

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—

(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

(4) the National Science Foundation shall upgrade the National Science Foundation

funded network, assist regional networks to upgrade their capabilities, and provide other Federal departments and agencies the opportunity to connect to the National Science Foundation funded network.

##### (b) Authorization of appropriations

From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the National Science Foundation for the purposes of the Program \$213,000,000 for fiscal year 1992; \$262,000,000 for fiscal year 1993; \$305,000,000 for fiscal year 1994; \$354,000,000 for fiscal year 1995; and \$413,000,000 for fiscal year 1996.

(Pub. L. 102-194, title II, §201, Dec. 9, 1991, 105 Stat. 1599.)

#### § 5522. National Aeronautics and Space Administration activities

##### (a) General responsibilities

As part of the Program described in subchapter I, the National Aeronautics and Space Administration shall conduct basic and applied research in high-performance computing, particularly in the field of computational science, with emphasis on aerospace sciences, earth and space sciences, and remote exploration and experimentation.

##### (b) Authorization of appropriations

From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the National Aeronautics and Space Administration for the purposes of the Program \$72,000,000 for fiscal year 1992; \$107,000,000 for fiscal year 1993; \$134,000,000 for fiscal year 1994; \$151,000,000 for fiscal year 1995; and \$145,000,000 for fiscal year 1996.

(Pub. L. 102-194, title II, §202, Dec. 9, 1991, 105 Stat. 1600.)

#### § 5523. Department of Energy activities

##### (a) General responsibilities

As part of the Program described in subchapter I, the Secretary of Energy shall—

(1) conduct and support basic and applied research in high-performance computing and networking to support fundamental research in science and engineering disciplines related to energy applications; and

(2) provide computing and networking infrastructure support, including—

(A) the provision of high-performance computing systems that are among the most advanced in the world in terms of performance in solving scientific and engineering problems; and

(B) support for advanced software and applications development for science and engineering disciplines related to energy applications.

##### (b) Authorization of appropriations

There are authorized to be appropriated to the Secretary of Energy such sums as are necessary to carry out this section.

(Pub. L. 102-194, title II, §203, Dec. 9, 1991, 105 Stat. 1600; Pub. L. 104-66, title I, §1052(j), Dec. 21, 1995, 109 Stat. 719; Pub. L. 109-58, title IX, §976(b), Aug. 8, 2005, 119 Stat. 903.)

## AMENDMENTS

2005—Pub. L. 109-58 reenacted section catchline without change and amended text generally, substituting provisions relating to general responsibilities and authorization of appropriations for provisions relating to general responsibilities, establishment of High-Performance Computing Research and Development Collaborative Consortia, transfer of technology to private sector and others, reports on activities, and authorization of appropriations.

1995—Subsec. (d). Pub. L. 104-66 amended heading and text of subsec. (d) generally. Prior to amendment, text read as follows: "Within one year after December 9, 1991, and every year thereafter, the Secretary of Energy shall transmit to the Congress a report on activities taken to carry out this chapter."

**§ 5524. Department of Commerce activities****(a) General responsibilities**

As part of the Program described in subchapter I—

(1) the National Institute of Standards and Technology shall—

(A) conduct basic and applied measurement research needed to support various high-performance computing systems and networks;

(B) develop and propose standards and guidelines, and develop measurement techniques and test methods, for the interoperability of high-performance computing systems in networks and for common user interfaces to systems; and

(C) be responsible for developing benchmark tests and standards for high-performance computing systems and software; and

(2) the National Oceanic and Atmospheric Administration shall conduct basic and applied research in weather prediction and ocean sciences, particularly in development of new forecast models, in computational fluid dynamics, and in the incorporation of evolving computer architectures and networks into the systems that carry out agency missions.

**(b) High-performance computing and network security**

Pursuant to the Computer Security Act of 1987 (Public Law 100-235; 101 Stat. 1724), the National Institute of Standards and Technology shall be responsible for developing and proposing standards and guidelines needed to assure the cost-effective security and privacy of sensitive information in Federal computer systems.

**(c) Study of impact of Federal procurement regulations**

(1) The Secretary of Commerce shall conduct a study to—

(A) evaluate the impact of Federal procurement regulations that require that contractors providing software to the Federal Government share the rights to proprietary software development tools that the contractors use to develop the software; and

(B) determine whether such regulations discourage development of improved software development tools and techniques.

(2) The Secretary of Commerce shall, within one year after December 9, 1991, report to the Congress regarding the results of the study conducted under paragraph (1).

**(d) Authorization of appropriations**

From sums otherwise authorized to be appropriated, there are authorized to be appropriated—

(1) to the National Institute of Standards and Technology for the purposes of the Program \$3,000,000 for fiscal year 1992; \$4,000,000 for fiscal year 1993; \$5,000,000 for fiscal year 1994; \$6,000,000 for fiscal year 1995; and \$7,000,000 for fiscal year 1996; and

(2) to the National Oceanic and Atmospheric Administration for the purposes of the Program \$2,500,000 for fiscal year 1992; \$3,000,000 for fiscal year 1993; \$3,500,000 for fiscal year 1994; \$4,000,000 for fiscal year 1995; and \$4,500,000 for fiscal year 1996.

(Pub. L. 102-194, title II, §204, Dec. 9, 1991, 105 Stat. 1601.)

## REFERENCES IN TEXT

The Computer Security Act of 1987, referred to in subsec. (b), is Pub. L. 100-235, Jan. 8, 1988, 101 Stat. 1724, which enacted sections 278g-3 and 278g-4 of this title, amended section 272 of this title and section 759 of former Title 40, Public Buildings, Property, and Works, and enacted provisions set out as notes under section 271 of this title and section 1441 of former Title 40. For complete classification of this Act to the Code, see Tables.

**§ 5525. Environmental Protection Agency activities****(a) General responsibilities**

As part of the Program described in subchapter I, the Environmental Protection Agency shall conduct basic and applied research directed toward the advancement and dissemination of computational techniques and software tools which form the core of ecosystem, atmospheric chemistry, and atmospheric dynamics models.

**(b) Authorization of appropriations**

From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the Environmental Protection Agency for the purposes of the Program \$5,000,000 for fiscal year 1992; \$5,500,000 for fiscal year 1993; \$6,000,000 for fiscal year 1994; \$6,500,000 for fiscal year 1995; and \$7,000,000 for fiscal year 1996.

(Pub. L. 102-194, title II, §205, Dec. 9, 1991, 105 Stat. 1602.)

**§ 5526. Role of Department of Education****(a) General responsibilities**

As part of the Program described in subchapter I, the Secretary of Education is authorized to conduct basic and applied research in computational research with an emphasis on the coordination of activities with libraries, school facilities, and education research groups with respect to the advancement and dissemination of computational science and the development, evaluation and application of software capabilities.

**(b) Authorization of appropriations**

From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the Department of Education for the purposes