under sub-
18	section (b) of that section that includes—
19	(i) a description of any challenges the
20	Director anticipates encountering; and
21	(ii) the use of automation and ma-
22	chine-readable formats for collecting, com-
23	piling, monitoring, and analyzing data; and

1	(B) provide to the appropriate congres-
2	sional committees a briefing on the plan devel-
3	oped under subparagraph (A).
4	(2) Briefing.—Not later than 1 year after the
5	date of enactment of this Act, the Director of the
6	Cybersecurity and Infrastructure Security Agency
7	shall provide to the appropriate congressional com-
8	mittees a briefing on—
9	(A) the execution of the plan required
10	under paragraph (1)(A); and
11	(B) the development of the report required
12	under section 3597(b) of title 44, United States
13	Code, as added by this division.
14	(b) Responsibilities of the Director of the
15	OFFICE OF MANAGEMENT AND BUDGET.—
16	(1) FISMA.—Section 2 of the Federal Informa-
17	tion Security Modernization Act of 2014 (44 U.S.C.
18	3554 note) is amended—
19	(A) by striking subsection (b); and
20	(B) by redesignating subsections (c)
21	through (f) as subsections (b) through (e), re-
22	spectively.
23	(2) Incident data sharing.—
24	(A) IN GENERAL.—The Director shall de-
25	velop guidance, to be updated not less fre-

Ţ	quently than once every 2 years, on the content,
2	timeliness, and format of the information pro-
3	vided by agencies under section 3594(a) of title
4	44, United States Code, as added by this divi-
5	sion.
6	(B) REQUIREMENTS.—The guidance devel-
7	oped under subparagraph (A) shall—
8	(i) prioritize the availability of data
9	necessary to understand and analyze—
10	(I) the causes of incidents;
11	(II) the scope and scale of inci-
12	dents within the environments and
13	systems of an agency;
14	(III) a root cause analysis of in-
15	cidents that—
16	(aa) are common across the
17	Federal Government; or
18	(bb) have a Government-
19	wide impact;
20	(IV) agency response, recovery,
21	and remediation actions and the effec-
22	tiveness of those actions; and
23	(V) the impact of incidents;
24	(ii) enable the efficient development
25	of—

1	(I) lessons learned and rec-
2	ommendations in responding to, recov-
3	ering from, remediating, and miti-
4	gating future incidents; and
5	(II) the report on Federal inci-
6	dents required under section 3597(b)
7	of title 44, United States Code, as
8	added by this division;
9	(iii) include requirements for the time-
10	liness of data production; and
11	(iv) include requirements for using
12	automation and machine-readable data for
13	data sharing and availability.
14	(3) GUIDANCE ON RESPONDING TO INFORMA-
15	TION REQUESTS.—Not later than 1 year after the
16	date of enactment of this Act, the Director shall de-
17	velop guidance for agencies to implement the re-
18	quirement under section 3594(c) of title 44, United
19	States Code, as added by this division, to provide in-
20	formation to other agencies experiencing incidents.
21	(4) STANDARD GUIDANCE AND TEMPLATES.—
22	Not later than 1 year after the date of enactment
23	of this Act, the Director, in consultation with the
24	Director of the Cybersecurity and Infrastructure Se-
25	curity Agency, shall develop guidance and templates,

l	to be reviewed and, if necessary, updated not less
2	frequently than once every 2 years, for use by Fed-
3	eral agencies in the activities required under sections
4	3592, 3593, and 3596 of title 44, United States
5	Code, as added by this division.

(5) CONTRACTOR AND AWARDEE GUIDANCE.—

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

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

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1	(6) UPDATED BRIEFINGS.—Not less frequently
2	than once every 2 years, the Director shall provide
3	to the appropriate congressional committees an up-
4	date on the guidance and templates developed under
5	paragraphs (2) through (4).
6	(c) UPDATE TO THE PRIVACY ACT OF 1974.—Sec-
7	tion 552a(b) of title 5, United States Code (commonly
8	known as the "Privacy Act of 1974") is amended—
9	(1) in paragraph (11), by striking "or" at the
10	$\operatorname{end};$
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 of
18	the requesting agency has made a written request to
19	the agency that maintains the record specifying the
20	particular portion desired and the activity for which
21	the record is sought.".
22	SEC. 5124. ADDITIONAL GUIDANCE TO AGENCIES ON FISMA
23	UPDATES.
24	Not later than 1 year after the date of enactment
25	of this Act, the Director, in coordination with the Director

1	of the Cybersecurity and Infrastructure Security Agency,
2	shall issue guidance for agencies on—
3	(1) performing the ongoing and continuous
4	agency system risk assessment required under sec-
5	tion 3554(a)(1)(A) of title 44, United States Code,
6	as amended by this division;
7	(2) implementing additional cybersecurity pro-
8	cedures, which shall include resources for shared
9	services;
10	(3) establishing a process for providing the sta-
11	tus of each remedial action under section 3554(b)(7)
12	of title 44, United States Code, as amended by this
13	division, to the Director and the Cybersecurity and
14	Infrastructure Security Agency using automation
15	and machine-readable data, as practicable, which
16	shall include—
17	(A) specific guidance for the use of auto-
18	mation and machine-readable data; and
19	(B) templates for providing the status of
20	the remedial action;
21	(4) interpreting the definition of "high value
22	asset" under section 3552 of title 44, United States
23	Code, as amended by this division; and
24	(5) a requirement to coordinate with inspectors
25	general of agencies to ensure consistent under-

