# <sup>117th CONGRESS</sup> 2D SESSION H.R.6497

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

#### IN THE HOUSE OF REPRESENTATIVES

#### JANUARY 25, 2022

Mrs. CAROLYN B. MALONEY of New York (for herself, Mr. COMER, Mr. CON-NOLLY, Mr. SESSIONS, Ms. NORTON, Mr. KELLER, Ms. WASSERMAN SCHULTZ, Mr. HICE of Georgia, Mr. COOPER, Mr. C. SCOTT FRANKLIN of Florida, Ms. BROWN of Ohio, Mr. GIBBS, Mr. LYNCH, and Mr. RASKIN) introduced the following bill; which was referred to the Committee on Oversight and Reform, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

## A BILL

- To modernize Federal information security management and improve Federal cybersecurity to combat persisting and emerging threats, and for other purposes.
  - 1 Be it enacted by the Senate and House of Representa-
  - 2 tives of the United States of America in Congress assembled,

#### **3** SECTION 1. SHORT TITLE.

- 4 This Act may be cited as the "Federal Information
- 5 Security Modernization Act of 2022".

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

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

Sec. 1. Short title.

2

- Sec. 2. Table of contents.
- Sec. 3. Definitions.

#### TITLE I—UPDATES TO FISMA

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

#### TITLE II—IMPROVING FEDERAL CYBERSECURITY

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

#### TITLE III—PILOT PROGRAMS TO ENHANCE FEDERAL CYBERSECURITY

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

#### **3** SEC. 3. DEFINITIONS.

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

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

tion test" has the meaning given the term in section

3552(b) of title 44, United States Code, as amended
 by this Act.

3 (8) THREAT HUNTING.—The term "threat
4 hunting" means iteratively searching systems for
5 threats that evade detection by automated threat de6 tection systems.

7 (9) ZERO TRUST ARCHITECTURE.—The term "zero trust architecture" means a security model, a 8 9 set of system design principles, and a coordinated 10 cybersecurity and system management strategy that 11 employs continuous monitoring, risk-based access 12 controls, or system security automation techniques 13 to address the cybersecurity principle that threats 14 exist both inside and outside traditional network 15 boundaries with an assumption that a breach is in-16 evitable or has likely already occurred, and therefore 17 employs least-privileged access for network or system 18 users while monitoring for anomalous or malicious 19 activity.

### 20 TITLE I—UPDATES TO FISMA

#### 21 SEC. 101. TITLE 44 AMENDMENTS.

(a) SUBCHAPTER I AMENDMENTS.—Subchapter I of
chapter 35 of title 44, United States Code, is amended—
(1) in subsection (a)(1)(B) of section 3504—

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

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

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

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

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

| 1  | (C) High-performance computing act              |
|----|---|
| 2  | OF 1991.—Section 207(a) of the High-Perform-    |
| 3  | ance Computing Act of 1991 (15 U.S.C.           |
| 4  | 5527(a)) is amended by striking "section        |
| 5  | 3552(b)(6)(A)(i)" and inserting "section        |
| 6  | 3552(b)(9)(A)(i)".                              |
| 7  | (D) INTERNET OF THINGS CYBERSECU-               |
| 8  | RITY IMPROVEMENT ACT OF 2020.—Section 3(5)      |
| 9  | of the Internet of Things Cybersecurity Im-     |
| 10 | provement Act of 2020 (15 U.S.C. 278g–3a) is    |
| 11 | amended by striking "section $3552(b)(6)$ " and |
| 12 | inserting "section 3552(b)".                    |
| 13 | (E) NATIONAL DEFENSE AUTHORIZATION              |
| 14 | ACT FOR FISCAL YEAR 2013.—Section               |
| 15 | 933(e)(1)(B) of the National Defense Author-    |
| 16 | ization Act for Fiscal Year 2013 (10 U.S.C.     |
| 17 | 2224 note) is amended by striking "section      |
| 18 | 3542(b)(2)" and inserting "section 3552(b)".    |
| 19 | (F) IKE SKELTON NATIONAL DEFENSE AU-            |
| 20 | THORIZATION ACT FOR FISCAL YEAR 2011.—The       |
| 21 | Ike Skelton National Defense Authorization Act  |
| 22 | for Fiscal Year 2011 (Public Law 111–383) is    |
| 23 | amended   |

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

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

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

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

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

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

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

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

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

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

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

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

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

| 2 quest of the agency;"; and      |                |
|-----------------------------------|----------------|
| 3 (ii) in paragraph (2)—          |                |
| 4 (I) in subparagraph             | (A), by in-    |
| 5 serting "in accordance wi       | ith the agen-  |
| 6 cy system risk assessmer        | nt performed   |
| 7 under paragraph (1)(A)"         | after "infor-  |
| 8 mation systems'';               |                |
| 9 (II) in subparagraph            | (B)—           |
| 10 (aa) by striking               | ; "in accord-  |
| 11 ance with standards'           | ' and insert-  |
| 12 ing "in accordance w           | ith—           |
| 13 "(i) standards"; and           |                |
| 14 (bb) by adding                 | at the end     |
| 15 the following:                 |                |
| 16 "(ii) the evaluation perfe     | ormed under    |
| 17 paragraph $(1)(F)$ ; and       |                |
| 18 "(iii) the implementation      | on plan de-    |
| 19 scribed in paragraph (1)(G);"; | and            |
| 20 (III) in subparagraph          | h (D), by in-  |
| 21 serting ", through the us      | e of penetra-  |
| tion testing, the vulnera         | bility disclo- |
| 23 sure program established       | l under sec-   |
| tion 3559B, and other n           | neans," after  |
| 25 "periodically";                |                |

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

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

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

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

21 (a)(1)(A);

"(B) evaluates the adequacy and effectiveness of information security policies, procedures, and practices of the agency to address
the risks identified in the agency system risk

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

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

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

| 1  | "(2) The protections required under paragraph $(1)$         |
|----|---|
| 2  | shall be commensurate with the risk and comply with all     |
| 3  | applicable laws and regulations.                            |
| 4  | "(3) With respect to information that is not related        |
| 5  | to national security systems, agencies and evaluators shall |
| 6  | make a summary of the information unclassified and pub-     |
| 7  | licly available, including information that does not iden-  |
| 8  | tify—   |
| 9  | "(A) specific information system incidents; or              |
| 10 | "(B) specific information system                            |
| 11 | vulnerabilities.";  |
| 12 | (F) in subsection $(g)(2)$ —                                |
| 13 | (i) by striking "this subsection shall"                     |
| 14 | and inserting "this subsection—                             |
| 15 | "(A) shall";  |
| 16 | (ii) in subparagraph (A), as so des-                        |
| 17 | ignated, by striking the period at the end                  |
| 18 | and inserting "; and"; and                                  |
| 19 | (iii) by adding at the end the fol-                         |
| 20 | lowing:   |
| 21 | "(B) identify any entity that performs an                   |
| 22 | independent evaluation under subsection (b).";              |
| 23 | and   |
| 24 | (G) striking subsection (j); and                            |

