

and local agencies, libraries, educational institutions and organizations, and others, as appropriate, in order to ensure that the researchers, educators, and students have access, as appropriate, to the Network. The Network is to provide users with appropriate access to high-performance computing systems, electronic information resources, other research facilities, and libraries. The Network shall provide access, to the extent practicable, to electronic information resources maintained by libraries, research facilities, publishers, and affiliated organizations.

**(c) Network characteristics**

The Network shall—

(1) be developed and deployed with the computer, telecommunications, and information industries;

(2) be designed, developed, and operated in collaboration with potential users in government, industry, and research institutions and educational institutions;

(3) be designed, developed, and operated in a manner which fosters and maintains competition and private sector investment in high-speed data networking within the telecommunications industry;

(4) be designed, developed, and operated in a manner which promotes research and development leading to development of commercial data communications and telecommunications standards, whose development will encourage the establishment of privately operated high-speed commercial networks;

(5) be designed and operated so as to ensure the continued application of laws that provide network and information resources security measures, including those that protect copyright and other intellectual property rights, and those that control access to data bases and protect national security;

(6) have accounting mechanisms which allow users or groups of users to be charged for their usage of copyrighted materials available over the Network and, where appropriate and technically feasible, for their usage of the Network;

(7) ensure the interoperability of Federal and non-Federal computer networks, to the extent appropriate, in a way that allows autonomy for each component network;

(8) be developed by purchasing standard commercial transmission and network services from vendors whenever feasible, and by contracting for customized services when not feasible, in order to minimize Federal investment in network hardware;

(9) support research and development of networking software and hardware; and

(10) serve as a test bed for further research and development of high-capacity and high-speed computing networks and demonstrate how advanced computers, high-capacity and high-speed computing networks, and data bases can improve the national information infrastructure.

**(d) Defense Advanced Research Projects Agency responsibility**

As part of the Program, the Department of Defense, through the Defense Advanced Research Projects Agency, shall support research and de-

velopment of advanced fiber optics technology, switches, and protocols needed to develop the Network.

**(e) Information services**

The Director shall assist the President in coordinating the activities of appropriate agencies and departments to promote the development of information services that could be provided over the Network. These services may include the provision of directories of the users and services on computer networks, data bases of unclassified Federal scientific data, training of users of data bases and computer networks, access to commercial information services for users of the Network, and technology to support computer-based collaboration that allows researchers and educators around the Nation to share information and instrumentation.

**(f) Use of grant funds**

All Federal agencies and departments are authorized to allow recipients of Federal research grants to use grant moneys to pay for computer networking expenses.

**(g) Report to Congress**

Within one year after December 9, 1991, the Director shall report to the Congress on—

(1) effective mechanisms for providing operating funds for the maintenance and use of the Network, including user fees, industry support, and continued Federal investment;

(2) the future operation and evolution of the Network;

(3) how commercial information service providers could be charged for access to the Network, and how Network users could be charged for such commercial information services;

(4) the technological feasibility of allowing commercial information service providers to use the Network and other federally funded research networks;

(5) how to protect the copyrights of material distributed over the Network; and

(6) appropriate policies to ensure the security of resources available on the Network and to protect the privacy of users of networks.

(Pub. L. 102-194, title I, §102, Dec. 9, 1991, 105 Stat. 1598.)

**§ 5513. Next Generation Internet**

**(a) Establishment**

The National Science Foundation, the Department of Energy, the National Institutes of Health, the National Aeronautics and Space Administration, and the National Institute of Standards and Technology may support the Next Generation Internet program. The objectives of the Next Generation Internet program shall be to—

(1) support research, development, and demonstration of advanced networking technologies to increase the capabilities and improve the performance of the Internet;

(2) develop an advanced testbed network connecting a significant number of research sites, including universities, Federal research institutions, and other appropriate research partner institutions, to support networking research and to demonstrate new networking technologies; and

(3) develop and demonstrate advanced Internet applications that meet important national goals or agency mission needs, and that are supported by the activities described in paragraphs (1) and (2).