1	standing and application of agency policies for the
2	purpose of evaluations by inspectors general.
3	SEC. 5125. AGENCY REQUIREMENTS TO NOTIFY PRIVATE
4	SECTOR ENTITIES IMPACTED BY INCIDENTS.
5	(a) DEFINITIONS.—In this section:
6	(1) Reporting entity.—The term "reporting
7	entity" means private organization or governmental
8	unit that is required by statute or regulation to sub-
9	mit sensitive information to an agency.
10	(2) Sensitive information.—The term "sen-
11	sitive information" has the meaning given the term
12	by the Director in guidance issued under subsection
13	(b).
14	(b) GUIDANCE ON NOTIFICATION OF REPORTING EN-
15	TITIES.—Not later than 180 days after the date of enact-
16	ment of this Act, the Director shall issue guidance requir-
17	ing the head of each agency to notify a reporting entity
18	of an incident that is likely to substantially affect—
19	(1) the confidentiality or integrity of sensitive
20	information submitted by the reporting entity to the
21	agency pursuant to a statutory or regulatory re-
22	quirement; or
23	(2) the agency information system or systems
24	used in the transmission or storage of the sensitive
25	information described in paragraph (1).

1 TITLE LII—IMPROVING 2 FEDERAL CYBERSECURITY

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3	SEC. 5141. MOBILE SECURITY STANDARDS.
4	(a) In General.—Not later than 1 year after the
5	date of enactment of this Act, the Director shall—
6	(1) evaluate mobile application security guid-
7	ance promulgated by the Director; and
8	(2) issue guidance to secure mobile devices, in-
9	cluding for mobile applications, for every agency.
10	(b) CONTENTS.—The guidance issued under sub-
11	section (a)(2) shall include—
12	(1) a requirement, pursuant to section
13	3506(b)(4) of title 44, United States Code, for every
14	agency to maintain a continuous inventory of
15	every—
16	(A) mobile device operated by or on behalf
17	of the agency; and
18	(B) vulnerability identified by the agency
19	associated with a mobile device; and
20	(2) a requirement for every agency to perform
21	continuous evaluation of the vulnerabilities described
22	in paragraph (1)(B) and other risks associated with
23	the use of applications on mobile devices.
24	(c) Information Sharing.—The Director, in co-
25	ordination with the Director of the Cybersecurity and In-

- 1 frastructure Security Agency, shall issue guidance to
- 2 agencies for sharing the inventory of the agency required
- 3 under subsection (b)(1) with the Director of the Cyberse-
- 4 curity and Infrastructure Security Agency, using automa-
- 5 tion and machine-readable data to the greatest extent
- 6 practicable.
- 7 (d) Briefing.—Not later than 60 days after the date
- 8 on which the Director issues guidance under subsection
- 9 (a)(2), the Director, in coordination with the Director of
- 10 the Cybersecurity and Infrastructure Security Agency,
- 11 shall provide to the appropriate congressional committees
- 12 a briefing on the guidance.
- 13 SEC. 5142. DATA AND LOGGING RETENTION FOR INCIDENT
- 14 RESPONSE.
- 15 (a) RECOMMENDATIONS.—Not later than 2 years
- 16 after the date of enactment of this Act, and not less fre-
- 17 quently than every 2 years thereafter, the Director of the
- 18 Cybersecurity and Infrastructure Security Agency, in con-
- 19 sultation with the Attorney General, shall submit to the
- 20 Director recommendations on requirements for logging
- 21 events on agency systems and retaining other relevant
- 22 data within the systems and networks of an agency.
- 23 (b) Contents.—The recommendations provided
- 24 under subsection (a) shall include—
- 25 (1) the types of logs to be maintained;

1	(2) the time periods to retain the logs and other
2	relevant data;
3	(3) the time periods for agencies to enable rec-
4	ommended logging and security requirements;
5	(4) how to ensure the confidentiality, integrity,
6	and availability of logs;
7	(5) requirements to ensure that, upon request,
8	in a manner that excludes or otherwise reasonably
9	protects personally identifiable information, and to
10	the extent permitted by applicable law (including
11	privacy and statistical laws), agencies provide logs
12	to—
13	(A) the Director of the Cybersecurity and
14	Infrastructure Security Agency for a cybersecu-
15	rity purpose; and
16	(B) the Federal Bureau of Investigation to
17	investigate potential criminal activity; and
18	(6) requirements to ensure that, subject to com-
19	pliance with statistical laws and other relevant data
20	protection requirements, the highest level security
21	operations center of each agency has visibility into
22	all agency logs.
23	(c) GUIDANCE.—Not later than 90 days after receiv-
24	ing the recommendations submitted under subsection (a),
25	the Director, in consultation with the Director of the Cy-

- 1 bersecurity and Infrastructure Security Agency and the
- 2 Attorney General, shall, as determined to be appropriate
- 3 by the Director, update guidance to agencies regarding re-
- 4 quirements for logging, log retention, log management,
- 5 sharing of log data with other appropriate agencies, or any
- 6 other logging activity determined to be appropriate by the
- 7 Director.

