tion 5402(1)(A) of this title. The Director shall act upon a petition within 180 days after its filing, and shall approve such petition if the document provides equal or greater rigor and reliability as compared to ISO/IEC Guide 25.

(d) Approval of accreditation bodies

A person publishing a document setting forth guidance or requirements for the approval of accreditation bodies to accredit laboratories may petition the Director to approve such document for use as described in section 5402(1)(B) of this title. The Director shall act upon a petition within 180 days after its filing, and shall approve such petition if the document provides equal or greater rigor and reliability as compared to ISO/IEC Guide 58. In addition to any other voluntary laboratory accreditation programs that may be established by private sector persons, the Director shall establish a National Voluntary Laboratory Accreditation Program, for the accreditation of laboratories as described in section 5402(1)(B) of this title, that meets the requirements of ISO/IEC Guide 58 (or another document approved by the Director under this subsection), including revisions from time-to-time.

(e) Affirmation

(1) An accreditation body accrediting third parties who certify manufacturing systems as fastener quality assurance systems as described in section 5402(7)(B)(iii)(I) of this title shall affirm to the Director that it meets the requirements of ISO/IEC Guide 61 (or another document approved by the Director under subsection (b) of this section), including revisions from time-to-time.

(2) An accreditation body accrediting laboratories as described in section 5402(1)(B) of this title shall affirm to the Director that it meets the requirements of ISO/IEC Guide 58 (or another document approved by the Director under subsection (d) of this section), including revisions from time-to-time.

(3) An affirmation required under paragraph (1) or (2) shall take the form of a self-declaration that the accreditation body meets the requirements of the applicable Guide, signed by an authorized representative of the accreditation body, without requirement for accompanying documentation. Any such affirmation shall be considered to be a continuous affirmation that the accreditation body meets the requirements of the applicable Guide, unless and until the affirmation is withdrawn by the accreditation body.

(Pub. L. 101–592, § 10, as added Pub. L. 106–34, § 10, June 8, 1999, 113 Stat. 123.)

PRIOR PROVISIONS

A prior section 10 of Pub. L. 101–592 was renumbered section 7 and is classified to section 5409 of this title.

§ 5411b. Applicability

The requirements of this chapter shall be applicable only to fasteners fabricated 180 days or more after June 8, 1999, except that if a manufacturer or distributor of fasteners fabricated before June 8, 1999, prepares a record of conformance for such fasteners, representations about such fasteners shall be subject to the requirements of this chapter.

(Pub. L. 101–592, § 11, as added Pub. L. 106–34, § 11, June 8, 1999, 113 Stat. 124.)

PRIOR PROVISIONS

A prior section 11 of Pub. L. 101–592 was renumbered section 8 and is classified to section 5410 of this title.

§ 5412. Repealed. Pub. L. 106–34, § 10, June 8, 1999, 113 Stat. 123

Section, Pub. L. 101–592, § 13, Nov. 16, 1990, 104 Stat. 2952; Pub. L. 104–113, § 11(i), Mar. 7, 1996, 110 Stat. 782, required the Secretary to issue regulations necessary to implement chapter.

§ 5413. Repealed. Pub. L. 104–113, § 11(j), Mar. 7, 1996, 110 Stat. 782

Section, Pub. L. 101–592, § 14, Nov. 16, 1990, 104 Stat. 2952, related to appointment of an advisory committee to be available for consultation with Secretary on matters related to fasteners.

§ 5414. Repealed. Pub. L. 106–34, § 10, June 8, 1999, 113 Stat. 123

Section, Pub. L. 101–592, § 15, Nov. 16, 1990, 104 Stat. 2952; Pub. L. 105–234, § 1, Aug. 14, 1998, 112 Stat. 1536, related to applicability of this chapter.

CHAPTER 81—HIGH-PERFORMANCE COMPUTING

§ 5501. Findings

The Congress finds the following:

(1) Advances in computer science and technology are vital to the Nation's prosperity, national and economic security, industrial production, engineering, and scientific advancement.

(2) The United States currently leads the world in the development and use of high-performance computing for national security, industrial productivity, science, and engineering, but that lead is being challenged by foreign competitors.

(3) Further research and development, expanded educational programs, improved computer research networks, and more effective technology transfer from government to industry are necessary for the United States to reap fully the benefits of high-performance computing.

(4) A high-capacity, flexible, high-speed national research and education computer network is needed to provide researchers and educators with access to computational and information resources, act as a test bed for further research and development for high-capacity and high-speed computer networks, and provide researchers the necessary vehicle for continued network technology improvement through research.

(5) Several Federal agencies have ongoing high-performance computing programs, but improved long-term interagency coordination, cooperation, and planning would enhance the effectiveness of these programs.

