

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in subsec. (a), was in the original “this Act”, meaning Pub. L. 107–231, Oct. 1, 2002, 116 Stat. 1471, known as the National Construction Safety Team Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7301 of this title and Tables.

AMENDMENTS

2022—Subsec. (c). Pub. L. 117–286 substituted “Section 1013 of title 5” for “Section 14 of the Federal Advisory Committee Act”.

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

§ 7311. Additional applicability

The authorities and restrictions applicable under this chapter to the Director and to Teams shall apply to the activities of the National Institute of Standards and Technology in response to the attacks of September 11, 2001.

(Pub. L. 107–231, § 12, Oct. 1, 2002, 116 Stat. 1476.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107–231, Oct. 1, 2002, 116 Stat. 1471, known as the National Construction Safety Team Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7301 of this title and Tables.

§ 7312. Construction

Nothing in this chapter shall be construed to confer any authority on the National Institute of Standards and Technology to require the adoption of building standards, codes, or practices.

(Pub. L. 107–231, § 14, Oct. 1, 2002, 116 Stat. 1477.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107–231, Oct. 1, 2002, 116 Stat. 1471, known as the National Construction Safety Team Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7301 of this title and Tables.

§ 7313. Authorization of appropriations

The National Institute of Standards and Technology is authorized to use funds otherwise authorized by law to carry out this chapter.

(Pub. L. 107–231, § 15, Oct. 1, 2002, 116 Stat. 1477.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107–231, Oct. 1, 2002, 116 Stat. 1471, known as the National Construction Safety Team Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7301 of this title and Tables.

CHAPTER 100—CYBER SECURITY RESEARCH AND DEVELOPMENT

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§ 7401. Findings

The Congress finds the following:

(1) Revolutionary advancements in computing and communications technology have interconnected government, commercial, scientific, and educational infrastructures—including critical infrastructures for electric power, natural gas and petroleum production and distribution, telecommunications, transportation, water supply, banking and finance, and emergency and government services—in a vast, interdependent physical and electronic network.

(2) Exponential increases in interconnectivity have facilitated enhanced communications, economic growth, and the delivery of services critical to the public welfare, but have also increased the consequences of temporary or prolonged failure.

(3) A Department of Defense Joint Task Force concluded after a 1997 United States information warfare exercise that the results “clearly demonstrated our lack of preparation for a coordinated cyber and physical attack on our critical military and civilian infrastructure”.

(4) Computer security technology and systems implementation lack—

(A) sufficient long term research funding;

(B) adequate coordination across Federal and State government agencies and among government, academia, and industry; and

(C) sufficient numbers of outstanding researchers in the field.

(5) Accordingly, Federal investment in computer and network security research and development must be significantly increased to—

(A) improve vulnerability assessment and technological and systems solutions;

(B) expand and improve the pool of information security professionals, including re-

searchers, in the United States workforce; and

(C) better coordinate information sharing and collaboration among industry, government, and academic research projects.

(6) While African-Americans, Hispanics, and Native Americans constitute 25 percent of the total United States workforce and 30 percent of the college-age population, members of these minorities comprise less than 7 percent of the United States computer and information science workforce.

(Pub. L. 107-305, §2, Nov. 27, 2002, 116 Stat. 2367.)

Statutory Notes and Related Subsidiaries

SHORT TITLE

Pub. L. 107-305, §1, Nov. 27, 2002, 116 Stat. 2367, provided that: “This Act [enacting this chapter and section 278h of this title, amending sections 278g-3, 1511e, and 7301 of this title and section 1862 of Title 42, The Public Health and Welfare, and redesignating section 278h of this title as 278q of this title] may be cited as the ‘Cyber Security Research and Development Act’.”

§ 7402. Definitions

In this chapter:

(1) Director

The term “Director” means the Director of the National Science Foundation.

(2) Institution of higher education

The term “institution of higher education” has the meaning given that term in section 1001(a) of title 20.

