115TH CONGRESS 1ST SESSION H.R. 1224

To amend the National Institute of Standards and Technology Act to implement a framework, assessment, and audits for improving United States cybersecurity.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 27, 2017

Mr. ABRAHAM (for himself, Mr. SMITH of Texas, Mr. LUCAS, Mrs. COM-STOCK, and Mr. KNIGHT) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

- To amend the National Institute of Standards and Technology Act to implement a framework, assessment, and audits for improving United States cybersecurity.
 - 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 "NIST Cybersecurity
- 5 Framework, Assessment, and Auditing Act".

3 Section 20(a)(1) of the National Institute of Standards and Technology Act (15 U.S.C. 278g-3(a)(1)) is 4 5 amended by inserting ", emphasizing the principle that expanding cybersecurity threats require engineering security 6 7 from the beginning of an information system's life cycle, 8 building more trustworthy and secure components and 9 systems from the start, and applying well-defined security design principles throughout" before the semicolon. 10

11SEC. 3. IMPLEMENTATION OF CYBERSECURITY FRAME-12WORK.

The National Institute of Standards and Technology
Act (15 U.S.C. 271 et seq.) is amended by inserting after
section 20 the following:

16 "SEC. 20A. FRAMEWORK FOR IMPROVING CRITICAL INFRA17 STRUCTURE CYBERSECURITY.

18 "(a) IMPLEMENTATION BY FEDERAL AGENCIES.— 19 The Institute shall promote the implementation by Fed-20 eral agencies of the Framework for Improving Critical Infrastructure Cybersecurity (in this section referred to as 21 22 the 'Framework') by providing to the Office of Manage-23 ment and Budget, the Office of Science and Technology 24 Policy, and all other Federal agencies, not later than 6 25 months after the date of enactment of the NIST Cybersecurity Framework, Assessment, and Auditing Act, guid-26

ance that Federal agencies may use to incorporate the
 Framework into their information security risk manage ment efforts, including practices related to compliance
 with chapter 35 of title 44, United States Code, and any
 other applicable Federal law.

6 "(b) GUIDANCE.—The guidance required under sub-7 section (a) shall—

8 "(1) describe how the Framework aligns with or
9 augments existing agency practices related to com10 pliance with chapter 35 of title 44, United States
11 Code, and any other applicable Federal law;

12 "(2) identify any areas of conflict or overlap be-13 tween the Framework and existing cybersecurity re-14 quirements, including gap areas where additional 15 policies, standards, guidelines, or programs may be 16 needed to encourage Federal agencies to use the 17 Framework and improve the ability of Federal agen-18 cies to manage cybersecurity risk;

"(3) include a template for Federal agencies on
how to use the Framework, and recommend procedures for streamlining and harmonizing existing and
future cybersecurity-related requirements, in support
of the goal of using the Framework to supplement
Federal agency practices in compliance with chapter
35 of title 44, United States Code;

"(4) recommend other procedures for compli ance with cybersecurity reporting, oversight, and
 policy review and creation requirements under such
 chapter 35 and any other applicable Federal law;
 and

6 "(5) be updated, as the Institute considers nec-7 essary, to reflect what the Institute learns from on-8 going research, evaluations, and audits or analytical 9 examinations conducted pursuant to section 3555 of 10 title 44, United States Code, the information com-11 piled by the Federal working group established pur-12 suant to subsection (c), and the annual reports pub-13 lished pursuant to subsection (d).

14 "(c) FEDERAL WORKING GROUP.—Not later than 3 15 months after the date of enactment of the NIST Cybersecurity Framework, Assessment, and Auditing Act, the In-16 17 stitute shall establish and chair a working group (in this 18 section referred to as the 'Federal working group'), includ-19 ing representatives of the Office of Management and 20 Budget, the Office of Science and Technology Policy, and 21 other appropriate Federal agencies, which shall—

"(1) not later than 6 months after the date of
enactment of the NIST Cybersecurity Framework,
Assessment, and Auditing Act, develop outcomebased and quantifiable metrics to help Federal agen-

1	cies in their analysis and assessment of the effective-
2	ness of the Framework in protecting their informa-
3	tion and information systems;
4	((2) update such metrics as the Federal work-
5	ing group considers necessary;
6	"(3) compile information from Federal agencies
7	on their use of the Framework and the results of the
8	analysis and assessment described in paragraph (1) ;
9	and
10	"(4) assist the Office of Management and
11	Budget and the Office of Science and Technology
12	Policy in publishing the annual report required
13	under subsection (d).
14	"(d) REPORT.—The Office of Management and
15	Budget and the Office of Science and Technology Policy
16	shall develop and make publicly available an annual report
17	on agency adoption rates and the effectiveness of the
18	Framework. In preparing such report, the Offices shall
19	use the information compiled by the Federal working
20	group pursuant to subsection $(c)(3)$.
21	"SEC. 20B. CYBERSECURITY ASSESSMENT.
22	"(a) IN GENERAL.—Not later than 6 months after
23	the date of enactment of the NIST Cybersecurity Frame-

25 complete an initial assessment of the cybersecurity pre-

 $24\,$ work, Assessment, and Auditing Act, the Institute shall

paredness of the agencies described in subsection (b).
 Such assessment shall be based on information security
 standards developed under section 20, and may also be
 informed by work done or reports published by other Fed eral agencies or officials.