8 SEC. 5143. CISA AGENCY ADVISORS.

- 9 (a) IN GENERAL.—Not later than 120 days after the
- 10 date of enactment of this Act, the Director of the Cyberse-
- 11 curity and Infrastructure Security Agency shall assign not
- 12 less than 1 cybersecurity professional employed by the Cy-
- 13 bersecurity and Infrastructure Security Agency to be the
- 14 Cybersecurity and Infrastructure Security Agency advisor
- 15 to the senior agency information security officer of each
- 16 agency.
- 17 (b) QUALIFICATIONS.—Each advisor assigned under
- 18 subsection (a) shall have knowledge of—
- 19 (1) cybersecurity threats facing agencies, in-
- 20 cluding any specific threats to the assigned agency;
- 21 (2) performing risk assessments of agency sys-
- tems; and
- 23 (3) other Federal cybersecurity initiatives.
- 24 (c) Duties.—The duties of each advisor assigned
- 25 under subsection (a) shall include—

1	(1) providing ongoing assistance and advice, as
2	requested, to the agency Chief Information Officer;
3	(2) serving as an incident response point of
4	contact between the assigned agency and the Cyber-
5	security and Infrastructure Security Agency; and
6	(3) familiarizing themselves with agency sys-
7	tems, processes, and procedures to better facilitate
8	support to the agency in responding to incidents.
9	(d) LIMITATION.—An advisor assigned under sub-
10	section (a) shall not be a contractor.
11	(e) Multiple Assignments.—One individual advi-
12	sor may be assigned to multiple agency Chief Information
13	Officers under subsection (a).
14	SEC. 5144. FEDERAL PENETRATION TESTING POLICY.
15	(a) In General.—Subchapter II of chapter 35 of
16	title 44, United States Code, is amended by adding at the
17	end the following:
18	"§ 3559A. Federal penetration testing
19	"(a) DEFINITIONS.—In this section:
20	"(1) AGENCY OPERATIONAL PLAN.—The term
21	'agency operational plan' means a plan of an agency
22	for the use of penetration testing.
23	"(2) Rules of engagement.—The term
24	'rules of engagement' means a set of rules estab-

1	lished by an agency for the use of penetration test-
2	ing.
3	"(b) GUIDANCE.—
4	"(1) In general.—The Director shall issue
5	guidance that—
6	"(A) requires agencies to use, when and
7	where appropriate, penetration testing on agen-
8	cy systems; and
9	"(B) requires agencies to develop an agen-
10	cy operational plan and rules of engagement
11	that meet the requirements under subsection
12	(e).
13	"(2) PENETRATION TESTING GUIDANCE.—The
14	guidance issued under this section shall—
15	"(A) permit an agency to use, for the pur-
16	pose of performing penetration testing—
17	"(i) a shared service of the agency or
18	another agency; or
19	"(ii) an external entity, such as a ven-
20	dor; and
21	"(B) require agencies to provide the rules
22	of engagement and results of penetration test-
23	ing to the Director and the Director of the Cy-
24	bersecurity and Infrastructure Security Agency,

. 1	without regard to the status of the entity that
2	performs the penetration testing.
3	"(c) AGENCY PLANS AND RULES OF ENGAGE-
4	MENT.—The agency operational plan and rules of engage-
5	ment of an agency shall—
6	"(1) require the agency to—
7	"(A) perform penetration testing on the
8	high value assets of the agency; or
9	"(B) coordinate with the Director of the
10	Cybersecurity and Infrastructure Security
11	Agency to ensure that penetration testing is
12	being performed;
13	"(2) establish guidelines for avoiding, as a re-
14	sult of penetration testing—
15	"(A) adverse impacts to the operations of
16	the agency;
17	"(B) adverse impacts to operational envi-
18	ronments and systems of the agency; and
19	"(C) inappropriate access to data;
20	"(3) require the results of penetration testing
21	to include feedback to improve the cybersecurity of
22	the agency; and
23	"(4) include mechanisms for providing consist-
24	ently formatted, and, if applicable, automated and
25	machine-readable, data to the Director and the Di-

1	rector of the Cybersecurity and Infrastructure Secu-
2	rity Agency.
3	"(d) Responsibilities of CISA.—The Director of
4	the Cybersecurity and Infrastructure Security Agency
5	shall—
6	"(1) establish a process to assess the perform-
7	ance of penetration testing by both Federal and non-
8	Federal entities that establishes minimum quality
9	controls for penetration testing;
10	"(2) develop operational guidance for insti-
11	tuting penetration testing programs at agencies;
12	"(3) develop and maintain a centralized capa-
13	bility to offer penetration testing as a service to
14	Federal and non-Federal entities; and
15	"(4) provide guidance to agencies on the best
16	use of penetration testing resources.
17	"(e) Responsibilities of OMB.—The Director, in
18	coordination with the Director of the Cybersecurity and
19	Infrastructure Security Agency, shall—
20	"(1) not less frequently than annually, inven-
21	tory all Federal penetration testing assets; and
22	"(2) develop and maintain a standardized proc-
23	ess for the use of penetration testing.
24	"(f) Prioritization of Penetration Testing Re-
25	SOURCES.—