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

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

| "(1) Appropriate reporting entities.—The         |
|--|
| term 'appropriate reporting entities' means—     |
| "(A) the majority and minority leaders of        |
| the Senate;                                      |
| "(B) the Speaker and minority leader of          |
| the House of Representatives;                    |
| "(C) the Committee on Homeland Security          |
| and Governmental Affairs of the Senate;          |
| "(D) the Committee on Oversight and Re-          |
| form of the House of Representatives;            |
| "(E) the Committee on Homeland Security          |
| of the House of Representatives;                 |
| "(F) the appropriate authorization and ap-       |
| propriations committees of Congress;             |
| "(G) the Director;                               |
| "(H) the Director of the Cybersecurity and       |
| Infrastructure Security Agency;                  |
| "(I) the National Cyber Director;                |
| "(J) the Comptroller General of the United       |
| States; and                                      |
| "(K) the inspector general of any impacted       |
| agency.  |
| "(2) AWARDEE.—The term 'awardee'—                |
| "(A) means a person, business, or other          |
| entity that receives a grant from, or is a party |
|  |

| 1  | to a cooperative agreement or an other trans-        |
|----|--|
| 2  | action agreement with, an agency; and                |
| 3  | "(B) includes any subgrantee of a person,            |
| 4  | business, or other entity described in subpara-      |
| 5  | graph (A).   |
| 6  | "(3) BREACH.—The term 'breach' shall be de-          |
| 7  | fined by the Director.                               |
| 8  | "(4) CONTRACTOR.—The term 'contractor'               |
| 9  | means a prime contractor of an agency or a subcon-   |
| 10 | tractor of a prime contractor of an agency.          |
| 11 | "(5) Federal information.—The term 'Fed-             |
| 12 | eral information' means information created, col-    |
| 13 | lected, processed, maintained, disseminated, dis-    |
| 14 | closed, or disposed of by or for the Federal Govern- |
| 15 | ment in any medium or form.                          |
| 16 | "(6) FEDERAL INFORMATION SYSTEM.—The                 |
| 17 | term 'Federal information system' means an infor-    |
| 18 | mation system used or operated by an agency, a con-  |
| 19 | tractor, or another organization on behalf of an     |
| 20 | agency.  |
| 21 | "(7) INTELLIGENCE COMMUNITY.—The term                |
| 22 | 'intelligence community' has the meaning given the   |
| 23 | term in section 3 of the National Security Act of    |
| 24 | 1947 (50 U.S.C. 3003).                               |
"(8) NATIONWIDE CONSUMER REPORTING
 AGENCY.—The term 'nationwide consumer reporting
 agency' means a consumer reporting agency de scribed in section 603(p) of the Fair Credit Report ing Act (15 U.S.C. 1681a(p)).

6 "(9) VULNERABILITY DISCLOSURE.—The term
7 'vulnerability disclosure' means a vulnerability iden8 tified under section 3559B.

### 9 "§ 3592. Notification of breach

10 "(a) NOTIFICATION.—As expeditiously as practicable 11 and without unreasonable delay, and in any case not later 12 than 45 days after an agency has a reasonable basis to 13 conclude that a breach has occurred, the head of the agen-14 cy, in consultation with the chief privacy officer of the 15 agency, shall—

"(1) determine whether notice to any individual
potentially affected by the breach is appropriate
based on an assessment of the risk of harm to the
individual that considers—

20 "(A) the nature and sensitivity of the per21 sonally identifiable information affected by the
22 breach;

23 "(B) the likelihood of access to and use of
24 the personally identifiable information affected
25 by the breach;

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

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

40

| 1  | "(A) IN GENERAL.—Any delay under para-                        |
|----|---|
| 2  | graph (1) shall be reported in writing to the Di-             |
| 3  | rector, the Attorney General, the Director of                 |
| 4  | National Intelligence, the Secretary of Home-                 |
| 5  | land Security, the National Cyber Director, the               |
| 6  | Director of the Cybersecurity and Infrastruc-                 |
| 7  | ture Security Agency, and the head of the agen-               |
| 8  | cy and the inspector general of the agency that               |
| 9  | experienced the breach.                                       |
| 10 | "(B) CONTENTS.—A report required under                        |
| 11 | subparagraph (A) shall include a written state-               |
| 12 | ment from the entity that delayed the notifica-               |
| 13 | tion explaining the need for the delay.                       |
| 14 | "(C) FORM.—The report required under                          |
| 15 | subparagraph (A) shall be unclassified but may                |
| 16 | include a classified annex.                                   |
| 17 | "(3) RENEWAL.—A delay under paragraph (1)                     |
| 18 | shall be for a period of 60 days and may be renewed.          |
| 19 | "(d) UPDATE NOTIFICATION.—If an agency deter-                 |
| 20 | mines there is a significant change in the reasonable basis   |
| 21 | to conclude that a breach occurred, a significant change      |
| 22 | to the determination made under subsection $(a)(1)$ , or that |
| 23 | it is necessary to update the details of the information pro- |
| 24 | vided to potentially affected individuals as described in     |
| 25 | subsection (b), the agency shall as expeditiously as prac-    |

ticable and without unreasonable delay, and in any case
 not later than 30 days after such a determination, notify
 each individual who received a notification pursuant to
 subsection (a) of those changes.

5 "(e) RULE OF CONSTRUCTION.—Nothing in this sec-6 tion shall be construed to limit—

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

11 "(2) the Director from issuing guidance relat-12 ing to notifications of major incidents or the head of 13 an agency from providing more information than de-14 scribed in subsection (b) when notifying individuals 15 potentially affected by breaches.

16 "§ 3593. Congressional and executive branch reports

17 "(a) INITIAL REPORT.—

18 "(1) IN GENERAL.—Not later than 72 hours 19 after an agency has a reasonable basis to conclude 20 that a major incident occurred, the head of the 21 agency impacted by the major incident shall submit 22 to the appropriate reporting entities a written re-23 port. Within 7 days of a major incident determina-24 tion, the head of the agency impacted shall coordi-25 nate with the National Cyber Director, or their des-

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

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

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

"(b) SUPPLEMENTAL REPORT.—Within a reasonable 4 5 amount of time, but not later than 30 days after the date 6 on which an agency submits a written report under sub-7 section (a), the head of the agency shall provide to the 8 appropriate reporting entities written updates on the 9 major incident and, to the extent practicable, provide a 10 briefing to the congressional committees described in sub-11 section (a)(1), including summaries of—

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

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

"(3) an estimate of the number of individuals
potentially affected by the major incident based on
information available to agency officials as of the
date on which the agency provides the update;

23 "(4) an assessment of the risk of harm to indi-24 viduals potentially affected by the major incident

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| 1  | based on information available to agency officials as |
|----|---|
| 2  | of the date on which the agency provides the update;  |
| 3  | ((5) an update to the assessment of the risk to       |
| 4  | agency operations, or to impacts on other agency or   |
| 5  | non-Federal entity operations, affected by the major  |
| 6  | incident based on information available to agency of- |
| 7  | ficials as of the date on which the agency provides   |
| 8  | the update; and                                       |
| 9  | (6) the detection, response, and remediation          |
| 10 |   |

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

"(c) UPDATE REPORT.—If the agency, or the Na-16 tional Cyber Director, determines that there is any signifi-17 18 cant change in the understanding of the agency of the 19 scope, scale, or consequence of a major incident for which an agency submitted a written report under subsection 20 21 (a), the agency shall provide an updated report to the ap-22 propriate reporting entities that includes information re-23 lating to the change in understanding.