(Pub. L. 107-305, §3, Nov. 27, 2002, 116 Stat. 2368.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107-305, Nov. 27, 2002, 116 Stat. 2367, known as the Cyber Security Research and Development Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

§ 7403. National Science Foundation research

(a) Computer and network security research grants

(1) In general

The Director shall award grants for basic research on innovative approaches to the structure of computer and network hardware and software that are aimed at enhancing computer security. Research areas may include—

(A) authentication, cryptography, and other secure data communications technology;

(B) computer forensics and intrusion detection;

(C) reliability of computer and network applications, middleware, operating systems, control systems, and communications infrastructure;

(D) privacy and confidentiality;

(E) network security architecture, including tools for security administration and analysis;

(F) emerging threats;

(G) vulnerability assessments and techniques for quantifying risk;

(H) remote access and wireless security;

(I) enhancement of law enforcement ability to detect, investigate, and prosecute cyber-crimes, including those that involve piracy of intellectual property;

(J) secure fundamental protocols that are integral to inter-network communications and data exchange;

(K) secure software engineering and software assurance, including—

(i) programming languages and systems that include fundamental security features;

(ii) portable or reusable code that remains secure when deployed in various environments;

(iii) verification and validation technologies to ensure that requirements and specifications have been implemented; and

(iv) models for comparison and metrics to assure that required standards have been met;

(L) holistic system security that—

(i) addresses the building of secure systems from trusted and untrusted components;

(ii) proactively reduces vulnerabilities;

(iii) addresses insider threats; and

(iv) supports privacy in conjunction with improved security;

(M) monitoring and detection;

(N) mitigation and rapid recovery methods;

(O) security of wireless networks and mobile devices;

(P) security of cloud infrastructure and services;

(Q) security of election-dedicated voting system software and hardware; and

(R) role of the human factor in cybersecurity and the interplay of computers and humans and the physical world.

(2) Merit review; competition

Grants shall be awarded under this section on a merit-reviewed competitive basis.

(3) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation to carry out this subsection—

(A) \$35,000,000 for fiscal year 2003;

(B) \$40,000,000 for fiscal year 2004;

(C) \$46,000,000 for fiscal year 2005;

(D) \$52,000,000 for fiscal year 2006; and

(E) \$60,000,000 for fiscal year 2007.

(b) Computer and network security research centers

(1) In general

The Director shall award multiyear grants, subject to the availability of appropriations, to institutions of higher education, nonprofit research institutions, or consortia thereof to establish multidisciplinary Centers for Computer and Network Security Research. Institutions of higher education, nonprofit research institutions, or consortia thereof receiving

such grants may partner with 1 or more government laboratories or for-profit institutions, or other institutions of higher education or nonprofit research institutions.

(2) Merit review; competition

Grants shall be awarded under this subsection on a merit-reviewed competitive basis.

(3) Purpose

The purpose of the Centers shall be to generate innovative approaches to computer and network security by conducting cutting-edge, multidisciplinary research in computer and network security, including improving the security and resiliency of information technology, reducing cyber vulnerabilities, and anticipating and mitigating consequences of cyber attacks on critical infrastructure, by conducting research in the areas described in subsection (a)(1).

(4) Applications

An institution of higher education, nonprofit research institution, or consortia thereof seeking funding under this subsection shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum, a description of—

(A) the research projects that will be undertaken by the Center and the contributions of each of the participating entities;

(B) how the Center will promote active collaboration among scientists and engineers from different disciplines, such as computer scientists, engineers, mathematicians, and social science researchers;

(C) how the Center will contribute to increasing the number and quality of computer and network security researchers and other professionals, including individuals from groups historically underrepresented in these fields; and

(D) how the Center will disseminate research results quickly and widely to improve cyber security in information technology networks, products, and services.