1	"(1) In General.—The Director, in coordina-
2	tion with the Director of the Cybersecurity and In-
3	frastructure Security Agency, shall develop a frame-
4	work for prioritizing Federal penetration testing re-
5	sources among agencies.
6	"(2) Considerations.—In developing the
7	framework under this subsection, the Director shall
8	$\operatorname{consider}$ —
9	"(A) agency system risk assessments per-
10	formed under section 3554(a)(1)(A);
11	"(B) the Federal risk assessment per-
12	formed under section 3553(i);
13	"(C) the analysis of Federal incident data
14	performed under section 3597; and
15	"(D) any other information determined ap-
16	propriate by the Director or the Director of the
17	Cybersecurity and Infrastructure Security
18	Agency.
19	"(g) Exception for National Security Sys-
20	TEMS.—The guidance issued under subsection (b) shall
21	not apply to national security systems.
22	"(h) Delegation of Authority for Certain
23	Systems.—The authorities of the Director described in
24	subsection (b) shall be delegated—

1	"(1) to the Secretary of Defense in the case of
2	systems described in section 3553(e)(2); and
3	"(2) to the Director of National Intelligence in
4	the case of systems described in 3553(e)(3).".
5	(b) DEADLINE FOR GUIDANCE.—Not later than 180
6	days after the date of enactment of this Act, the Director
7	shall issue the guidance required under section 3559A(b)
8	of title 44, United States Code, as added by subsection
9	(a).
10	(c) Clerical Amendment.—The table of sections
11	for chapter 35 of title 44, United States Code, is amended
12	by adding after the item relating to section 3559 the fol-
13	lowing:
	"3559A. Federal penetration testing.".
14	(d) Penetration Testing by the Secretary of
15	HOMELAND SECURITY.—Section 3553(b) of title 44,
16	United States Code, as amended by section 5121, is fur-
17	ther amended—
18	(1) in paragraph (8)(B), by striking "and" at
19	the end;
20	(2) by redesignating paragraph (9) as para-
21	graph (10); and
22	(3) by inserting after paragraph (8) the fol-
23	lowing:
24	"(9) performing penetration testing with or
25	without advance notice to, or authorization from,

1	agencies, to identify vulnerabilities within Federal
2	information systems; and".
3	SEC. 5145. ONGOING THREAT HUNTING PROGRAM.
4	(a) THREAT HUNTING PROGRAM.—
5	(1) In general.—Not later than 540 days
6	after the date of enactment of this Act, the Director
7	of the Cybersecurity and Infrastructure Security
8	Agency shall establish a program to provide ongoing,
9	hypothesis-driven threat-hunting services on the net-
10	work of each agency.
11	(2) Plan.—Not later than 180 days after the
12	date of enactment of this Act, the Director of the
13	Cybersecurity and Infrastructure Security Agency
14	shall develop a plan to establish the program re-
15	quired under paragraph (1) that describes how the
16	Director of the Cybersecurity and Infrastructure Se-
17	curity Agency plans to—
18	(A) determine the method for collecting,
19	storing, accessing, and analyzing appropriate
20	agency data;
21	(B) provide on-premises support to agen-
22	cies;
23	(C) staff threat hunting services;
24	(D) allocate available human and financial
25	resources to implement the plan; and

1	(E) provide input to the heads of agencies
2	on the use of—
3	(i) more stringent standards under
4	section 11331(c)(1) of title 40, United
5	States Code; and
6	(ii) additional cybersecurity proce-
7	dures under section 3554 of title 44,
8	United States Code.
9	(b) Reports.—The Director of the Cybersecurity
10	and Infrastructure Security Agency shall submit to the ap-
11	propriate congressional committees—
12	(1) not later than 30 days after the date on
13	which the Director of the Cybersecurity and Infra-
14	structure Security Agency completes the plan re-
15	quired under subsection (a)(2), a report on the plan
16	to provide threat hunting services to agencies;
17	(2) not less than 30 days before the date on
18	which the Director of the Cybersecurity and Infra-
19	structure Security Agency begins providing threat
20	hunting services under the program under sub-
21	section (a)(1), a report providing any updates to the
22	plan developed under subsection (a)(2); and
23	(3) not later than 1 year after the date on
24	which the Director of the Cybersecurity and Infra-
25	structure Security Agency begins providing threat

1	hunting services to agencies other than the Cyberse-
2	curity and Infrastructure Security Agency, a report
3	describing lessons learned from providing those serv-
4	ices.
5	SEC. 5146. CODIFYING VULNERABILITY DISCLOSURE PRO-
6	GRAMS.
7	(a) In General.—Chapter 35 of title 44, United
8	States Code, is amended by inserting after section 3559A,
9	as added by section 5144 of this division, the following:
10	"§ 3559B. Federal vulnerability disclosure programs
11	"(a) DEFINITIONS.—In this section:
12	"(1) Report.—The term 'report' means a vul-
13	nerability disclosure made to an agency by a re-
14	porter.
15	"(2) REPORTER.—The term 'reporter' means
16	an individual that submits a vulnerability report
17	pursuant to the vulnerability disclosure process of an
18	agency.
19	"(b) Responsibilities of OMB.—
20	"(1) LIMITATION ON LEGAL ACTION.—The Di-
21	rector, in consultation with the Attorney General,
22	shall issue guidance to agencies to not recommend or
23	pursue legal action against a reporter or an indi-
24	vidual that conducts a security research activity that
25	the head of the agency determines—

