

tending meetings of such committees or while otherwise performing duties at the request of the Board Chairman while away from their homes or a regular place of business, may be allowed travel expenses in accordance with subchapter I of chapter 57 of title 5.

**(f) Meetings**

The Board shall hold meetings at such locations and at such time and place as determined by a majority of the Board.

**(g) Staff services and utilization of Federal personnel**

To provide the staff services necessary to assist the Board in carrying out its functions, the Board may utilize personnel from the Institute or any other agency of the Federal Government with the consent of the head of the agency.

**(h) Definitions**

As used in this section, the terms “information system” and “information technology” have the meanings given in section 278g-3 of this title.

(Mar. 3, 1901, ch. 872, §21, as added Pub. L. 100-235, §3(2), Jan. 8, 1988, 101 Stat. 1727; amended Pub. L. 100-418, title V, §5115(a)(1), Aug. 23, 1988, 102 Stat. 1433; Pub. L. 107-296, title X, §1004, Nov. 25, 2002, 116 Stat. 2271; Pub. L. 107-347, title III, §304, Dec. 17, 2002, 116 Stat. 2959; Pub. L. 113-283, §2(f)(2), Dec. 18, 2014, 128 Stat. 3087.)

AMENDMENTS

2014—Subsec. (b)(2). Pub. L. 113-283, §2(f)(2)(A), inserted “, the Secretary of Homeland Security,” after “the Institute”.

Subsec. (b)(3). Pub. L. 113-283, §2(f)(2)(B), inserted “the Secretary of Homeland Security,” after “the Secretary of Commerce.”

2002—Subsec. (a). Pub. L. 107-296, §1004(1), and Pub. L. 107-347, §304(1), amended subsec. (a) identically, substituting “Information Security and Privacy Advisory Board” for “Computer System Security and Privacy Advisory Board” in introductory provisions.

Subsec. (a)(1). Pub. L. 107-296, §1004(2), and Pub. L. 107-347, §304(2), amended par. (1) identically, substituting “information technology” for “computer or telecommunications”.

Subsec. (a)(2). Pub. L. 107-296, §1004(3), and Pub. L. 107-347, §304(3), amended par. (2) identically, substituting “information technology” for “computer or telecommunications technology” and for “computer or telecommunications equipment”.

Subsec. (a)(3). Pub. L. 107-296, §1004(4), and Pub. L. 107-347, §304(4), amended par. (3) identically, substituting “information system” for “computer systems” and “information security” for “computer systems security”.

Subsec. (b)(1). Pub. L. 107-296, §1004(5), and Pub. L. 107-347, §304(5), amended par. (1) identically, substituting “information security” for “computer systems security”.

Subsec. (b)(2). Pub. L. 107-347, §304(6), added par. (2) and struck out former par. (2) which read as follows: “to advise the Institute and the Secretary of Commerce on security and privacy issues pertaining to Federal computer systems; and”.

Pub. L. 107-296, §1004(6), added par. (2) and struck out former par. (2), as added by Pub. L. 107-347, which read as follows: “to advise the Institute, the Secretary of Commerce, and the Director of the Office of Management and Budget on information security and privacy issues pertaining to Federal Government information systems, including through review of proposed standards and guidelines developed under section 278g-3 of this title; and”.

Subsec. (b)(3). Pub. L. 107-296, §1004(7), and Pub. L. 107-347, §304(7), amended par. (3) identically, inserting “annually” after “report”.

Subsecs. (f), (g). Pub. L. 107-296, §1004(8), (9), and Pub. L. 107-347, §304(8), (9), amended section identically, adding subsec. (f) and redesignating former subsec. (f) as (g). Former subsec. (g) redesignated (h).

Subsec. (h). Pub. L. 107-296, §1004(10), and Pub. L. 107-347, §304(10), amended section identically, adding subsec. (h) and striking out former subsec. (h) which read as follows: “As used in this section, the terms ‘computer system’ and ‘Federal computer system’ have the meanings given in section 278g-3 of this title.”

Pub. L. 107-296, §1004(9), and Pub. L. 107-347, §304(9), amended section identically, redesignating subsec. (g) as (h).

1988—Subsec. (b)(2). Pub. L. 100-418, which directed that this chapter be amended by substituting “Institute” for “National Bureau of Standards”, “Bureau”, or “bureau”, wherever appearing, was executed to par. (2) by substituting “Institute” for “Bureau of Standards”, to reflect the probable intent of Congress.

Subsec. (f). Pub. L. 100-418 substituted “Institute” for “National Bureau of Standards”.

EFFECTIVE DATE OF 2002 AMENDMENTS

Amendment by Pub. L. 107-347 effective Dec. 17, 2002, see section 402(b) of Pub. L. 107-347, set out as a note under section 3504 of Title 44, Public Printing and Documents.

Amendment by Pub. L. 107-296 effective 60 days after Nov. 25, 2002, see section 4 of Pub. L. 107-296, set out as an Effective Date note under section 101 of Title 6, Domestic Security.