(5) Criteria

In evaluating the applications submitted under paragraph (4), the Director shall consider, at a minimum—

(A) the ability of the applicant to generate innovative approaches to computer and network security and effectively carry out the research program;

(B) the experience of the applicant in conducting research on computer and network security and the capacity of the applicant to foster new multidisciplinary collaborations;

(C) the capacity of the applicant to attract and provide adequate support for a diverse group of undergraduate and graduate students and postdoctoral fellows to pursue computer and network security research;

(D) the extent to which the applicant will partner with government laboratories, for-profit entities, other institutions of higher education, or nonprofit research institutions, and the role the partners will play in the research undertaken by the Center;

(E) the demonstrated capability of the applicant to conduct high performance computation integral to complex computer and network security research, through on-site or off-site computing;

(F) the applicant's affiliation with private sector entities involved with industrial research described in subsection (a)(1);

(G) the capability of the applicant to conduct research in a secure environment;

(H) the applicant's affiliation with existing research programs of the Federal Government;

(I) the applicant's experience managing public-private partnerships to transition new technologies into a commercial setting or the government user community;

(J) the capability of the applicant to conduct interdisciplinary cybersecurity research, basic and applied, such as in law, economics, or behavioral sciences; and

(K) the capability of the applicant to conduct research in areas such as systems security, wireless security, networking and protocols, formal methods and networking and information technology, nanotechnology, or industrial control systems.

(6) Annual meeting

The Director shall convene an annual meeting of the Centers in order to foster collaboration and communication between Center participants.

(7) Authorization of appropriations

There are authorized to be appropriated for the National Science Foundation to carry out this subsection—

(A) \$12,000,000 for fiscal year 2003;

(B) \$24,000,000 for fiscal year 2004;

(C) \$36,000,000 for fiscal year 2005;

(D) \$36,000,000 for fiscal year 2006; and

(E) \$36,000,000 for fiscal year 2007.

(Pub. L. 107-305, § 4, Nov. 27, 2002, 116 Stat. 2368; Pub. L. 113-274, title II, §§ 201(e), 202, Dec. 18, 2014, 128 Stat. 2978; Pub. L. 114-329, title I, §§ 104(a), 105(r), Jan. 6, 2017, 130 Stat. 2975, 2984.)

Editorial Notes

AMENDMENTS

2017—Subsec. (a)(1)(Q), (R). Pub. L. 114-329, § 104(a), added subpars. (Q) and (R).

Subsec. (b)(5)(K). Pub. L. 114-329, § 105(r), substituted “networking and information technology” for “high-performance computing”.

2014—Subsec. (a)(1)(J) to (P). Pub. L. 113-274, § 201(e), added subpars. (J) to (P).

Subsec. (b)(3). Pub. L. 113-274, § 202(1), substituted “improving the security and resiliency of information technology, reducing cyber vulnerabilities, and anticipating and mitigating consequences of cyber attacks on critical infrastructure, by conducting research in the areas” for “the research areas”.

Subsec. (b)(4)(D). Pub. L. 113-274, § 202(2), substituted “the Center” for “the center”.

Subsec. (b)(5)(E) to (K). Pub. L. 113-274, § 202(3), added subpars. (E) to (K).

§ 7404. National Science Foundation computer and network security programs

(a) Computer and network security capacity building grants

(1) In general

The Director shall establish a program to award grants to institutions of higher education (or consortia thereof) to establish or improve undergraduate and master's degree programs in computer and network security, to increase the number of students, including the number of students from groups historically underrepresented in these fields and students who are veterans, who pursue undergraduate or master's degrees in fields related to computer and network security, and to provide students with experience in government or industry related to their computer and network security studies.

(2) Merit review

Grants shall be awarded under this subsection on a merit-reviewed competitive basis.