24 "(d) BIANNUAL REPORT.—Each agency shall submit25 as part of the biannual report required under section

3554(c)(1) of this title a description of each major inci dent that occurred during the 2-year period preceding the
 date on which the biannual report is submitted.

4 "(e) Delay Report.—

5 "(1) IN GENERAL.—The Director shall submit
6 to the appropriate reporting entities an annual re7 port on all notification delays granted pursuant to
8 subsection (c) of section 3592.

9 "(2) COMPONENT OF OTHER REPORT.—The Di10 rector may submit the report required under para11 graph (1) as a component of the annual report sub12 mitted under section 3597(b).

"(f) REPORT AND BRIEFING CONSISTENCY.—In carrying out the duties under this section, and to achieve consistent and understandable agency reporting to Congress,
the National Cyber Director shall—

"(1) provide to agencies formatting guidelines
and recommended contents of information to be included in the reports and briefings required under
this section, including recommendations for the use
of plain language terminology and consistent formats for presenting any associated metrics; and

23 "(2) maintain a historical archive and major in24 cident log of all reports and briefings provided under
25 the requirements of this section, which shall include

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

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

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

security system shall share information about inci dents that occur on national security systems with
 the Director of the Cybersecurity and Infrastructure
 Security Agency to the extent consistent with stand ards and guidelines for national security systems
 issued in accordance with law and as directed by the
 President.

8 "(b) COMPLIANCE.—The information provided and 9 method of reporting under subsection (a) shall take into 10 account the level of classification of the information and any information sharing limitations and protections, such 11 12 as limitations and protections relating to law enforcement, 13 national security, privacy, statistical confidentiality, or other factors determined by the Director in order to imple-14 15 ment subsection (a)(1) in a manner that enables automated and consistent reporting. 16

17 "(c) INCIDENT RESPONSE.—Each agency that has a 18 reasonable basis to conclude that a major incident oc-19 curred involving Federal information in electronic medium 20 or form, as defined by the Director and not involving a 21 national security system, regardless of delays from notifi-22 cation granted for a major incident, shall coordinate with 23 the Cybersecurity and Infrastructure Security Agency to 24facilitate asset response activities and recommendations 25 for mitigating future incidents, and with appropriate Federal law enforcement agencies to facilitate threat response
 activities, consistent with relevant policies, principles,
 standards, and guidelines on information security.

#### 4 "§ 3595. Responsibilities of contractors and awardees

5 "(a) Reporting.—

6 "(1) IN GENERAL.—Unless otherwise specified 7 in a contract, grant, cooperative agreement, or any 8 other transaction agreement, any contractor or 9 awardee of an agency shall report to the agency 10 within the same amount of time such agency is re-11 quired to report an incident to the Cybersecurity 12 and Infrastructure Security Agency, if the con-13 tractor or awardee has a reasonable basis to suspect 14 or conclude that—

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

21 "(B) an incident or breach has occurred
22 with respect to a Federal information system
23 used or operated by the contractor or awardee
24 in connection with the contract, grant, coopera-

| 1  | tive agreement, or other transaction agreement    |
|----|---|
| 2  | of the contractor or awardee;                     |
| 3  | "(C) a component of any Federal informa-          |
| 4  | tion system, or a system able to access, store,   |
| 5  | or process Federal information, contains a secu-  |
| 6  | rity vulnerability, including a supply chain com- |
| 7  | promise or an identified software or hardware     |
| 8  | vulnerability; or                                 |
| 9  | "(D) the contractor or awardee has re-            |
| 10 | ceived information from the agency that the       |
| 11 | contractor or awardee is not authorized to re-    |
| 12 | ceive in connection with the contract, grant, co- |
| 13 | operative agreement, or other transaction agree-  |
| 14 | ment of the contractor or awardee.                |
| 15 | "(2) Procedures.—                                 |
| 16 | "(A) MAJOR INCIDENT.—Following a re-              |
| 17 | port of a breach or major incident by a con-      |
| 18 | tractor or awardee under paragraph (1), the       |
| 19 | agency, in consultation with the contractor or    |
| 20 | awardee, shall carry out the requirements under   |
| 21 | sections 3592, 3593, and 3594 with respect to     |
| 22 | the major incident.                               |
| 23 | "(B) INCIDENT.—Following a report of an           |
| 24 | incident by a contractor or awardee under para-   |
| 25 | graph (1), an agency, in consultation with the    |

contractor or awardee, shall carry out the re quirements under section 3594 with respect to
 the incident.

4 "(b) EFFECTIVE DATE.—This section shall apply on 5 and after the date that is 1 year after the date of the 6 enactment of the Federal Information Security Mod-7 ernization Act of 2022 and shall apply with respect to any 8 contract entered into on or after such effective date.

#### 9 "§ 3596. Training

10 "(a) COVERED INDIVIDUAL DEFINED.—In this sec-11 tion, the term 'covered individual' means an individual 12 who obtains access to Federal information or Federal in-13 formation systems because of the status of the individual 14 as an employee, contractor, awardee, volunteer, or intern 15 of an agency.

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

19 "(1) the internal process of the agency for re-20 porting an incident; and

21 "(2) the obligation of a covered individual to re22 port to the agency a confirmed major incident and
23 any suspected incident involving information in any
24 medium or form, including paper, oral, and elec25 tronic.

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

#### 5 "§ 3597. Analysis and report on Federal incidents

6 "(a) Analysis of Federal Incidents.—

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

- 14 "(A) the causes of incidents, including—
- 15 "(i) attacker tactics, techniques, and16 procedures; and
- 17 "(ii) system vulnerabilities, including
  18 previously unknown zero day exploitations,
  19 unpatched systems, and information system misconfigurations;

21 "(B) the scope and scale of incidents at22 agencies;

23 "(C) common root causes of incidents
24 across multiple agencies;

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

|    | 50   |
|----|--|
| 1  | "(B) FORMAT.—In carrying out subpara-                      |
| 2  | graph (A), the Director shall share the anal-              |
| 3  | yses—  |
| 4  | "(i) in human-readable written prod-                       |
| 5  | ucts; and  |
| 6  | "(ii) to the greatest extent practicable,                  |
| 7  | in machine-readable formats in order to                    |
| 8  | enable automated intake and use by agen-                   |
| 9  | cies.  |
| 10 | "(b) ANNUAL REPORT ON FEDERAL INCIDENTS.—                  |
| 11 | Not later than 2 years after the date of the enactment     |
| 12 | of this section, and not less frequently than annually     |
| 13 | thereafter, the Director of the Cybersecurity and Infra-   |
| 14 | structure Security Agency, in consultation with the Direc- |
| 15 | tor, the National Cyber Director, and the heads of other   |
| 16 | agencies as appropriate, shall submit to the appropriate   |
| 17 | reporting entities a report that includes—                 |
| 18 | "(1) a summary of causes of incidents from                 |
| 19 | across the Federal Government that categorizes             |
| 20 | those incidents as incidents or major incidents;           |
| 21 | ((2) the quantitative and qualitative analyses of          |
| 22 | incidents developed under subsection $(a)(1)$ on an        |
| 23 | agency-by-agency basis and comprehensively across          |

24 the Federal Government, including—

25 "(A) a specific analysis of breaches; and

"(B) an analysis of the Federal Govern-1 2 ment's performance against the metrics established under section 224(c) of the Cybersecurity 3 Act of 2015 (6 U.S.C. 1522(c)); and 4 5 "(3) an annex for each agency that includes— 6 "(A) a description of each major incident; 7 and "(B) an analysis of the agency's perform-8 9 ance against the metrics established under sec-10 tion 224(c) of the Cybersecurity Act of 2015 (6 11 U.S.C. 1522(c)). 12 "(c) PUBLICATION.—To the extent that publication is consistent with national security interests, a version of 13 14 each report submitted under subsection (b) shall be made 15 publicly available on the website of the Cybersecurity and Infrastructure Security Agency during the year in which 16 17 the report is submitted. 18 "(d) INFORMATION PROVIDED BY AGENCIES.—

19 "(1) IN GENERAL.—The analysis required
20 under subsection (a) and each report submitted
21 under subsection (b) shall use information provided
22 by agencies under section 3594(a).