(6) A 1991 report entitled ''Grand Challenges: High-Performance Computing and Communications'' by the Office of Science and Technology Policy, outlining a research and development strategy for high-performance computing, provides a framework for a multiagency high-performance computing program. Such a program would provide American researchers and educators with the computer and information resources they need, and demonstrate how advanced computers, high-capacity and high-speed networks, and electronic data bases can improve the national information infrastructure for use by all Americans.

(7) Additional research must be undertaken to lay the foundation for the development of new applications that can result in economic growth, improved health care, and improved educational opportunities.

(8) Research in new networking technologies holds the promise of easing the economic burdens of information access disproportionately borne by rural users of the Internet.

(9) Information security is an important part of computing, information, and communications systems and applications, and research into security architectures is a critical aspect of computing, information, and communications research programs.

(Pub. L. 102–194, § 2, Dec. 9, 1991, 105 Stat. 1594; Pub. L. 105–305, § 2(b), Oct. 28, 1998, 112 Stat. 2919.)

AMENDMENTS

1998—Par. (4). Pub. L. 105–305, § 2(b)(1), added par. (4) and struck out former par. (4) which read as follows: ''A high-capacity and high-speed national research and education computer network would provide researchers and educators with access to computer and information resources and act as a test bed for further research and development of high-capacity and high-speed computer networks.''

Pars. (7) to (9). Pub. L. 105–305, § 2(b)(2), added pars. (7) to (9).

SHORT TITLE OF 1998 AMENDMENT

Pub. L. 105–305, § 1, Oct. 28, 1998, 112 Stat. 2919, provided that: ''This Act [enacting section 5513 of this title, amending this section and sections 5502, 5503, and 5511 of this title, and enacting provisions set out as notes under this section] may be cited as the 'Next Generation Internet Research Act of 1998'.''

SHORT TITLE

Section 1 of Pub. L. 102–194 provided that: ''This Act [enacting this chapter] may be cited as the 'High-Performance Computing Act of 1991'.''

Pub. L. 108–423, § 1, Nov. 30, 2004, 118 Stat. 2400, provided that: ''This Act [enacting subchapter III of this chapter, amending sections 205*l* of this title and 1862n–9 of Title 42, The Public Health and Welfare, and enacting provisions set out as a note under section 1862n–9 of Title 42] may be cited as the 'Department of Energy High-End Computing Revitalization Act of 2004'.''

CONGRESSIONAL FINDINGS

Pub. L. 105–305, § 2(a), Oct. 28, 1998, 112 Stat. 2919, provided that: ''The Congress finds that—

''(1) United States leadership in science and technology has been vital to the Nation's prosperity, national and economic security, and international competitiveness, and there is every reason to believe that maintaining this tradition will lead to long-term continuation of United States strategic advantages in information technology;

''(2) the United States investment in science and technology has yielded a scientific and engineering enterprise without peer, and that Federal investment in research is critical to the maintenance of United States leadership;

''(3) previous Federal investment in computer networking technology and related fields has resulted in the creation of new industries and new jobs in the United States;

''(4) the Internet is playing an increasingly important role in keeping citizens informed of the actions of their government; and

''(5) continued inter-agency cooperation is necessary to avoid wasteful duplication in Federal networking research and development programs.''

PURPOSES

Pub. L. 105–305, § 3(a), Oct. 28, 1998, 112 Stat. 2920, provided that: ''The purposes of this Act [see Short Title of 1998 Amendment note above] are—

''(1) to authorize, through the High-Performance Computing Act of 1991 (15 U.S.C. 5501 et seq.), research programs related to—

''(A) high-end computing and computation;

''(B) human-centered systems;

''(C) high confidence systems; and

''(D) education, training, and human resources; and

''(2) to provide, through the High-Performance Computing Act of 1991 (15 U.S.C. 5501 et seq.), for the development and coordination of a comprehensive and integrated United States research program which will—

''(A) focus on the research and development of a coordinated set of technologies that seeks to create a network infrastructure that can support greater speed, robustness, and flexibility than is currently available and promote connectivity and interoperability among advanced computer networks of Federal agencies and departments;

''(B) focus on research in technology that may result in high-speed data access for users that is both economically viable and does not impose a geographic penalty; and

''(C) encourage researchers to pursue approaches to networking technology that lead to maximally flexible and extensible solutions wherever feasible.''

DEFINITIONS

Pub. L. 105–305, § 7(a), Oct. 28, 1998, 112 Stat. 2924, provided that: ''For purposes of this Act [see Short Title of 1998 Amendment note above]—

''(1) GEOGRAPHIC PENALTY.—The term 'geographic penalty' means the imposition of costs on users of the

Internet in rural or other locations, attributable to the distance of the user from network facilities, the low population density of the area in which the user is located, or other factors, that are disproportionately greater than the costs imposed on users in locations closer to such facilities or on users in locations with significantly greater population density.

''(2) INTERNET.—The term 'Internet' means the international computer network of both Federal and non-Federal interoperable packet switched data networks.''