1	(A) represents a good faith effort to fol-
2	low the vulnerability disclosure policy of the
3	agency developed under subsection (d)(2); and
4	"(B) is authorized under the vulnerability
5	disclosure policy of the agency developed under
6	subsection $(d)(2)$.
7	"(2) Sharing information with cisa.—The
8	Director, in coordination with the Director of the
9	Cybersecurity and Infrastructure Security Agency
10	and in consultation with the National Cyber Direc-
11	tor, shall issue guidance to agencies on sharing rel-
12	evant information in a consistent, automated, and
13	machine readable manner with the Cybersecurity
14	and Infrastructure Security Agency, including—
15	"(A) any valid or credible reports of newly
16	discovered or not publicly known vulnerabilities
۱7	(including misconfigurations) on Federal infor-
18	mation systems that use commercial software or
19	services;
20	"(B) information relating to vulnerability
21	disclosure, coordination, or remediation activi-
22	ties of an agency, particularly as those activities
23	relate to outside organizations—
24	"(i) with which the head of the agency
25	believes the Director of the Cybersecurity

1	and Infrastructure Security Agency can as-
2	sist; or
3	"(ii) about which the head of the
4	agency believes the Director of the Cyber-
5	security and Infrastructure Security Agen-
6	cy should know; and
7	"(C) any other information with respect to
8	which the head of the agency determines helpful
9	or necessary to involve the Cybersecurity and
0	Infrastructure Security Agency.
11	"(3) AGENCY VULNERABILITY DISCLOSURE
12	POLICIES.—The Director shall issue guidance to
13	agencies on the required minimum scope of agency
14	systems covered by the vulnerability disclosure policy
15	of an agency required under subsection (d)(2).
16	"(c) Responsibilities of CISA.—The Director of
17	the Cybersecurity and Infrastructure Security Agency
18	shall—
19	"(1) provide support to agencies with respect to
20	the implementation of the requirements of this sec-
21	tion;
22	"(2) develop tools, processes, and other mecha-
23	nisms determined appropriate to offer agencies capa-
24	bilities to implement the requirements of this sec-
25	tion; and

1	"(3) upon a request by an agency, assist the
2	agency in the disclosure to vendors of newly identi-
3	fied vulnerabilities in vendor products and services.
4	"(d) RESPONSIBILITIES OF AGENCIES.—
5	"(1) Public information.—The head of each
6	agency shall make publicly available, with respect to
7	each internet domain under the control of the agen-
8	cy that is not a national security system—
9	"(A) an appropriate security contact; and
10	"(B) the component of the agency that is
11	responsible for the internet accessible services
12	offered at the domain.
13	"(2) Vulnerability disclosure policy.—
14	The head of each agency shall develop and make
15	publicly available a vulnerability disclosure policy for
16	the agency, which shall—
17	"(A) describe—
18	"(i) the scope of the systems of the
19	agency included in the vulnerability disclo-
20	sure policy;
21	"(ii) the type of information system
22	testing that is authorized by the agency;
23	"(iii) the type of information system
24	testing that is not authorized by the agen-
25	ey; and

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1	"(IV) the disclosure policy of the agen-
2	cy for sensitive information;
3	"(B) with respect to a report to an agency,
4	describe—
5	"(i) how the reporter should submit
6	the report; and
7	"(ii) if the report is not anonymous,
8	when the reporter should anticipate an ac-
9	knowledgment of receipt of the report by
10	the agency;
11	"(C) include any other relevant informa-
12	tion; and
13	"(D) be mature in scope, to cover all Fed-
14	eral information systems used or operated by
15	that agency or on behalf of that agency.
16	"(3) Identified vulnerabilities.—The head
17	of each agency shall incorporate any vulnerabilities
18	reported under paragraph (2) into the vulnerability
19	management process of the agency in order to track
20	and remediate the vulnerability.
21	"(e) Paperwork Reduction Act Exemption.—
22	The requirements of subchapter I (commonly known as
23	the 'Paperwork Reduction Act') shall not apply to a vul-
24	nerability disclosure program established under this sec-
25	tion.

1	"(f) Congressional Reporting.—Not later than
2	90 days after the date of enactment of the Federal Infor-
3	mation Security Modernization Act of 2021, and annually
4	thereafter for a 3-year period, the Director shall provide
5	to the Committee on Homeland Security and Govern-
6	mental Affairs of the Senate and the Committee on Over-
7	sight and Reform of the House of Representatives a brief-
8	ing on the status of the use of vulnerability disclosure poli-
9	cies under this section at agencies, including, with respect
10	to the guidance issued under subsection (b)(3), an identi-
11	fication of the agencies that are compliant and not compli-
12	ant.
13	"(g) Exemptions.—The authorities and functions of
14	the Director and Director of the Cybersecurity and Infra-
15	structure Security Agency under this section shall not
16	apply to national security systems.
17	"(h) Delegation of Authority for Certain
18	Systems.—The authorities of the Director and the Direc-
19	tor of the Cybersecurity and Infrastructure Security Agen-
20	cy described in this section shall be delegated—
21	"(1) to the Secretary of Defense in the case of
22	systems described in section 3553(e)(2); and
23	"(2) to the Director of National Intelligence in
24	the case of systems described in section
25	3553(e)(3).".