23 "(2) NATIONAL SECURITY SYSTEM REPORTS.—
24 "(A) IN GENERAL.—Annually, the head of
25 an agency that operates or exercises control of

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

| 1        | "(ix) the Permanent Select Committee  |
|----------|---|
| 2        | on Intelligence of the House of Represent-  |
| 3        | atives;   |
| 4        | "(x) the Committee on Armed Serv-   |
| 5        | ices of the House of Representatives; and   |
| 6        | "(xi) the Committee on Appropria-   |
| 7        | tions of the House of Representatives.  |
| 8        | "(B) CLASSIFIED FORM.—A report re-  |
| 9        | quired under subparagraph (A) may be sub-   |
| 10       | mitted in a classified form.  |
| 11       | "(e) Requirement for Compiling Informa-   |
| 12       | TION.—In publishing the public report required under  |
| 13       | subsection (c), the Director of the Cybersecurity and In-   |
| 14       | frastructure Security Agency shall sufficiently compile in-   |
| 15       |   |
|          | formation such that no specific incident of an agency can   |
| 16       | formation such that no specific incident of an agency can<br>be identified, except with the concurrence of the Director |
| 16<br>17 | be identified, except with the concurrence of the Director  |
|          | be identified, except with the concurrence of the Director  |

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19 agency.

## 20 "§ 3598. Major incident definition

"(a) IN GENERAL.—Not later than 180 days after
the date of the enactment of the Federal Information Security Modernization Act of 2022, the Director, in coordination with the Director of the Cybersecurity and Infrastructure Security Agency and the National Cyber Direc-

tor, shall develop and promulgate guidance on the defini tion of the term 'major incident' for the purposes of sub chapter II and this subchapter.

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

7 "(1) include, with respect to any information 8 collected or maintained by or on behalf of an agency 9 or an information system used or operated by an 10 agency or by a contractor of an agency or another 11 organization on behalf of an agency, any incident 12 the head of the agency determines is likely to result 13 in demonstrable harm to—

14 "(A) the national security interests, foreign
15 relations, or the economy of the United States;
16 "(B) the public confidence, civil liberties,
17 or public health and safety of the people of the
18 United States;

19 "(C) the integrity of personally identifiable
20 information, including the exfiltration, modifica21 tion, or deletion of such information; or

22 "(D) any other type of incident determined
23 appropriate by the Director; and

24 "(2) stipulate that the Director, in coordination25 with the National Cyber Director, shall declare a

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

23 issued under subsection (a);

| 1  | ((2) the definition of the term 'major incident'   |
|--|--|
| 2  | included in the guidance issued under subsection (a);  |
| 3  | and  |
| 4  | "(3) an explanation of, and the analysis that  |
| 5  | led to, the definition described in paragraph (2).".   |
| 6  | (2) CLERICAL AMENDMENT.—The table of sec-  |
| 7  | tions for chapter 35 of title 44, United States Code,  |
| 8  | is amended by adding at the end the following:   |
|  | "SUBCHAPTER IV—FEDERAL SYSTEM INCIDENT RESPONSE  |
|  | <ul> <li>"3591. Definitions.</li> <li>"3592. Notification of breach.</li> <li>"3593. Congressional and executive branch reports.</li> <li>"3594. Government information sharing and incident response.</li> <li>"3595. Responsibilities of contractors and awardees.</li> <li>"3596. Training.</li> </ul>  |
|  | "3597. Analysis and report on Federal incidents.<br>"3598. Major incident definition.".  |
| 9  |  |
| 9<br>10  | "3598. Major incident definition.".  |
|  | "3598. Major incident definition.".<br>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40.   |
| 10<br>11   | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40.</li> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> </ul>  |
| 10<br>11<br>12   | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40.</li> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> <li>Subtitle G of title X of Division A of the National Defense</li> </ul>   |
| 10<br>11<br>12   | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40. <ul> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> </ul> </li> <li>Subtitle G of title X of Division A of the National Defense</li> <li>Authorization Act for Fiscal Year 2018 (Public Law 115–</li> </ul>  |
| 10<br>11<br>12<br>13   | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40. <ul> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> </ul> </li> <li>Subtitle G of title X of Division A of the National Defense</li> <li>Authorization Act for Fiscal Year 2018 (Public Law 115–<br/>91; 40 U.S.C. 11301 note) is amended in section 1078—</li> </ul>  |
| <ol> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> </ol>                         | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40. <ul> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> <li>Subtitle G of title X of Division A of the National Defense</li> <li>Authorization Act for Fiscal Year 2018 (Public Law 115–</li> <li>91; 40 U.S.C. 11301 note) is amended in section 1078—</li> <li>(1) by striking subsection (a) and inserting the</li> </ul> </li> </ul>   |
| <ol> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> </ol>             | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40. <ul> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> <li>Subtitle G of title X of Division A of the National Defense</li> <li>Authorization Act for Fiscal Year 2018 (Public Law 115–</li> <li>91; 40 U.S.C. 11301 note) is amended in section 1078—</li> <li>(1) by striking subsection (a) and inserting the following:</li> </ul> </li> </ul>  |
| <ol> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> </ol> | <ul> <li>"3598. Major incident definition.".</li> <li>SEC. 102. AMENDMENTS TO SUBTITLE III OF TITLE 40. <ul> <li>(a) MODERNIZING GOVERNMENT TECHNOLOGY.—</li> <li>Subtitle G of title X of Division A of the National Defense</li> <li>Authorization Act for Fiscal Year 2018 (Public Law 115–</li> <li>91; 40 U.S.C. 11301 note) is amended in section 1078— <ul> <li>(1) by striking subsection (a) and inserting the</li> <li>following:</li> <li>"(a) DEFINITIONS.—In this section:</li> </ul> </li> </ul></li></ul> |

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

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

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

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

"(A) IN GENERAL.—Not less frequently 1 2 than once every 3 years, the Director of the Of-3 fice of Management and Budget, in consultation 4 with, as available, the Chief Information Offi-5 cers Council, the Director of the Cybersecurity 6 and Infrastructure Security Agency, the National Cyber Director, the Comptroller General 7 8 of the United States, and the Council of the In-9 spectors General on Integrity and Efficiency, 10 shall review the efficacy of the guidance and 11 policy promulgated by the Director in reducing 12 cybersecurity risks, including an assessment of 13 the requirements for agencies to report infor-14 mation to the Director, and determine whether 15 any changes to that guidance or policy is appro-16 priate.