(3) Use of funds

Grants awarded under this subsection shall be used for activities that enhance the ability of an institution of higher education (or consortium thereof) to provide high-quality undergraduate and master's degree programs in computer and network security and to recruit and retain increased numbers of students to such programs. Activities may include—

(A) revising curriculum to better prepare undergraduate and master's degree students for careers in computer and network security;

(B) establishing degree and certificate programs in computer and network security;

(C) creating opportunities for undergraduate students to participate in computer and network security research projects;

(D) acquiring equipment necessary for student instruction in computer and network security, including the installation of testbed networks for student use;

(E) providing opportunities for faculty to work with local or Federal Government agencies, private industry, nonprofit research institutions, or other academic institutions to develop new expertise or to formulate new research directions in computer and network security;

(F) establishing collaborations with other academic institutions or academic departments that seek to establish, expand, or enhance programs in computer and network security;

(G) establishing student internships in computer and network security at government agencies or in private industry;

(H) establishing collaborations with other academic institutions to establish or enhance a web-based collection of computer and network security courseware and laboratory exercises for sharing with other institutions of higher education, including community colleges;

(I) establishing or enhancing bridge programs in computer and network security between community colleges and universities;

(J) creating opportunities for veterans to transition to careers in computer and network security; and

(K) any other activities the Director determines will accomplish the goals of this subsection.

(4) Selection process

(A) Application

An institution of higher education (or a consortium thereof) seeking funding under this subsection shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—

(i) a description of the applicant's computer and network security research and instructional capacity, and in the case of an application from a consortium of institutions of higher education, a description of the role that each member will play in implementing the proposal;

(ii) a comprehensive plan by which the institution or consortium will build instructional capacity in computer and information security;

(iii) a description of relevant collaborations with government agencies or private industry that inform the instructional program in computer and network security;

(iv) a survey of the applicant's historic student enrollment and placement data in fields related to computer and network security and a study of potential enrollment and placement for students enrolled in the proposed computer and network security program; and

(v) a plan to evaluate the success of the proposed computer and network security program, including post-graduation assessment of graduate school and job placement and retention rates as well as the relevance of the instructional program to graduate study and to the workplace.

(B) Awards

(i) The Director shall ensure, to the extent practicable, that grants are awarded under this subsection in a wide range of geographic areas and categories of institutions of higher education, including minority serving institutions.

(ii) The Director shall award grants under this subsection for a period not to exceed 5 years.

(5) Assessment required

The Director shall evaluate the program established under this subsection no later than 6 years after the establishment of the program. At a minimum, the Director shall evaluate the extent to which the program achieved its objectives of increasing the quality and quantity of students, including students from groups historically underrepresented in computer and network security related disciplines, pursuing undergraduate or master's degrees in computer and network security.

(6) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation to carry out this subsection—

- (A) \$15,000,000 for fiscal year 2003;
- (B) \$20,000,000 for fiscal year 2004;
- (C) \$20,000,000 for fiscal year 2005;
- (D) \$20,000,000 for fiscal year 2006; and
- (E) \$20,000,000 for fiscal year 2007.

(b) Scientific and Advanced Technology Act of 1992

(1) Grants

The Director shall provide grants under the Scientific and Advanced Technology Act of 1992 (42 U.S.C. 1862i) [42 U.S.C. 1862h et seq.] for the purposes of section 3(a) and (b) of that Act [42 U.S.C. 1862i(a), (b)], except that the activities supported pursuant to this subsection shall be limited to improving education in fields related to computer and network security.

(2) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation to carry out this subsection—

- (A) \$1,000,000 for fiscal year 2003;
- (B) \$1,250,000 for fiscal year 2004;
- (C) \$1,250,000 for fiscal year 2005;
- (D) \$1,250,000 for fiscal year 2006; and
- (E) \$1,250,000 for fiscal year 2007.

(c) Graduate traineeships in computer and network security research

(1) In general

The Director shall establish a program to award grants to institutions of higher education to establish traineeship programs for graduate students who pursue computer and network security research leading to a doctorate degree by providing funding and other assistance, and by providing graduate students with research experience in government or industry related to the students' computer and network security studies.