1	(b) CLERICAL AMENDMENT.—The table of sections
2	for chapter 35 of title 44, United States Code, is amended
3	by adding after the item relating to section 3559A, as
4	added by section 204, the following:
	"3559B. Federal vulnerability disclosure programs.".
5	SEC. 5147. IMPLEMENTING PRESUMPTION OF COMPROMISE
6	AND LEAST PRIVILEGE PRINCIPLES.
7	(a) GUIDANCE.—Not later than 1 year after the date
8	of enactment of this Act, the Director shall provide an
9	update to the appropriate congressional committees on
10	progress in increasing the internal defenses of agency sys-
11	tems, including—
12	(1) shifting away from "trusted networks" to
13	implement security controls based on a presumption
14	of compromise;
15	(2) implementing principles of least privilege in
16	administering information security programs;
17	(3) limiting the ability of entities that cause in-
18	cidents to move laterally through or between agency
19	systems;
20	(4) identifying incidents quickly;
21	(5) isolating and removing unauthorized entities
22	from agency systems quickly;
23	(6) otherwise increasing the resource costs for
24	entities that cause incidents to be successful; and

1	(7) a summary of the agency progress reports
2	required under subsection (b).
3	(b) AGENCY PROGRESS REPORTS.—Not later than 1
4	year after the date of enactment of this Act, the head of
5	each agency shall submit to the Director a progress report
6	on implementing an information security program based
7	on the presumption of compromise and least privilege
8	principles, which shall include—
9	(1) a description of any steps the agency has
10	completed, including progress toward achieving re-
11	quirements issued by the Director;
12	(2) an identification of activities that have not
13	yet been completed and that would have the most
14	immediate security impact; and
15	(3) a schedule to implement any planned activi-
16	ties.
17	SEC. 5148. AUTOMATION REPORTS.
18	(a) OMB REPORT.—Not later than 180 days after
19	the date of enactment of this Act, the Director shall sub-
20	mit to the appropriate congressional committees a report
21	on the use of automation under paragraphs (1) , $(5)(C)$
22	and (8)(B) of section 3554(b) of title 44, United States
23	Code.
24	(b) GAO REPORT.—Not later than 1 year after the
25	date of enactment of this Act, the Comptroller General

1	of the United States shall perform a study on the use of
2	automation and machine readable data across the Federal
3	Government for cybersecurity purposes, including the
4	automated updating of cybersecurity tools, sensors, or
5	processes by agencies.
6	SEC. 5149. EXTENSION OF FEDERAL ACQUISITION SECU-
7	RITY COUNCIL.
8	Section 1328 of title 41, United States Code, is
9	amended by striking "the date that" and all that follows
10	and inserting "December 31, 2026.".
11	SEC. 5150. COUNCIL OF THE INSPECTORS GENERAL ON IN-
12	TEGRITY AND EFFICIENCY DASHBOARD.
13	(a) Dashboard Required.—Section 11(e)(2) of the
14	Inspector General Act of 1978 (5 U.S.C. App.) is amend-
15	ed —
16	(1) in subparagraph (A), by striking "and" at
17	
	the end;
18	the end; (2) by redesignating subparagraph (B) as sub-
18 19	,
	(2) by redesignating subparagraph (B) as sub-
19	(2) by redesignating subparagraph (B) as subparagraph (C); and
19 20	(2) by redesignating subparagraph (B) as subparagraph (C); and (3) by inserting after subparagraph (A) the fol-
19 20 21	(2) by redesignating subparagraph (B) as subparagraph (C); and(3) by inserting after subparagraph (A) the following:

1	quired by section $3555(a)$ of title 44, United
2	States Code; and".
3	SEC. 5151. QUANTITATIVE CYBERSECURITY METRICS.
4	(a) Definition of Covered Metrics.—In this sec-
5	tion, the term "covered metrics" means the metrics estab-
6	lished, reviewed, and updated under section 224(c) of the
7	Cybersecurity Act of 2015 (6 U.S.C. 1522(c)).
8	(b) UPDATING AND ESTABLISHING METRICS.—Not
9	later than 1 year after the date of enactment of this Act,
10	the Director of the Cybersecurity and Infrastructure Secu-
11	rity Agency, in coordination with the Director, shall—
12	(1) evaluate any covered metrics established as
13	of the date of enactment of this Act; and
14	(2) as appropriate and pursuant to section
15	224(c) of the Cybersecurity Act of 2015 (6 U.S.C.
16	1522(c))—
17	(A) update the covered metrics; and
18	(B) establish new covered metrics.
19	(c) Implementation.—
20	(1) In general.—Not later than 540 days
21	after the date of enactment of this Act, the Director,
22	in coordination with the Director of the Cybersecu-
23	rity and Infrastructure Security Agency, shall pro-
24	mulgate guidance that requires each agency to use

- 1 covered metrics to track trends in the cybersecurity 2 and incident response capabilities of the agency.
 - (2) Performance Demonstration.—The guidance issued under paragraph (1) and any subsequent guidance shall require agencies to share with the Director of the Cybersecurity and Infrastructure Security Agency data demonstrating the performance of the agency using the covered metrics included in the guidance.
 - (3) Penetration tests.—On not less than 2 occasions during the 2-year period following the date on which guidance is promulgated under paragraph (1), the Director shall ensure that not less than 3 agencies are subjected to substantially similar penetration tests, as determined by the Director, in coordination with the Director of the Cybersecurity and Infrastructure Security Agency, in order to validate the utility of the covered metrics.
 - (4) Analysis capacity.—The Director of the Cybersecurity and Infrastructure Security Agency shall develop a capability that allows for the analysis of the covered metrics, including cross-agency performance of agency cybersecurity and incident response capability trends.
- 25 (d) Congressional Reports.—