17 "(B) FEDERAL RISK ASSESSMENTS.—In
18 conducting the review described in subpara19 graph (A), the Director shall consider the Fed20 eral risk assessments performed under section
21 3553(i) of title 44.

"(C) REQUIREMENTS BURDEN REDUCTION
AND CLARITY.—In conducting the review described in subparagraph (A), the Director shall
consider the cumulative reporting and compli-

1 ance burden to agencies as well as the clarity 2 of the requirements and deadlines contained in 3 guidance and policy documents. "(2) UPDATED GUIDANCE.—Not later than 90 4 5 days after the date on which a review is completed 6 under paragraph (1), the Director of the Office of 7 Management and Budget shall issue updated guid-8 ance or policy to agencies determined appropriate by 9 the Director, based on the results of the review. "(3) CONGRESSIONAL BRIEFING.—Not later 10 11 than 60 days after the date on which a review is 12 completed under paragraph (1), the Director is ex-13 pected to provide to the Committee on Homeland

Security and Governmental Affairs of the Senate
and the Committee on Oversight and Reform of the
House of Representatives a briefing on the review
and any newly issued guidance or policy, which shall
include—

19 "(A) an overview of the guidance and pol20 icy promulgated under this section that is cur21 rently in effect;

"(B) the cybersecurity risk mitigation, or
other cybersecurity benefit, offered by each
guidance or policy document described in subparagraph (A); and

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

5 "(f) AUTOMATED STANDARD IMPLEMENTATION VERIFICATION.—When the Director of the National Insti-6 7 tute of Standards and Technology issues a proposed 8 standard pursuant to paragraphs (2) and (3) of section 9 20(a) of the National Institute of Standards and Technology Act (15 U.S.C. 278g–3(a)), the Director of the Na-10 11 tional Institute of Standards and Technology shall con-12 sider developing and, if appropriate and practical, develop, 13 in consultation with the Director of the Cybersecurity and Infrastructure Security Agency, specifications to enable 14 15 the automated verification of the implementation of controls.". 16

# 17SEC. 103. ACTIONS TO ENHANCE FEDERAL INCIDENT RE-18SPONSE.

19 (a) RESPONSIBILITIES OF THE CYBERSECURITY AND
20 INFRASTRUCTURE SECURITY AGENCY.—

(1) IN GENERAL.—Not later than 180 days
after the date of the enactment of this Act, the Director of the Cybersecurity and Infrastructure Security Agency shall—

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

| 1  | (1) FISMA.—Section 2 of the Federal Informa-          |
|----|---|
| 2  | tion Security Modernization Act of 2014 (Public       |
| 3  | Law 113–283; 44 U.S.C. 3554 note) is amended—         |
| 4  | (A) by striking subsection (b); and                   |
| 5  | (B) by redesignating subsections (c)                  |
| 6  | through (f) as subsections (b) through (e), re-       |
| 7  | spectively.   |
| 8  | (2) IN GENERAL.—The Director shall develop            |
| 9  | guidance, to be updated not less frequently than      |
| 10 | once every 2 years, on the content, timeliness, and   |
| 11 | format of the information provided by agencies        |
| 12 | under section 3594(a) of title 44, United States      |
| 13 | Code, as added by this Act.                           |
| 14 | (3) GUIDANCE ON RESPONDING TO INFORMA-                |
| 15 | TION REQUESTS.—Not later than 1 year after the        |
| 16 | date of the enactment of this Act, the Director shall |
| 17 | develop guidance for agencies to implement the re-    |
| 18 | quirement under section 3594(c) of title 44, United   |
| 19 | States Code, as added by this Act, to provide infor-  |
| 20 | mation to other agencies experiencing incidents.      |
| 21 | (4) STANDARD GUIDANCE AND TEMPLATES.—                 |
| 22 | Not later than 1 year after the date of the enact-    |
| 23 | ment of this Act, the Director, in consultation with  |
| 24 | the Director of the Cybersecurity and Infrastructure  |
| 25 | Security Agency, shall develop guidance and tem-      |
|    |   |

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

6 (5) CONTRACTOR AND AWARDEE GUIDANCE.—

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

20 (B) EXISTING PROCESSES.—To the great21 est extent practicable, the guidance issued
22 under subparagraph (A) shall allow contractors
23 and awardees to use existing processes for noti24 fying Federal agencies of incidents involving in25 formation of the Federal Government.
| 1  | (6) UPDATED BRIEFINGS.—Not less frequently             |
|----|--|
| 2  | than once every 2 years, the Director shall provide    |
| 3  | to the appropriate congressional committees an up-     |
| 4  | date on the guidance and templates developed under     |
| 5  | paragraphs (2) through (4).                            |
| 6  | (c) Update to the Privacy Act of 1974.—Sec-            |
| 7  | tion 552a(b) of title 5, United States Code (commonly  |
| 8  | known as the "Privacy Act of 1974") is amended—        |
| 9  | (1) in paragraph (11), by striking "or" at the         |
| 10 | end;   |
| 11 | (2) in paragraph $(12)$ , by striking the period at    |
| 12 | the end and inserting "; or"; and                      |
| 13 | (3) by adding at the end the following:                |
| 14 | ((13) to another agency in furtherance of a re-        |
| 15 | sponse to an incident (as defined in section $3552$ of |
| 16 | title 44) and pursuant to the information sharing re-  |
| 17 | quirements in section 3594 of title 44, if the head    |
| 18 | of the requesting agency has made a written request    |
| 19 | to the agency that maintains the record specifying     |
| 20 | the particular portion desired and the activity for    |
| 21 | which the record is sought.".                          |

3 Not later than 1 year after the date of the enactment
4 of this Act, the Director shall issue guidance for agencies
5 on—

6 (1) performing the ongoing and continuous
7 agency system risk assessment required under sec8 tion 3554(a)(1)(A) of title 44, United States Code,
9 as amended by this Act;

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

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

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

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

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

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

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

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

3 (c) INFORMATION SHARING.—The Director, in co-4 ordination with the Director of the Cybersecurity and In-5 frastructure Security Agency, shall issue guidance to agencies for sharing the inventory of the agency required 6 7 under subsection (b)(1) with the Director of the Cyberse-8 curity and Infrastructure Security Agency, using automa-9 tion and machine-readable data to the greatest extent 10 practicable.

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

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

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

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

(6) requirements to ensure that, subject to com pliance with statistical laws and other relevant data
 protection requirements, the highest level security
 operations center of each agency has visibility into
 all agency logs.

6 (c) GUIDANCE.—Not later than 90 days after receiv-7 ing the recommendations submitted under subsection (a), 8 the Director, in consultation with the Director of the Cy-9 bersecurity and Infrastructure Security Agency and the 10 Attorney General, shall, as determined to be appropriate by the Director, update guidance to agencies regarding re-11 12 quirements for logging, log retention, log management, 13 sharing of log data with other appropriate agencies, or any other logging activity determined to be appropriate by the 14 15 Director.

16 (d) SUNSET.—This section will cease to be in effect
17 on the date that is 10 years after the date of the enact18 ment of this Act.