**(b) Duties of Advisory Committee**

The President's Information Technology Advisory Committee (established pursuant to section 5511(b) of this title by Executive Order No. 13035 of February 11, 1997 (62 F.R. 7131), as amended by Executive Order No. 13092 of July 24, 1998), in addition to its functions under section 5511(b) of this title, shall—

(1) assess the extent to which the Next Generation Internet program—

(A) carries out the purposes of this chapter; and

(B) addresses concerns relating to, among other matters—

(i) geographic penalties (as defined in section 7(1) of the Next Generation Internet Research Act of 1998);<sup>1</sup>

(ii) the adequacy of access to the Internet by Historically Black Colleges and Universities, Hispanic Serving Institutions, and small colleges and universities (whose enrollment is less than 5,000) and the degree of participation of those institutions in activities described in subsection (a) of this section; and

(iii) technology transfer to and from the private sector;

(2) review the extent to which the role of each Federal agency and department involved in implementing the Next Generation Internet program is clear and complementary to, and non-duplicative of, the roles of other participating agencies and departments;

(3) assess the extent to which Federal support of fundamental research in computing is sufficient to maintain the Nation's critical leadership in this field; and

(4) make recommendations relating to its findings under paragraphs (1), (2), and (3).

**(c) Reports**

The Advisory Committee shall review implementation of the Next Generation Internet program and shall report, not less frequently than annually, to the President, the Committee on Commerce, Science, and Transportation, the Committee on Appropriations, and the Committee on Armed Services of the Senate, and the Committee on Science, the Committee on Appropriations, and the Committee on Armed Services of the House of Representatives on its findings and recommendations for the preceding fiscal year. The first such report shall be submitted 6 months after October 28, 1998, and the last report shall be submitted by September 30, 2000.

**(d) Authorization of appropriations**

There are authorized to be appropriated for the purposes of this section—

(1) for the Department of Energy, \$22,000,000 for fiscal year 1999 and \$25,000,000 for fiscal year 2000;

(2) for the National Science Foundation, \$25,000,000 for fiscal year 1999 and \$25,000,000 for fiscal year 2000, as authorized in the National Science Foundation Authorization Act of 1998;

(3) for the National Institutes of Health, \$5,000,000 for fiscal year 1999 and \$7,500,000 for fiscal year 2000;

(4) for the National Aeronautics and Space Administration, \$10,000,000 for fiscal year 1999 and \$10,000,000 for fiscal year 2000; and

(5) for the National Institute of Standards and Technology, \$5,000,000 for fiscal year 1999 and \$7,500,000 for fiscal year 2000.

Such funds may not be used for routine upgrades to existing federally funded communication networks.

(Pub. L. 102-194, title I, §103, as added Pub. L. 105-305, §5, Oct. 28, 1998, 112 Stat. 2921; amended Pub. L. 106-65, div. A, title X, §1067(20), Oct. 5, 1999, 113 Stat. 775.)

REFERENCES IN TEXT

Executive Order No. 13035, referred to in subsec. (b), is set out as a note under section 5511 of this title.

Section 7(1) of the Next Generation Internet Research Act of 1998, referred to in subsec. (b)(1)(B)(i), probably means section 7(a)(1) of Pub. L. 105-305, which is set out as a note under section 5501 of this title.

The National Science Foundation Authorization Act of 1998, referred to in subsec. (d)(2), is Pub. L. 105-207, July 29, 1998, 112 Stat. 869. For complete classification of this Act to the Code, see Short Title of 1998 Amendment note set out under section 1861 of Title 42, The Public Health and Welfare, and Tables.

AMENDMENTS

1999—Subsec. (c). Pub. L. 106-65 substituted "Committee on Armed Services of the House" for "Committee on National Security of the House".

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.

SUBCHAPTER II—AGENCY ACTIVITIES

**§ 5521. National Science Foundation activities**

**(a) General responsibilities**

As part of the Program described in subchapter I of this chapter—

(1) the National Science Foundation shall provide computing and networking infrastructure support for all science and engineering disciplines, and support basic research and human resource development in all aspects of high-performance computing and advanced high-speed computer networking;

(2) to the extent that colleges, universities, and libraries cannot connect to the Network with the assistance of the private sector, the National Science Foundation shall have primary responsibility for assisting colleges, universities, and libraries to connect to the Network;

(3) the National Science Foundation shall serve as the primary source of information on access to and use of the Network; and

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