1	(1) UTILITY OF METRICS.—Not later than 1
2	year after the date of enactment of this Act, the Di-
3	rector of the Cybersecurity and Infrastructure Secu-
4	rity Agency shall submit to the appropriate congres-
5	sional committees a report on the utility of the cov-
6	ered metrics.
7	(2) Use of metrics.—Not later than 180 days
8	after the date on which the Director promulgates
9	guidance under subsection (c)(1), the Director shall
10	submit to the appropriate congressional committees
11	a report on the results of the use of the covered
12	metrics by agencies.
13	(e) Cybersecurity Act of 2015 Updates.—Sec-
14	tion 224 of the Cybersecurity Act of 2015 (6 U.S.C. 1522)
15	is amended—
16	(1) by striking subsection (c) and inserting the
17	following:
18	"(c) IMPROVED METRICS.—
19	"(1) IN GENERAL.—The Director of the Cyber-
20	security and Infrastructure Security Agency, in co-
21	ordination with the Director, shall establish, review,
22	and update metrics to measure the cybersecurity and
23	incident response capabilities of agencies in accord-
24	ance with the responsibilities of agencies under sec-
25	tion 3554 of title 44, United States Code.

1	"(2) QUALITIES.—With respect to the metrics
2	established, reviewed, and updated under paragraph
3	(1)—
4	"(A) not less than 2 of the metrics shall be
5	time-based, such as a metric of—
6	"(i) the amount of time it takes for
7	an agency to detect an incident; and
8	"(ii) the amount of time that passes
9	between—
10	"(I) the detection of an incident
11	and the remediation of the incident;
12	and
13	"(II) the remediation of an inci-
14	dent and the recovery from the inci-
15	dent; and
16	"(B) the metrics may include other meas-
17	urable outcomes.";
18	(2) by striking subsection (e); and
19	(3) by redesignating subsection (f) as sub-
20	section (e).
21	TITLE LIII—RISK-BASED
22	BUDGET MODEL
23	SEC. 5161. DEFINITIONS.
24	In this title:

1	(1) APPROPRIATE CONGRESSIONAL COMMIT-
2	TEES.—The term "appropriate congressional com-
3	mittees" means—
4	(A) the Committee on Homeland Security
5	and Governmental Affairs and the Committee
6	on Appropriations of the Senate; and
7	(B) the Committee on Homeland Security
8	and the Committee on Appropriations of the
9	House of Representatives.
10	(2) COVERED AGENCY.—The term "covered
11	agency" has the meaning given the term "executive
12	agency" in section 133 of title 41, United States
13	Code.
14	(3) DIRECTOR.—The term "Director" means
15	the Director of the Office of Management and Budg-
16	et.
17	(4) Information technology.—The term
18	"information technology"—
19	(A) has the meaning given the term in sec-
20	tion 11101 of title 40, United States Code; and
21	(B) includes the hardware and software
22	systems of a Federal agency that monitor and
23	control physical equipment and processes of the
24	

I	(5) RISK-BASED BUDGET.—The term "risk-
2	based budget" means a budget—
3	(A) developed by identifying and
4	prioritizing cybersecurity risks and
5	vulnerabilities, including impact on agency oper-
6	ations in the case of a cyber attack, through
7	analysis of cyber threat intelligence, incident
8	data, and tactics, techniques, procedures, and
9	capabilities of cyber threats; and
10	(B) that allocates resources based on the
11	risks identified and prioritized under subpara-
12	graph (A).
13	SEC. 5162. ESTABLISHMENT OF RISK-BASED BUDGET
13 14	SEC. 5162. ESTABLISHMENT OF RISK-BASED BUDGET MODEL.
14	MODEL.
14 15	MODEL. (a) IN GENERAL.—
14 15 16	MODEL. (a) IN GENERAL.— (1) MODEL.—Not later than 1 year after the
14 15 16 17	MODEL. (a) IN GENERAL.— (1) MODEL.—Not later than 1 year after the first publication of the budget submitted by the
14 15 16 17	MODEL. (a) IN GENERAL.— (1) MODEL.—Not later than 1 year after the first publication of the budget submitted by the President under section 1105 of title 31, United
14 15 16 17 18	MODEL. (a) IN GENERAL.— (1) MODEL.—Not later than 1 year after the first publication of the budget submitted by the President under section 1105 of title 31, United States Code, following the date of enactment of this
14 15 16 17 18 19	MODEL. (a) IN GENERAL.— (1) MODEL.—Not later than 1 year after the first publication of the budget submitted by the President under section 1105 of title 31, United States Code, following the date of enactment of this Act, the Director, in consultation with the Director
14 15 16 17 18 19 20	MODEL. (a) IN GENERAL.— (1) MODEL.—Not later than 1 year after the first publication of the budget submitted by the President under section 1105 of title 31, United States Code, following the date of enactment of this Act, the Director, in consultation with the Director of the Cybersecurity and Infrastructure Security

1	standard model for creating a risk-based budget for
2	cybersecurity spending.
3	(2) Responsibility of director.—Section
4	3553(a) of title 44, United States Code, as amended
5	by section 5121 of this division, is further amended
6	by inserting after paragraph (6) the following:
7	"(7) developing a standard risk-based budget
8	model to inform Federal agency cybersecurity budget
9	development; and".
10	(3) Contents of model.—The model re-
11	quired to be developed under paragraph (1) shall—
12	(A) consider Federal and non-Federal
13	cyber threat intelligence products, where avail-
14	able, to identify threats, vulnerabilities, and
15	risks;
16	(B) consider the impact of agency oper-
17	ations of compromise of systems, including the
18	interconnectivity to other agency systems and
19	the operations of other agencies;
20	(C) indicate where resources should be al-
21	located to have the greatest impact on miti-
22	gating current and future threats and current
23	and future cybersecurity capabilities;
24	(D) be used to inform acquisition and
25	sustainment of—