§ 5502. Purposes

The purposes of this chapter are to help ensure the continued leadership of the United States in high-performance computing and its applications by—

(1) expanding Federal support for research, development, and application of high-performance computing in order to—

(A) expand the number of researchers, educators, and students with training in high-performance computing and access to high-performance computing resources;

(B) promote the further development of an information infrastructure of data bases, services, access mechanisms, and research facilities available for use through the Internet;

(C) stimulate research on software technology;

(D) promote the more rapid development and wider distribution of computing software tools and applications software;

(E) accelerate the development of computing systems and subsystems;

(F) provide for the application of high-performance computing to Grand Challenges;

(G) invest in basic research and education, and promote the inclusion of high-performance computing into educational institutions at all levels; and

(H) promote greater collaboration among government, Federal laboratories, industry, high-performance computing centers, and universities;

(2) improving the interagency planning and coordination of Federal research and development on high-performance computing and maximizing the effectiveness of the Federal Government's high-performance computing network research and development programs;

(3) promoting the more rapid development and wider distribution of networking management and development tools; and

(4) promoting the rapid adoption of open network standards.

(Pub. L. 102–194, §3, Dec. 9, 1991, 105 Stat. 1594; Pub. L. 105–305, §3(b), Oct. 28, 1998, 112 Stat. 2920.)

AMENDMENTS

1998—Pub. L. 105–305, §3(b)(1), substituted ''Purposes'' for ''Purpose'' as section catchline.

Pub. L. 105–305, §3(b)(2), substituted ''purposes of this chapter are'' for ''purpose of this chapter is'' in introductory provisions.

Par. (1)(A). Pub. L. 105–305, §3(b)(3), redesignated subpar. (B) as (A) and struck out former subpar. (A) which read as follows: ''establish a high-capacity and high-speed National Research and Education Network;''.

Par. (1)(B). Pub. L. 105–305, §3(b)(3), (4), redesignated subpar. (C) as (B) and substituted ''Internet'' for ''Network''. Former subpar. (B) redesignated (A).

Par. (1)(C) to (I). Pub. L. 105–305, §3(b)(3), (5), redesignated subpars. (D) to (I) as (C) to (H), respectively, and struck out ''and'' at end of par. (H).

Par. (2). Pub. L. 105–305, §3(b)(6), substituted ''network research and development programs;'' for ''efforts.''

Pars. (3), (4). Pub. L. 105–305, §3(b)(7), added pars. (3) and (4).

§ 5503. Definitions

As used in this chapter, the term—

(1) ''Director'' means the Director of the Office of Science and Technology Policy;

(2) ''Grand Challenge'' means a fundamental problem in science or engineering, with broad economic and scientific impact, whose solution will require the application of high-performance computing resources and multidisciplinary teams of researchers;

(3) ''high-performance computing'' means advanced computing, communications, and information technologies, including supercomputer systems, high-capacity and high-speed networks, special purpose and experimental systems, applications and systems software, and the management of large data sets;

(4) ''Internet'' means the international computer network of both Federal and non-Federal interoperable data networks;

(5) ''Network'' means a computer network referred to as the National Research and Education Network established under section 5512 of this title;

(6) ''Program'' means the National High-Performance Computing Program described in section 5511 of this title; and

(7) ''Program Component Areas'' means the major subject areas under which related individual projects and activities carried out under the Program are grouped.

(Pub. L. 102–194, §4, Dec. 9, 1991, 105 Stat. 1595; Pub. L. 105–305, §7(b), Oct. 28, 1998, 112 Stat. 2924; Pub. L. 110–69, title VII, §7024(a)(2), Aug. 9, 2007, 121 Stat. 689.)

AMENDMENTS

2007—Par. (2). Pub. L. 110–69, §7024(a)(2)(A), inserted ''and multidisciplinary teams of researchers'' after ''high-performance computing resources''.

Par. (3). Pub. L. 110–69, §7024(a)(2)(B), struck out ''scientific workstations,'' after ''technologies, including'' and ''(including vector supercomputers and large scale parallel systems)'' after ''supercomputer systems'', substituted ''applications'' for ''and applications'', and inserted '', and the management of large data sets'' after ''systems software''.

Par. (4). Pub. L. 110–69, §7024(a)(2)(C), struck out ''packet switched'' before ''data networks''.

Par. (7). Pub. L. 110–69, §7024(a)(2)(D)–(F), added par. (7).

1998—Pars. (4) to (6). Pub. L. 105–305 added par. (4) and redesignated former pars. (4) and (5) as (5) and (6), respectively.

SUBCHAPTER I—HIGH-PERFORMANCE COMPUTING RESEARCH AND DEVELOPMENT

§ 5511. National High-Performance Computing Program

(a) National High-Performance Computing Program

(1) The President shall implement a National High-Performance Computing Program, which shall—