- (A) be made available to individuals on a merit-reviewed competitive basis and in accordance with the requirements established in paragraph (7);
- (B) be in an amount that is sufficient to cover annual tuition and fees for doctoral study at an institution of higher education for the duration of the graduate traineeship, and shall include, in addition, an annual living stipend of \$25,000; and
- (C) be provided to individuals for a duration of no more than 5 years, the specific duration of each graduate traineeship to be determined by the institution of higher education, on a case-by-case basis.

#### (5) Repayment

Each graduate traineeship shall—

(A) subject to paragraph (5)(B), be subject to full repayment upon completion of the doctoral degree according to a repayment schedule established and administered by the institution of higher education;

(B) be forgiven at the rate of 20 percent of the total amount of the graduate traineeship assistance received under this section for each academic year that a recipient is employed as a full-time faculty member at an institution of higher education for a period not to exceed 5 years; and

(C) be monitored by the institution of higher education receiving a grant under this subsection to ensure compliance with this subsection.

#### (6) Exceptions

The Director may provide for the partial or total waiver or suspension of any service obligation or payment by an individual under this section whenever compliance by the individual is impossible or would involve extreme hardship to the individual, or if enforcement of such obligation with respect to the individual would be unconscionable.

#### (7) Eligibility

To be eligible to receive a graduate traineeship under this section, an individual shall—

(A) be a citizen, national, or lawfully admitted permanent resident alien of the United States; and

(B) demonstrate a commitment to a career in higher education.

## (8) Consideration

In making selections for graduate traineeships under this paragraph, an institution receiving a grant under this subsection shall consider, to the extent possible, a diverse pool of applicants whose interests are of an interdisciplinary nature, encompassing the social scientific as well as the technical dimensions of cyber security.

### (9) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation to carry out this paragraph \$5,000,000 for each of fiscal years 2003 through 2007.

(Pub. L. 107–305, §5, Nov. 27, 2002, 116 Stat. 2370.)

REFERENCES IN TEXT

The Scientific and Advanced Technology Act of 1992, referred to in subsec. (b)(1), is Pub. L. 102-476, Oct. 23,

1992, 106 Stat. 2297, as amended, which is classified generally to section 1862h et seq. of Title 42. The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 1861 of Title 42 and Tables.

#### § 7405. Consultation

In carrying out sections 7403 and 7404 of this title, the Director shall consult with other Federal agencies.

(Pub. L. 107-305, §6, Nov. 27, 2002, 116 Stat. 2374.)

# § 7406. National Institute of Standards and Technology programs

#### (a), (b) Omitted

# (c) Security automation and checklists for Government systems

#### (1) In general

The Director of the National Institute of Standards and Technology shall, as necessary, develop and revise security automation standards, associated reference materials (including protocols), and checklists providing settings and option selections that minimize the security risks associated with each information technology hardware or software system and security tool that is, or is likely to become, widely used within the Federal Government, thereby enabling standardized and interoperable technologies, architectures, and frameworks for continuous monitoring of information security within the Federal Government.

#### (2) Priorities for development

The Director of the National Institute of Standards and Technology shall establish priorities for the development of standards, reference materials, and checklists under this subsection on the basis of—

(A) the security risks associated with the use of the system;

(B) the number of agencies that use a particular system or security tool;

(C) the usefulness of the standards, reference materials, or checklists to Federal agencies that are users or potential users of the system;

(D) the effectiveness of the associated standard, reference material, or checklist in creating or enabling continuous monitoring of information security; or

(E) such other factors as the Director of the National Institute of Standards and Technology determines to be appropriate.

## (3) Excluded systems

The Director of the National Institute of Standards and Technology may exclude from the application of paragraph (1) any information technology hardware or software system or security tool for which such Director determines that the development of a standard, reference material, or checklist is inappropriate because of the infrequency of use of the system, the obsolescence of the system, or the lack of utility or impracticability of developing a standard, reference material, or checklist for the system.

# (4) Dissemination of standards and related materials

The Director of the National Institute of Standards and Technology shall ensure that Federal agencies are informed of the availability of any standard, reference material, checklist, or other item developed under this subsection.

#### (5) Agency use requirements

The development of standards, reference materials, and checklists under paragraph (1) for an information technology hardware or software system or tool does not—

- (A) require any Federal agency to select the specific settings or options recommended by the standard, reference material, or checklist for the system:
- (B) establish conditions or prerequisites for Federal agency procurement or deployment of any such system;
- (C) imply an endorsement of any such system by the Director of the National Institute of Standards and Technology; or
- (D) preclude any Federal agency from procuring or deploying other information technology hardware or software systems for which no such standard, reference material, or checklist has been developed or identified under paragraph (1).