1	(i) information technology and cyber-
2	security tools;
3	(ii) information technology and cyber-
4	security architectures;
5	(iii) information technology and cyber-
6	security personnel; and
7	(iv) cybersecurity and information
8	technology concepts of operations; and
9	(E) be used to evaluate and inform Gov-
10	ernment-wide cybersecurity programs of the De-
11,	partment of Homeland Security.
12	(4) REQUIRED UPDATES.—Not less frequently
13	than once every 3 years, the Director shall review,
14	and update as necessary, the model required to be
15	developed under this subsection.
16	(5) Publication.—The Director shall publish
17	the model required to be developed under this sub-
18	section, and any updates necessary under paragraph
19	(4), on the public website of the Office of Manage-
20	ment and Budget.
21	(6) Reports.—Not later than 1 year after the
22	date of enactment of this Act, and annually there-
23	after for each of the 2 following fiscal years or until
24	the date on which the model required to be devel-
25	oped under this subsection is completed, whichever is

1	sooner, the Director shall submit a report to Con-
2	gress on the development of the model.
3	(b) REQUIRED USE OF RISK-BASED BUDGET
4	Model.—
5	(1) IN GENERAL.—Not later than 2 years after
6	the date on which the model developed under sub-
7	section (a) is published, the head of each covered
8	agency shall use the model to develop the annual cy-
9	bersecurity and information technology budget re-
10	quests of the agency.
11	(2) AGENCY PERFORMANCE PLANS.—Section
12	3554(d)(2) of title 44, United States Code, is
13	amended by inserting "and the risk-based budget
14	model required under section 3553(a)(7)" after
15	"paragraph (1)".
16	(c) Verification.—
17	(1) IN GENERAL.—Section 1105(a)(35)(A)(i) of
18	title 31, United States Code, is amended—
19	(A) in the matter preceding subclause (I),
20	by striking "by agency, and by initiative area
21	(as determined by the administration)" and in-
22	serting "and by agency";
23	(B) in subclause (III), by striking "and"
24	at the end; and
25	(C) by adding at the end the following:

1	"(V) a validation that the budg-
2	ets submitted were developed using a
3	risk-based methodology; and
4	"(VI) a report on the progress of
5	each agency on closing recommenda-
6	tions identified under the independent
7	evaluation required by section
8	3555(a)(1) of title 44.".
9	(2) Effective date.—The amendments made
10	by paragraph (1) shall take effect on the date that
11	is 2 years after the date on which the model devel-
12	oped under subsection (a) is published.
13	(d) Reports.—
14	(1) Independent evaluation.—Section
15	3555(a)(2) of title 44, United States Code, is
16	amended—
17	(A) in subparagraph (B), by striking
18	"and" at the end;
19	(B) in subparagraph (C), by striking the
20	period at the end and inserting "; and"; and
21	(C) by adding at the end the following:
22	"(D) an assessment of how the agency im-
23	plemented the risk-based budget model required
24	under section 3553(a)(7) and an evaluation of

1	whether the model mitigates agency cyber
2	vulnerabilities.".
3	(2) Assessment.—Section 3553(c) of title 44,
4	United States Code, as amended by section 5121, is
5	further amended by inserting after paragraph (5)
6	the following:
7	"(6) an assessment of—
8	"(A) Federal agency implementation of the
9	model required under subsection (a)(7);
10	"(B) how cyber vulnerabilities of Federal
11	agencies changed from the previous year; and
12	"(C) whether the model mitigates the
13	cyber vulnerabilities of the Federal Govern-
14	ment.".
15	(e) GAO REPORT.—Not later than 3 years after the
16	date on which the first budget of the President is sub-
17	mitted to Congress containing the validation required
18	under section 1105(a)(35)(A)(i)(V) of title 31, United
19	States Code, as amended by subsection (c), the Comp-
20	troller General of the United States shall submit to the
21	appropriate congressional committees a report that in-
22	cludes—
23	(1) an evaluation of the success of covered
24	agencies in developing risk-based budgets;

1	(2) an evaluation of the success of covered
2	agencies in implementing risk-based budgets;
3	(3) an evaluation of whether the risk-based
4	budgets developed by covered agencies mitigate
5	cyber vulnerability, including the extent to which the
6	risk-based budgets inform Federal Government-wide
7	cybersecurity programs; and
8	(4) any other information relating to risk-based
9	budgets the Comptroller General determines appro-
10	priate.
11	TITLE LIV—PILOT PROGRAMS
12	TO ENHANCE FEDERAL CY-
13	BERSECURITY
14	SEC. 5181. ACTIVE CYBER DEFENSIVE STUDY.
15	(a) Definition.—In this section, the term "active
16	defense technique''—
17	(1) means an action taken on the systems of an
18	entity to increase the security of information on the
19	network of an agency by misleading an adversary;
20	and
21	(2) includes a honeypot, deception, or purpose-
22	fully feeding false or misleading data to an adver-
23	sary when the adversary is on the systems of the en-
24	tity.

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