(2) Merit review

Grants shall be provided under this subsection on a merit-reviewed competitive basis.

(3) Use of funds

An institution of higher education shall use grant funds for the purposes of—

- (A) providing traineeships to students who are citizens, nationals, or lawfully admitted permanent resident aliens of the United States and are pursuing research in computer or network security leading to a doctorate degree;
- (B) paying tuition and fees for students receiving traineeships under subparagraph (A);
- (C) establishing scientific internship programs for students receiving traineeships under subparagraph (A) in computer and network security at for-profit institutions, nonprofit research institutions, or government laboratories; and
- (D) other costs associated with the administration of the program.

(4) Traineeship amount

Traineeships provided under paragraph (3)(A) shall be in the amount of \$25,000 per year, or the level of the National Science Foundation Graduate Research Fellowships, whichever is greater, for up to 3 years.

(5) Selection process

An institution of higher education seeking funding under this subsection shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum, a description of—

- (A) the instructional program and research opportunities in computer and network security available to graduate students at the applicant's institution; and
- (B) the internship program to be established, including the opportunities that will be made available to students for internships at for-profit institutions, nonprofit research institutions, and government laboratories.

(6) Review of applications

In evaluating the applications submitted under paragraph (5), the Director shall consider—

- (A) the ability of the applicant to effectively carry out the proposed program;
- (B) the quality of the applicant's existing research and education programs;
- (C) the likelihood that the program will recruit increased numbers of students, including students from groups historically underrepresented in computer and network security related disciplines or veterans, to pursue and earn doctorate degrees in computer and network security;
- (D) the nature and quality of the internship program established through collaborations with government laboratories, nonprofit research institutions, and for-profit institutions;
- (E) the integration of internship opportunities into graduate students' research; and
- (F) the relevance of the proposed program to current and future computer and network security needs.

(7) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation to carry out this subsection—

- (A) \$10,000,000 for fiscal year 2003;
- (B) \$20,000,000 for fiscal year 2004;
- (C) \$20,000,000 for fiscal year 2005;
- (D) \$20,000,000 for fiscal year 2006; and
- (E) \$20,000,000 for fiscal year 2007.

(d) Graduate Research Fellowships program support

Computer and network security shall be included among the fields of specialization supported by the National Science Foundation's Graduate Research Fellowships program under section 1869 of title 42.

(e) Cyber security faculty development traineeship program

(1) In general

The Director shall establish a program to award grants to institutions of higher education to establish traineeship programs to enable graduate students to pursue academic careers in cyber security upon completion of doctoral degrees.

(2) Merit review; competition

Grants shall be awarded under this section on a merit-reviewed competitive basis.

(3) Application

Each institution of higher education desiring to receive a grant under this subsection shall submit an application to the Director at such time, in such manner, and containing such information as the Director shall require.

(4) Use of funds

Funds received by an institution of higher education under this paragraph shall—

(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 so-

cial 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; Pub. L. 116-115, § 3(f), (g), Feb. 11, 2020, 134 Stat. 107.)

Editorial Notes**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, which enacted sections 1862h to 1862j of Title 42, The Public Health and Welfare, and amended section 1862 of Title 42. For complete classification of this Act to the Code, see Short Title of 1992 Amendment note set out under section 1861 of Title 42 and Tables.

AMENDMENTS

2020—Subsec. (a)(1). Pub. L. 116-115, § 3(f)(1), inserted “and students who are veterans” after “these fields”.

Subsec. (a)(3)(J), (K). Pub. L. 116-115, § 3(f)(2), added subpar. (J) and redesignated former subpar. (J) as (K).

Subsec. (c)(6)(C). Pub. L. 116-115, § 3(g), inserted “or veterans” after “disciplines”.

§ 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.)

Editorial Notes

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 checklists 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 3554” 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)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.)