TERMINATION OF ADVISORY BOARDS

Advisory boards in existence on Jan. 5, 1973, to terminate not later than the expiration of the 2-year period following Jan. 5, 1973, unless, in the case of a council established by the President or an officer of the Federal Government, such council is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a council established by the Congress, its duration is otherwise provided by law. See sections 3(2) and 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770, 776, set out in the Appendix to Title 5, Government Organization and Employees.

**§ 278g-5. Enterprise integration initiative**

**(a) Establishment**

The Director shall establish an initiative for advancing enterprise integration within the United States. In carrying out this section, the Director shall involve, as appropriate, the various units of the National Institute of Standards and Technology, including the National Institute of Standards and Technology laboratories (including the Building and Fire Research Laboratory), the Manufacturing Extension Partnership program<sup>1</sup> established under sections 278k and 278l of this title, and the Malcolm Baldrige National Quality Program. This initiative shall build upon ongoing efforts of the National Institute of Standards and Technology and of the private sector, shall involve consortia that include government and industry, and shall address the enterprise integration needs of each United States major manufacturing industry at the earliest possible date.

**(b) Assessment**

For each major manufacturing industry, the Director may work with industry, trade associa-

<sup>1</sup> See Change of Name note below.

tions, professional societies, and others as appropriate, to identify enterprise integration standardization and implementation activities underway in the United States and abroad that affect that industry and to assess the current state of enterprise integration within that industry. The Director may assist in the development of roadmaps to permit supply chains within the industry to operate as an integrated electronic enterprise. The roadmaps shall be based on voluntary consensus standards.

**(c) Authorized activities**

In order to carry out this Act, the Director may work with industry, trade associations, professional societies, and others as appropriate—

- (1) to raise awareness in the United States, including awareness by businesses that are majority owned by women, minorities, or both, of enterprise integration activities in the United States and abroad, including by the convening of conferences;
- (2) on the development of enterprise integration roadmaps;
- (3) to support the development, testing, promulgation, integration, adoption, and upgrading of standards related to enterprise integration including application protocols; and
- (4) to provide technical assistance and, if necessary, financial support to small- and medium-sized businesses that set up pilot projects in enterprise integration.

**(d) Manufacturing Extension Program**

The Director shall ensure that the Manufacturing Extension Program is prepared to advise small- and medium-sized businesses on how to acquire the expertise, equipment, and training necessary to participate fully in supply chains using enterprise integration.

(Pub. L. 107-277, §3, Nov. 5, 2002, 116 Stat. 1936; Pub. L. 113-188, title II, §201(b), Nov. 26, 2014, 128 Stat. 2018.)

REFERENCES IN TEXT

This Act, referred to in subsec. (c), is Pub. L. 107-277, Nov. 5, 2002, 116 Stat. 1936, which enacted this section and provisions set out as a note under this section. For complete classification of this Act to the Code, see Tables.

CODIFICATION

Section was enacted as part of the Enterprise Integration Act of 2002, and not as part of the National Institute of Standards and Technology Act which comprises this chapter.

AMENDMENTS

2014—Subsecs. (c) to (e). Pub. L. 113-188 redesignated subsecs. (d) and (e) as (c) and (d), respectively, and struck out former subsec. (c) which required annual reports on the National Institute of Standards and Technology's activities under subsec. (b).

CHANGE OF NAME

The Manufacturing Extension Partnership Program, referred to in subsec. (a), redesignated the Hollings Manufacturing Partnership Program by provision of title II of div. B of Pub. L. 108-447, formerly set out as a note under section 278k of this title. Program now known as the Hollings Manufacturing Extension Partnership, see section 278k(i) of this title.

ENTERPRISE INTEGRATION

Pub. L. 107-277, Nov. 5, 2002, 116 Stat. 1936, provided that:

“SECTION. 1. SHORT TITLE.

“This Act [enacting this section and this note] may be cited as the ‘Enterprise Integration Act of 2002’.

“SEC. 2. FINDINGS.

“The Congress makes the following findings:

“(1) Over 90 percent of United States companies engaged in manufacturing are small- and medium-sized businesses.

“(2) Most of these manufacturers produce goods for assemblage into products of large companies.

“(3) The emergence of the World Wide Web and the promulgation of international standards for product data exchange greatly accelerated the movement toward electronically integrated supply chains during the last half of the 1990's.

“(4) European and Asian countries are investing heavily in electronic enterprise standards development, and in preparing their smaller manufacturers to do business in the new environment. European efforts are well advanced in the aerospace, automotive, and shipbuilding industries and are beginning in other industries including home building, furniture manufacturing, textiles, and apparel. This investment could give overseas companies a major competitive advantage.

“(5) The National Institute of Standards and Technology, because of the electronic commerce expertise in its laboratories and quality program, its long history of working cooperatively with manufacturers, and the nationwide reach of its manufacturing extension program, is in a unique position to help United States large and smaller manufacturers alike in their responses to this challenge.

“(6) It is, therefore, in the national interest for the National Institute of Standards and Technology to accelerate its efforts in helping industry develop standards and enterprise integration processes that are necessary to increase efficiency and lower costs.