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

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

#### 23 "§ 3559A. Federal penetration testing

24 "(a) GUIDANCE.—

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

1 "(2) develop and maintain a standardized proc-2 ess for the use of penetration testing. 3 "(c) EXCEPTION FOR NATIONAL SECURITY SYS-4 TEMS.—The guidance issued under subsection (a) shall 5 not apply to national security systems. 6 "(d) Delegation of Authority for Certain 7 SYSTEMS.—The authorities of the Director described in 8 subsection (a) shall be delegated— 9 "(1) to the Secretary of Defense in the case of 10 systems described in section 3553(e)(2); and 11 "(2) to the Director of National Intelligence in 12 the case of systems described in 3553(e)(3).". 13 (b) DEADLINE FOR GUIDANCE.—Not later than 180 days after the date of the enactment of this Act, the Direc-14 15 tor shall issue the guidance required under section 3559A(a) of title 44, United States Code, as added by sub-16 17 section (a). 18 (c) SUNSET.—This section shall sunset on the date that is 10 years after the date of the enactment of this 19 20 Act. 21 (d) CLERICAL AMENDMENT.—The table of sections 22 for chapter 35 of title 44, United States Code, is amended 23 by adding after the item relating to section 3559 the fol-24 lowing:

"3559A. Federal penetration testing.".

| 1                          | (e) PENETRATION TESTING BY THE SECRETARY OF  |
|----------------------------|--|
| 2                          | HOMELAND SECURITY.—Section 3553(b) of title 44,  |
| 3                          | United States Code, as amended by section 5121, is fur-  |
| 4                          | ther amended—  |
| 5                          | (1) in paragraph (8)(B), by striking "and" at  |
| 6                          | the end;   |
| 7                          | (2) by redesignating paragraph $(9)$ as para-  |
| 8                          | graph (10); and  |
| 9                          | (3) by inserting after paragraph $(8)$ the fol-  |
| 10                         | lowing:  |
| 11                         | "(9) performing penetration testing to identify  |
| 12                         | vulnerabilities within Federal information systems;  |
| 13                         | and".  |
| 14                         | SEC. 204. ONGOING THREAT HUNTING PROGRAM.  |
| 15                         | (a) THREAT HUNTING PROGRAM.—   |
|                            | $(a) \operatorname{IIIMEAT IIUNIING I MOGNAM.}$  |
| 16                         | (1) IN GENERAL.—Not later than 540 days  |
| 16<br>17                   |  |
|                            | (1) IN GENERAL.—Not later than 540 days  |
| 17                         | (1) IN GENERAL.—Not later than 540 days after the date of the enactment of this Act, the Di-   |
| 17<br>18                   | (1) IN GENERAL.—Not later than 540 days<br>after the date of the enactment of this Act, the Di-<br>rector of the Cybersecurity and Infrastructure Secu-  |
| 17<br>18<br>19             | (1) IN GENERAL.—Not later than 540 days<br>after the date of the enactment of this Act, the Di-<br>rector of the Cybersecurity and Infrastructure Secu-<br>rity Agency shall, in accordance with the authorities   |
| 17<br>18<br>19<br>20       | (1) IN GENERAL.—Not later than 540 days<br>after the date of the enactment of this Act, the Di-<br>rector of the Cybersecurity and Infrastructure Secu-<br>rity Agency shall, in accordance with the authorities<br>granted the Secretary under sections 3553(b)(7)–(8)  |
| 17<br>18<br>19<br>20<br>21 | (1) IN GENERAL.—Not later than 540 days<br>after the date of the enactment of this Act, the Di-<br>rector of the Cybersecurity and Infrastructure Secu-<br>rity Agency shall, in accordance with the authorities<br>granted the Secretary under sections 3553(b)(7)–(8)<br>and 3553(m) of title 44, United States Code (as re- |

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

the Director, shall submit to the appropriate congressional
 committees—

3 (1) not later than 30 days after the date on
4 which the Director of the Cybersecurity and Infra5 structure Security Agency completes the plan re6 quired under subsection (a)(2), a report on the plan
7 to provide threat hunting services to agencies;

8 (2) not less than 30 days before the date on 9 which the Director of the Cybersecurity and Infra-10 structure Security Agency begins providing threat 11 hunting services under the program under sub-12 section (a)(1), a report providing any updates to the 13 plan developed under subsection (a)(2); and

14 (3) not later than 1 year after the date on
15 which the Director of the Cybersecurity and Infra16 structure Security Agency begins providing threat
17 hunting services to agencies other than the Cyberse18 curity and Infrastructure Security Agency, a report
19 describing lessons learned from providing those serv20 ices.

21 SEC. 205. CODIFYING VULNERABILITY DISCLOSURE PRO22 GRAMS.

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

## 1 "§ 3559B. Federal vulnerability disclosure programs

2 "(a) DEFINITIONS.—In this section:

3 "(1) REPORT.—The term 'report' means a vul4 nerability disclosure made to an agency by a re5 porter.

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

10 "(b) Responsibilities of OMB.—

11 "(1) LIMITATION ON LEGAL ACTION.—The Di-12 rector of the Office of Management and Budget, in 13 consultation with the Attorney General, shall issue 14 guidance to agencies to not recommend or pursue 15 legal action against a reporter or an individual that 16 conducts a security research activity that the head 17 of the agency determines—

18 "(A) represents a good faith effort to fol19 low the vulnerability disclosure policy of the
20 agency developed under subsection (d)(2); and

21 "(B) is authorized under the vulnerability
22 disclosure policy of the agency developed under
23 subsection (d)(2).

24 "(2) SHARING INFORMATION WITH CISA.—The
25 Director of the Office of Management and Budget,
26 in coordination with the Director of the Cybersecu•HR 6497 IH

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

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

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

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

issued under subsection (b)(3), an identification of the
 agencies that are compliant and not compliant.

3 "(f) EXEMPTIONS.—The authorities and functions of
4 the Director and Director of the Cybersecurity and Infra5 structure Security Agency under this section shall not
6 apply to national security systems.

7 "(g) DELEGATION OF AUTHORITY FOR CERTAIN
8 SYSTEMS.—The authorities of the Director and the Direc9 tor of the Cybersecurity and Infrastructure Security Agen10 cy described in this section shall be delegated—

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

13 "(2) to the Director of National Intelligence in
14 the case of systems described in section
15 3553(e)(3).".

16 (b) SUNSET.—This section shall sunset on the date17 that is 10 years after the date of the enactment of this18 Act.

(c) CLERICAL AMENDMENT.—The table of sections
for chapter 35 of title 44, United States Code, is amended
by adding after the item relating to section 3559A, as
added by this Act, the following:

"3559B. Federal vulnerability disclosure programs.".

### 23 SEC. 206. IMPLEMENTING ZERO TRUST ARCHITECTURE.

24 (a) GUIDANCE.—The Director shall maintain guid25 ance on the adoption of zero trust architecture and not
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later than 2 years after the date of the enactment of this 1 2 Act, provide an update to the appropriate congressional 3 committees on progress in increasing the internal defenses 4 of agency systems through such adoption across the gov-5 ernment, including— (1) shifting away from "trusted networks" to 6 7 implement security controls based on a presumption 8 of compromise; 9 (2) implementing principles of least privilege in 10 administering information security programs; 11 (3) limiting the ability of entities that cause in-12 cidents to move laterally through or between agency 13 systems; 14 (4) identifying incidents quickly; 15 (5) isolating and removing unauthorized entities 16 from agency systems as quickly as practicable, ac-17 counting for intelligence or law enforcement pur-18 poses; 19 (6) otherwise increasing the resource costs for 20 entities that cause incidents to be successful; and 21 (7) a summary of the agency progress reports

22 required under subsection (b).