Editorial Notes

REFERENCES IN TEXT

Section 278g-3 of this title, referred to in par. (2), was amended by Pub. L. 107-347, title III, § 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, § 204(1), Dec. 18, 2014, 128 Stat. 2980, redesignated subsec. (e) of section 278g-3 of this title, relating to definitions, as (f).

¹ See References in Text note below.

§ 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 Transportation and the House of Representatives Committee on Science not later than 21 months after November 27, 2002.

(c) Security

The Director of the National Institute of Standards and Technology shall ensure that no information that is classified is included in any publicly released version of the report required by this section.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary of Commerce for the National Institute of Standards and Technology for the purposes of carrying out this section, \$700,000.

(Pub. L. 107-305, §12, Nov. 27, 2002, 116 Stat. 2380.)

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

§ 7409. Coordination of Federal cyber security research and development

The Director of the National Science Foundation and the Director of the National Institute of Standards and Technology shall coordinate the research programs authorized by this chapter or pursuant to amendments made by this

chapter. The Director of the Office of Science and Technology Policy shall work with the Director of the National Science Foundation and the Director of the National Institute of Standards and Technology to ensure that programs authorized by this chapter or pursuant to amendments made by this chapter are taken into account in any government-wide cyber security research effort.

(Pub. L. 107-305, §13, Nov. 27, 2002, 116 Stat. 2380.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107-305, Nov. 27, 2002, 116 Stat. 2367, known as the Cyber Security Research and Development Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title.

§ 7410. Grant eligibility requirements and compliance with immigration laws

(a) Immigration status

No grant or fellowship may be awarded under this chapter, directly or indirectly, to any individual who is in violation of the terms of his or her status as a nonimmigrant under section 1101(a)(15)(F), (M), or (J) of title 8.

(b) Aliens from certain countries

No grant or fellowship may be awarded under this chapter, directly or indirectly, to any alien from a country that is a state sponsor of international terrorism, as defined under section 1735(b) of title 8, unless the Secretary of State determines, in consultation with the Attorney General and the heads of other appropriate agencies, that such alien does not pose a threat to the safety or national security of the United States.

(c) Non-complying institutions

No grant or fellowship may be awarded under this chapter, directly or indirectly, to any institution of higher education or non-profit institution (or consortia thereof) that has—

- (1) materially failed to comply with the recordkeeping and reporting requirements to receive nonimmigrant students or exchange visitor program participants under section 1101(a)(15)(F), (M), or (J) of title 8, or section 1372 of title 8, as required by section 1762 of title 8; or
- (2) been suspended or terminated pursuant to section 1762(c) of title 8.

(Pub. L. 107-305, §16, Nov. 27, 2002, 116 Stat. 2381.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107-305, Nov. 27, 2002, 116 Stat. 2367, known as the Cyber Security Research and Development Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

§ 7411. Report on grant and fellowship programs

Within 24 months after November 27, 2002, the Director, in consultation with the Assistant to

the President for National Security Affairs, shall submit to Congress a report reviewing this chapter to ensure that the programs and fellowships are being awarded under this chapter to individuals and institutions of higher education who are in compliance with the Immigration and Nationality Act (8 U.S.C. 1101 *et seq.*) in order to protect our national security.

(Pub. L. 107–305, §17, Nov. 27, 2002, 116 Stat. 2381.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 107–305, Nov. 27, 2002, 116 Stat. 2367, known as the Cyber Security Research and Development Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

The Immigration and Nationality Act, referred to in text, is act June 27, 1952, ch. 477, 66 Stat. 163, which is classified principally to chapter 12 (§1101 *et seq.*) of Title 8, Aliens and Nationality. For complete classification of this Act to the Code, see Short Title note set out under section 1101 of Title 8 and Tables.

CHAPTER 100A—CYBERSECURITY ENHANCEMENT

Sec. 7421.	Definitions.
7422.	No regulatory authority.
7423.	No additional funds authorized.