# (d) Federal agency information security programs

#### (1) In general

In developing the agencywide information security program required by section 3554(b) of title 44, an agency that deploys a computer hardware or software system for which the Director of the National Institute of Standards and Technology has developed a checklist under subsection (c) of this section—

- (A) shall include in that program an explanation of how the agency has considered such checklist in deploying that system; and
- (B) may treat the explanation as if it were a portion of the agency's annual performance plan properly classified under criteria established by an Executive Order (within the meaning of section 1115(d) of title 31).

#### (2) Limitation

Paragraph (1) does not apply to any computer hardware or software system for which the National Institute of Standards and Technology does not have responsibility under section 278g-3(a)(3) of this title.

(Pub. L. 107–305, §8, Nov. 27, 2002, 116 Stat. 2375; Pub. L. 113–274, title II, §203, Dec. 18, 2014, 128 Stat. 2979; Pub. L. 113–283, §2(e)(2), Dec. 18, 2014, 128 Stat. 3086.)

## CODIFICATION

Section is comprised of section 8 of Pub. L. 107–305. Subsec. (a) of section 8 of Pub. L. 107–305 enacted section 278h of this title and renumbered former section 278h of this title as section 278q of this title. Subsec. (b) of section 8 of Pub. L. 107–305 amended section 278g–3 of this title.

## AMENDMENTS

2014—Subsec. (c). Pub. L. 113–274 amended subsec. (c) generally. Prior to amendment, text related to check-lists setting forth settings and option selections that minimize the security risks associated with computer hardware or software systems likely to become widely used within the Federal Government.

Subsec. (d)(1). Pub. L. 113-283, which directed amendment of section 8 of the Cybersecurity Research and

Development Act by substituting "section 3534" for "section 3534" in subsec. (d)(1), was executed to this section, which is section 8 of the Cyber Security Research and Development Act, to reflect the probable intent of Congress.

#### § 7407. Authorization of appropriations

There are authorized to be appropriated to the Secretary of Commerce for the National Institute of Standards and Technology—

- (1) for activities under section 278h of this title—  $\,$ 
  - (A) \$25,000,000 for fiscal year 2003;
  - (B) \$40,000,000 for fiscal year 2004;
  - (C) \$55,000,000 for fiscal year 2005;
  - (D) \$70,000,000 for fiscal year 2006;
  - (E) \$85,000,000 for fiscal year 2007; and
- (2) for activities under section 278g–3(f)  $^{\rm 1}$  of this title—
  - (A) \$6,000,000 for fiscal year 2003;
  - (B) \$6,200,000 for fiscal year 2004;
  - (C) \$6,400,000 for fiscal year 2005;
  - (D) \$6,600,000 for fiscal year 2006; and
  - (E) \$6,800,000 for fiscal year 2007.

(Pub. L. 107-305, §11, Nov. 27, 2002, 116 Stat. 2379.)

#### REFERENCES IN TEXT

Section 278g–3 of this title, referred to in par. (2), was amended by Pub. L. 107–347, title III,  $\S 303$ , Dec. 17, 2002, 116 Stat. 2957, and, as so amended, did not contain a subsec. (f). A later amendment by Pub. L. 113–274, title II,  $\S 204(1)$ , Dec. 18, 2014, 128 Stat. 2980, redesignated subsec. (e) of section 278g–3 of this title, relating to definitions, as (f).

# § 7408. National Academy of Sciences study on computer and network security in critical infrastructures

#### (a) Study

Not later than 3 months after November 27, 2002, the Director of the National Institute of Standards and Technology shall enter into an arrangement with the National Research Council of the National Academy of Sciences to conduct a study of the vulnerabilities of the Nation's network infrastructure and make recommendations for appropriate improvements. The National Research Council shall—

- (1) review existing studies and associated data on the architectural, hardware, and software vulnerabilities and interdependencies in United States critical infrastructure networks;
- (2) identify and assess gaps in technical capability for robust critical infrastructure network security and make recommendations for research priorities and resource requirements; and
- (3) review any and all other essential elements of computer and network security, including security of industrial process controls, to be determined in the conduct of the study.

#### (b) Report

The Director of the National Institute of Standards and Technology shall transmit a report containing the results of the study and recommendations required by subsection (a) to the Senate Committee on Commerce, Science, and

<sup>&</sup>lt;sup>1</sup> See References in Text note below.