(b) AGENCY PROGRESS REPORTS.—Not later than
24 270 days after the date of the enactment of this Act, the
25 head of each agency shall submit to the Director a

progress report on implementing an information security
 program based on a zero trust architecture, which shall
 include—

4 (1) a description of any steps the agency has
5 completed, including progress toward achieving any
6 requirements issued by the Director, including the
7 adoption of any models or reference architecture;

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

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

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

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

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

6 (b) DESIGNATION.—Section 1322(c)(1) of title 41, 7 United States Code, is amended by striking "Not later 8 than" and all that follows through the end of the para-9 graph and inserting the following: "The Director of OMB shall designate the Federal Chief Information Security Of-10 11 ficer appointed by the President under section 3607 of title 44, or an equivalent senior-level official from the Of-12 13 fice of Management and Budget if the position is vacant, to serve as the Chairperson of the Council.". 14

15 (c) REQUIREMENT.—Subsection 1326(b) of title 41,
16 United States Code, is amended—

17 (1) in paragraph (5), by striking "; and" and18 inserting a semicolon;

19 (2) by redesignating paragraph (6) as para-20 graph (7); and

21 (3) by inserting after paragraph (5) the fol-22 lowing new paragraph:

"(6) maintaining an up-to-date and accurate inventory of software in use by the agency and, when
available, the components of such software, including
any available Software Bills of Materials, as applica-

1 ble, that can be communicated when requested to 2 the Federal Acquisition Security Council, the Na-3 tional Cybersecurity Director, or the Secretary of 4 Homeland Security acting through the Director of 5 Cybersecurity and Infrastructure Security Agency.". 6 SEC. 209. FEDERAL CHIEF INFORMATION SECURITY OFFI-7 CER. 8 (a) AMENDMENT.—Chapter 36 of title 44, United 9 States Code, is amended by inserting at the end: 10 "§ 3607. Federal chief information security officer 11 "(a) ESTABLISHMENT.—There is established in the 12 Office of the Federal Chief Information Officer of the Of-

13 fice of Management and Budget a Federal Chief Informa-14 tion Security Officer, who shall be appointed by the Presi-15 dent.

16 "(b) DUTIES.—The Federal Chief Information Secu17 rity Officer shall report to the Federal Chief Information
18 Officer, and assist the Chief Information Officer in car19 rying out—

20 "(1) all functions under this chapter;

21 "(2) all functions assigned to the Director
22 under title II of the E–Government Act of 2002;

23 "(3) other electronic government initiatives,
24 consistent with other statutes;

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

"(6) other areas of electronic Government as
 determined by the Administrator.

3 "(d) ASSISTANCE.—The Federal Chief Information
4 Security Officer shall assist the Administrator in the per5 formance of electronic Government functions as described
6 in section 3602(f).".

7 (b) DEPUTY NATIONAL CYBER DIRECTOR.—Section
8 1752 of the William M. (Mac) Thornberry National De9 fense Authorization Act for Fiscal Year 2021 (6 U.S.C.
10 1500; 134 Stat. 4144) is amended by adding at the end
11 the following new subsection:

"(d) DEPUTY DIRECTOR.—There shall be a Deputy 12 13 National Cyber Director for Agency Strategy, Capabilities, and Budget, who shall be the Federal Chief Information 14 15 Security Officer appointed by the President under section 3607 of title 44, United States Code, and shall report to 16 17 the Director and assist the office in carrying out the following duties as it applies to the protection of Federal in-18 formation systems by the agencies— 19

20 "(1) the preparation and oversight over the im21 plementation of national cyber policy and strategy
22 under subsection (c)(1)(C)(i);

23 "(2) the formation and issuance of rec24 ommendations to agencies on resource allocations
25 and policies under subsection (c)(1)(C)(ii);

| 1                    | ((2) reviewing annual budget proposals and  |
|----------------------|---|
|                      | "(3) reviewing annual budget proposals and  |
| 2                    | making related recommendations under subsection   |
| 3                    | (c)(1)(C)(iii);   |
| 4                    | "(4) the functions, as determined necessary, of   |
| 5                    | the National Cyber Director under subchapter ${\rm II}$ of  |
| 6                    | chapter 35 of title 44, United States Code; and   |
| 7                    | "(5) other initiatives determined by the Direc-   |
| 8                    | tor, or to be necessary to coordinate with the Office   |
| 9                    | by the Federal Chief Information Officer.".   |
| 10                   | (c) Clerical Amendment.—The table of sections   |
| 11                   | for chapter 36 of title 44, United States Code, is amended  |
| 12                   | by adding after the item relating to section 3606 the fol-  |
| 13                   | lowing:   |
|                      | "3607. Federal chief information security officer.".  |
| 14                   | SEC. 210. EXTENSION OF CHIEF DATA OFFICER COUNCIL.  |
| 15                   | Section 2520A(e)(2) of title 44, United States Code,  |
| 16                   | is amended by striking "upon the expiration of the 2-year   |
| 17                   | period that begins on the date the Comptroller General  |
| 18                   | submits the report under paragraph (1) to Congress" and   |
| 19                   |   |
| 17                   | inserting "January 31, 2030".   |
| 20                   |   |
|                      | inserting "January 31, 2030".   |
| 20                   | inserting "January 31, 2030".<br>SEC. 211. COUNCIL OF THE INSPECTORS GENERAL ON IN-   |
| 20<br>21             | inserting "January 31, 2030".<br>SEC. 211. COUNCIL OF THE INSPECTORS GENERAL ON IN-<br>TEGRITY AND EFFICIENCY DASHBOARD.  |
| 20<br>21<br>22       | <pre>inserting "January 31, 2030". SEC. 211. COUNCIL OF THE INSPECTORS GENERAL ON IN- TEGRITY AND EFFICIENCY DASHBOARD. Section 11(e)(2) of the Inspector General Act of 1978</pre>                     |
| 20<br>21<br>22<br>23 | inserting "January 31, 2030". SEC. 211. COUNCIL OF THE INSPECTORS GENERAL ON IN-<br>TEGRITY AND EFFICIENCY DASHBOARD. Section 11(e)(2) of the Inspector General Act of 1978 (5 U.S.C. App.) is amended— |

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

| 1  | (A) update the covered metrics; and                  |
|----|--|
| 2  | (B) establish new covered metrics.                   |
| 3  | (c) Implementation.—                                 |
| 4  | (1) IN GENERAL.—Not later than 540 days              |
| 5  | after the date of the enactment of this Act, the Di- |
| 6  | rector, in coordination with the Director of the Cy- |
| 7  | bersecurity and Infrastructure Security Agency,      |
| 8  | shall promulgate guidance that requires each agency  |
| 9  | to use covered metrics to track trends in the cyber- |
| 10 | security and incident response capabilities of the   |
| 11 | agency.  |

12 (2)Performance DEMONSTRATION.—The 13 guidance issued under paragraph (1) and any subse-14 quent guidance shall require agencies to share with 15 the Director of the Cybersecurity and Infrastructure Security Agency data demonstrating the perform-16 17 ance of the agency using the covered metrics in-18 cluded in the guidance.