SUBCHAPTER I—CYBERSECURITY RESEARCH AND DEVELOPMENT

7431.	Federal cybersecurity research and development.
7432.	National cybersecurity challenges.

SUBCHAPTER II—EDUCATION AND WORKFORCE DEVELOPMENT

7441.	Cybersecurity competitions and challenges.
7442.	Federal Cyber Scholarship-for-Service Program.
7443.	National cybersecurity awareness and education program.

SUBCHAPTER III—CYBERSECURITY AWARENESS AND PREPAREDNESS

7451.	Transferred.
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SUBCHAPTER IV—ADVANCEMENT OF CYBERSECURITY TECHNICAL STANDARDS

7461.	Definitions.
7462.	International cybersecurity technical standards.
7463.	Cloud computing strategy.
7464.	Identity management research and development.

§ 7421. Definitions

In this chapter:

(1) Cybersecurity mission

The term “cybersecurity mission” means activities that encompass the full range of threat reduction, vulnerability reduction, deterrence, international engagement, incident response, resiliency, and recovery policies and activities, including computer network operations, information assurance, law enforcement, diplomacy, military, and intelligence missions as such activities relate to the security and stability of cyberspace.

(2) Information system

The term “information system” has the meaning given that term in section 3502 of title 44.

(Pub. L. 113–274, §2, Dec. 18, 2014, 128 Stat. 2971.)

Editorial Notes

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 113–274, Dec. 18, 2014, 128 Stat. 2971, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out below and Tables.

Statutory Notes and Related Subsidiaries

SHORT TITLE

Pub. L. 113–274, §1(a), Dec. 18, 2014, 128 Stat. 2971, provided that: “This Act [enacting this chapter and amending sections 272, 278g–3, 7403, and 7406 of this title] may be cited as the ‘Cybersecurity Enhancement Act of 2014’.”

Executive Documents

EX. ORD. NO. 13984. TAKING ADDITIONAL STEPS TO ADDRESS THE NATIONAL EMERGENCY WITH RESPECT TO SIGNIFICANT MALICIOUS CYBER-ENABLED ACTIVITIES

Ex. Ord. No. 13984, Jan. 19, 2021, 86 F.R. 6837, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*) (IEEPA), the National Emergencies Act (50 U.S.C. 1601 *et seq.*) (NEA), and section 301 of title 3, United States Code:

I, DONALD J. TRUMP, President of the United States of America, find that additional steps must be taken to deal with the national emergency related to significant malicious cyber-enabled activities declared in Executive Order 13694 of April 1, 2015 (Blocking the Property of Certain Persons Engaging in Significant Malicious Cyber-Enabled Activities), as amended [50 U.S.C. 1701 note], to address the use of United States Infrastructure as a Service (IaaS) products by foreign malicious cyber actors. IaaS products provide persons the ability to run software and store data on servers offered for rent or lease without responsibility for the maintenance and operating costs of those servers. Foreign malicious cyber actors aim to harm the United States economy through the theft of intellectual property and sensitive data and to threaten national security by targeting United States critical infrastructure for malicious cyber-enabled activities. Foreign actors use United States IaaS products for a variety of tasks in carrying out malicious cyber-enabled activities, which makes it extremely difficult for United States officials to track and obtain information through legal process before these foreign actors transition to replacement infrastructure and destroy evidence of their prior activities; foreign resellers of United States IaaS products make it easier for foreign actors to access these products and evade detection. This order provides authority to impose record-keeping obligations with respect to foreign transactions. To address these threats, to deter foreign malicious cyber actors’ use of United States IaaS products, and to assist in the investigation of transactions involving foreign malicious cyber actors, the United States must ensure that providers offering United States IaaS products verify the identity of persons obtaining an IaaS account (“Account”) for the provision of these products and maintain records of those transactions. In appropriate circumstances, to further protect against malicious cyber-enabled activities, the United States must also limit certain foreign actors’ access to United States IaaS products. Further, the United States must encour-