“SEC. 3. ENTERPRISE INTEGRATION INITIATIVE.

[Enacted this section.]

“SEC. 4. DEFINITIONS.

“For purposes of this Act—

“(1) the term ‘automotive’ means land-based engine-powered vehicles including automobiles, trucks, busses, trains, defense vehicles, farm equipment, and motorcycles;

“(2) the term ‘Director’ means the Director of the National Institute of Standards and Technology;

“(3) the term ‘enterprise integration’ means the electronic linkage of manufacturers, assemblers, suppliers, and customers to enable the electronic exchange of product, manufacturing, and other business data among all partners in a product supply chain, and such term includes related application protocols and other related standards;

“(4) the term ‘major manufacturing industry’ includes the aerospace, automotive, electronics, shipbuilding, construction, home building, furniture, textile, and apparel industries and such other industries as the Director designates; and

“(5) the term ‘roadmap’ means an assessment of manufacturing interoperability requirements developed by an industry describing that industry's goals related to enterprise integration, the knowledge and standards including application protocols necessary to achieve those goals, and the necessary steps, timetable, and assignment of responsibilities for acquiring the knowledge and developing the standards and protocols.

“SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

“There are authorized to be appropriated to the Director to carry out functions under this Act—

“(1) \$2,000,000 for fiscal year 2002;

- “(2) \$10,000,000 for fiscal year 2003;  
“(3) \$15,000,000 for fiscal year 2004; and  
“(4) \$20,000,000 for fiscal year 2005.”

**§ 278h. Research program on security of computer systems**

**(a) Establishment**

The Director shall establish a program of assistance to institutions of higher education that enter into partnerships with for-profit entities to support research to improve the security of computer systems. The partnerships may also include government laboratories and nonprofit research institutions. The program shall—

- (1) include multidisciplinary, long-term research;
- (2) include research directed toward addressing needs identified through the activities of the Computer System Security<sup>1</sup> and Privacy Advisory Board under section 278g-3(f)<sup>2</sup> of this title; and
- (3) promote the development of a robust research community working at the leading edge of knowledge in subject areas relevant to the security of computer systems by providing support for graduate students, post-doctoral researchers, and senior researchers.

**(b) Fellowships**

**(1) Post-doctoral research fellowships**

The Director is authorized to establish a program to award post-doctoral research fellowships to individuals who are citizens, nationals, or lawfully admitted permanent resident aliens of the United States and are seeking research positions at institutions, including the Institute, engaged in research activities related to the security of computer systems, including the research areas described in section 7403(a)(1) of this title.

**(2) Senior research fellowships**

The Director is authorized to establish a program to award senior research fellowships to individuals seeking research positions at institutions, including the Institute, engaged in research activities related to the security of computer systems, including the research areas described in section 7403(a)(1) of this title. Senior research fellowships shall be made available for established researchers at institutions of higher education who seek to change research fields and pursue studies related to the security of computer systems.

**(3) Eligibility**

**(A) In general**

To be eligible for an award under this subsection, an individual shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require.

**(B) Stipends**

Under this subsection, the Director is authorized to provide stipends for post-doctoral research fellowships at the level of the Institute's Post Doctoral Research Fellow-

ship Program and senior research fellowships at levels consistent with support for a faculty member in a sabbatical position.

**(c) Awards; applications**

**(1) In general**

The Director is authorized to award grants or cooperative agreements to institutions of higher education to carry out the program established under subsection (a). No funds made available under this section shall be made available directly to any for-profit partners.

**(2) Eligibility**

To be eligible for an award under this section, an institution of higher education 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 number of graduate students anticipated to participate in the research project and the level of support to be provided to each;
- (B) the number of post-doctoral research positions included under the research project and the level of support to be provided to each;
- (C) the number of individuals, if any, intending to change research fields and pursue studies related to the security of computer systems to be included under the research project and the level of support to be provided to each; and
- (D) how the for-profit entities, nonprofit research institutions, and any other partners will participate in developing and carrying out the research and education agenda of the partnership.

**(d) Program operation**

**(1) Management**

The program established under subsection (a) shall be managed by individuals who shall have both expertise in research related to the security of computer systems and knowledge of the vulnerabilities of existing computer systems. The Director shall designate such individuals as program managers.

**(2) Managers may be employees**

Program managers designated under paragraph (1) may be new or existing employees of the Institute or individuals on assignment at the Institute under the Intergovernmental Personnel Act of 1970 [42 U.S.C. 4701 et seq.], except that individuals on assignment at the Institute under the Intergovernmental Personnel Act of 1970 shall not directly manage such employees.

**(3) Manager responsibility**

Program managers designated under paragraph (1) shall be responsible for—

- (A) establishing and publicizing the broad research goals for the program;
- (B) soliciting applications for specific research projects to address the goals developed under subparagraph (A);
- (C) selecting research projects for support under the program from among applications

<sup>1</sup> So in original. Probably should be “Information Security”.

<sup>2</sup> See References in Text note below.