(3) PENETRATION TESTS.—On not less than 2
occasions during the 2-year period following the date
on which guidance is promulgated under paragraph
(1), the Director shall ensure that not less than 3
agencies are subjected to substantially similar penetration tests, as determined by the Director, in coordination with the Director of the Cybersecurity

| 1  | and Infrastructure Security Agency, in order to vali-   |
|----|---|
| 2  | date the utility of the covered metrics.                |
| 3  | (4) ANALYSIS CAPACITY.—The Director of the              |
| 4  | Cybersecurity and Infrastructure Security Agency        |
| 5  | shall develop a capability that allows for the analysis |
| 6  | of the covered metrics, including cross-agency per-     |
| 7  | formance of agency cybersecurity and incident re-       |
| 8  | sponse capability trends.                               |
| 9  | (d) Congressional Reports.—                             |
| 10 | (1) UTILITY OF METRICS.—Not later than 1                |
| 11 | year after the date of the enactment of this Act, the   |
| 12 | Director of the Cybersecurity and Infrastructure Se-    |
| 13 | curity Agency, in coordination with the Director,       |
| 14 | shall submit to the appropriate congressional com-      |
| 15 | mittees a report on the utility of the covered metrics. |
| 16 | (2) Use of metrics.—Not later than 180 days             |
| 17 | after the date on which the Director promulgates        |
| 18 | guidance under subsection $(c)(1)$ , the Director shall |
| 19 | submit to the appropriate congressional committees      |
| 20 | a report on the results of the use of the covered       |
| 21 | metrics by agencies.                                    |
| 22 | (e) Federal Cybersecurity Enhancement Act               |

(e) FEDERAL CYBERSECURITY ENHANCEMENT ACT
OF 2015 UPDATES.—The Federal Cybersecurity Enhancement Act of 2015 (6 U.S.C. 1521 et seq.) is amended—

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

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

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

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

1 President under section 1105 of title 31, United 2 States Code, following the date of the enactment of 3 this Act, the Director shall submit a report to Con-4 gress on the implementation of the pilot for risk-5 based budgeting for cybersecurity spending, an as-6 sessment of agency implementation, and an evalua-7 tion of whether the risk-based budget helps to miti-8 gate cybersecurity vulnerabilities. 9 (3) GAO REPORT.—Not later than 3 years 10 after the date on which the first budget of the Presi-11 dent is submitted to Congress containing the valida-12 tion required under section 1105(a)(35)(A)(i)(V) of 13 title 31, United States Code, as amended by sub-14 section (c), the Comptroller General of the United 15 States shall submit to the appropriate congressional 16 committees a report that includes— 17 (A) an evaluation of the success of pilot 18 agencies in implementing risk-based budgets; 19 (B) an evaluation of whether the risk-20 based budgets developed by pilot agencies are 21 effective at informing Federal Government-wide 22 cybersecurity programs; and 23 (C) any other information relating to risk-24 based budgets the Comptroller General deter-

25 mines appropriate.

#### 1 SEC. 302. ACTIVE CYBER DEFENSIVE STUDY.

2 (a) DEFINITION.—In this section, the term "active
3 defense technique" has the meaning given in guidance
4 issued by the Director, in coordination with the Attorney
5 General.

6 (b) STUDY.—Not later than 180 days after the date 7 of the enactment of this Act, the Director of the Cyberse-8 curity and Infrastructure Security Agency, in coordination 9 with the Director and the National Cyber Director, shall 10 perform a study on the use of active defense techniques 11 to enhance the security of agencies, which shall include—

(1) a review of legal restrictions on the use of
different active cyber defense techniques in Federal
environments, in consultation with the Attorney
General;

16 (2) an evaluation of—

17 (A) the efficacy of a selection of active de18 fense techniques determined by the Director of
19 the Cybersecurity and Infrastructure Security
20 Agency; and

21 (B) factors that impact the efficacy of the
22 active defense techniques evaluated under sub23 paragraph (A);

(3) recommendations on safeguards and procedures that shall be established to require that active
defense techniques are adequately coordinated to en-

sure that active defense techniques do not impede
 agency operations and mission delivery, threat re sponse efforts, criminal investigations, and national
 security activities, including intelligence collection;
 and

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

# 8 SEC. 303. SECURITY OPERATIONS CENTER AS A SERVICE 9 PILOT.

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

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

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

24 (1) collecting, organizing, and analyzing agency25 information system data in real time;

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| 1  | (2) staffing and resources; and                        |
| 2  | (3) appropriate interagency agreements, con-           |
| 3  | cepts of operations, and governance plans.             |
| 4  | (d) Pilot Program.—                                    |
| 5  | (1) IN GENERAL.—Not later than 180 days                |
| 6  | after the date on which the plan required under sub-   |
| 7  | section (b) is developed, the Director of the Cyberse- |
| 8  | curity and Infrastructure Security Agency, in con-     |
| 9  | sultation with the Director of the Office of Manage-   |
| 10 | ment and Budget, shall enter into a 1-year agree-      |
| 11 | ment with not less than 2 agencies to offer a secu-    |
| 12 | rity operations center as a shared service.            |
| 13 | (2) Additional agreements.—After the date              |
| 14 | on which the briefing required under subsection        |
| 15 | (e)(1) is provided, the Director of the Cybersecurity  |
| 16 | and Infrastructure Security Agency, in consultation    |
| 17 | with the Director of the Office of Management and      |
| 18 | Budget, may enter into additional 1-year agreements    |
| 19 | described in paragraph (1) with agencies.              |
| 20 | (e) BRIEFING AND REPORT.—                              |
| 21 | (1) Briefing.—Not later than 270 days after            |
| 22 | the date of the enactment of this Act, the Director    |
| 23 | of the Cybersecurity and Infrastructure Security       |

Agency shall provide to appropriate congressional

committees a briefing on the parameters of any 1-

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year agreements entered into under subsection
 (d)(1).

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

24 plan to establish a centralized endpoint detection and re-

23 rity and Infrastructure Security Agency shall develop a

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

| 1  | section (b) is developed, the Director of the Cyberse- |
|----|--|
| 2  | curity and Infrastructure Security Agency, in con-     |
| 3  | sultation with the Director, shall enter into a 1-year |
| 4  | agreement with not less than 2 agencies to offer       |
| 5  | endpoint detection and response as a shared service.   |
| 6  | (2) Additional agreements.—After the date              |
| 7  | on which the briefing required under subsection        |
| 8  | (e)(1) is provided, the Director of the Cybersecurity  |
| 9  | and Infrastructure Security Agency, in consultation    |
| 10 | with the Director, may enter into additional 1-year    |
| 11 | agreements described in paragraph (1) with agen-       |
| 12 | cies.  |
| 13 | (e) Briefing and Report.—                              |
| 14 | (1) Briefing.—Not later than 270 days after            |
| 15 | the date of the enactment of this Act, the Director    |
| 16 | of the Cybersecurity and Infrastructure Security       |
| 17 | Agency shall provide to the Committee on Homeland      |
| 18 | Security and Governmental Affairs of the Senate        |
| 19 | and the Committee on Homeland Security and the         |
| 20 | Committee on Oversight and Reform of the House         |
| 21 | of Representatives a briefing on the parameters of     |
| 22 | any 1-year agreements entered into under subsection    |
| 23 | (d)(1).  |
| 24 | (2) REPORT.—Not later than 90 days after the           |
|    |  |

25 date on which the first 1-year agreement entered

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

10 with agencies under subsection (d).

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