6 "(b) AGENCIES.—The agencies referred to in sub-7 section (a) are the agencies referred to in section 901(b) of title 31, United States Code, and any other agency that 8 9 has reported a major incident (as defined in the Office 10 of Management and Budget Memorandum—16—03, published on October 30, 2015, or any successor document). 11 "(c) NATIONAL SECURITY SYSTEMS.—The require-12 13 ment under subsection (a) shall not apply to national security systems (as defined in section 3552(b) of title 44, 14 15 United States Code).".

16 SEC. 4. CYBERSECURITY AUDITS.

17 Subchapter II of chapter 35 of title 44, United States18 Code, is amended—

(1) in section 3553(c), by inserting "and the
Director of the National Institute of Standards and
Technology" after "the Secretary";

- 22 (2) in section 3554(c)(1)(A)—
- 23 (A) by inserting ", the Director of the Na24 tional Institute of Standards and Technology"
 25 after "the Secretary"; and

1	(B) by inserting ", Space, and Tech-
2	nology" after "Science"; and
3	(3) in section 3555—
4	(A) in subsection $(a)(2)$ —
5	(i) by redesignating subparagraph (C)
6	as subparagraph (D); and
7	(ii) by inserting after subparagraph
8	(B) the following:
9	"(C) an audit or other analytical examina-
10	tion to determine the extent to which the agen-
11	cy is meeting the information security stand-
12	ards developed under section 20 of the National
13	Institute of Standards and Technology Act (15
14	U.S.C. 278g–3) and is effectively using the Na-
15	tional Institute of Standards and Technology
16	Framework for Improving Critical Infrastruc-
17	ture Cybersecurity (or any successor document),
18	which shall include obtaining evidence of an
19	agency's information security protections to de-
20	termine if such protections are commensurate
21	with the risk and magnitude of the harm result-
22	ing from unauthorized access, use, disclosure,
23	disruption, modification, or destruction of infor-
24	mation collected or maintained by or on behalf
25	of an agency and information systems used or

1	operated by an agency or by a contractor of an
2	agency or other organization on behalf of an
3	agency; and";
4	(B) in subsection (b), by inserting "sub-
5	section (i)(1) and" after "Subject to";
6	(C) in subsection (e)—
7	(i) in paragraph (1), by inserting
8	"and to the Director of the National Insti-
9	tute of Standards and Technology' after
10	"to the Director"; and
11	(ii) in paragraph (2), by inserting
12	"and to the Director of the National Insti-
13	tute of Standards and Technology' after
14	"to the Director";
15	(D) by amending subsection (i) to read as
16	follows:
17	"(i) EVALUATION AND AUDITING TECHNICAL AS-
18	SISTANCE.—
19	"(1) NIST.—Subject to subsection (c), and not-
20	withstanding subsection (d), the National Institute
21	of Standards and Technology shall provide technical
22	assistance and other expert input for each evaluation
23	under this section and shall directly support the
24	audit or other analytical examination described in

1	subsection $(a)(2)(C)$ with determinations and rec-
2	ommendations for inclusion in each such evaluation.
3	"(2) GAO.—The Comptroller General may pro-
4	vide technical assistance to an Inspector General or
5	the head of an agency, as applicable, to assist the
6	Inspector General or head of an agency in carrying
7	out the duties under this section, including by test-
8	ing information security controls and procedures.";
9	and
10	(E) in subsection (j)—
11	(i) by striking "The Director" and in-
12	serting "(1) The Director";
13	(ii) by inserting "the Director of the
14	National Institute of Standards and Tech-
15	nology," after "the Secretary,"; and
16	(iii) by adding at the end the fol-
17	lowing:
18	"(2) The Council of the Inspectors General on Integ-
19	rity and Efficiency, in collaboration with the Director of
20	the National Institute of Standards and Technology, may
21	provide training on how to implement the guidance de-
22	scribed in paragraph (1) to Inspectors General, inde-
23	pendent external auditors described in subsection (b), and
24	other interested parties as appropriate.".