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106TH CONGRESS
2D SESSION

H. R. 2086

IN THE SENATE OF THE UNITED STATES

FEBRUARY 22, 2000

Received; read twice and referred to the Committee on Commerce, Science,
and Transportation

AN ACT

To authorize funding for networking and information technology research and development for fiscal years 2000 through 2004, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the "Networking and Infor-
3 mation Technology Research and Development Act".

4 **SEC. 2. FINDINGS.**

5 The Congress makes the following findings:

6 (1) Information technology will continue to
7 change the way Americans live, learn, and work. The
8 information revolution will improve the workplace
9 and the quality and accessibility of health care and
10 education and make government more responsible
11 and accessible. It is important that access to infor-
12 mation technology be available to all citizens, includ-
13 ing elderly Americans and Americans with disabil-
14 ities.

15 (2) Information technology is an imperative en-
16 abling technology that contributes to scientific dis-
17 ciplines. Major advances in biomedical research, pub-
18 lic safety, engineering, and other critical areas de-
19 pend on further advances in computing and commu-
20 nications.

21 (3) The United States is the undisputed global
22 leader in information technology.

23 (4) Information technology is recognized as a
24 catalyst for economic growth and prosperity.

25 (5) Information technology represents one of
26 the fastest growing sectors of the United States

1 economy, with electronic commerce alone projected
2 to become a trillion-dollar business by 2005.

3 (6) Businesses producing computers, semi-
4 conductors, software, and communications equip-
5 ment account for one-third of the total growth in the
6 United States economy since 1992.

7 (7) According to the United States Census Bu-
8 reau, between 1993 and 1997, the information tech-
9 nology sector grew an average of 12.3 percent per
10 year.

11 (8) Fundamental research in information tech-
12 nology has enabled the information revolution.

13 (9) Fundamental research in information tech-
14 nology has contributed to the creation of new indus-
15 tries and new, high-paying jobs.

16 (10) Our Nation's well-being will depend on the
17 understanding, arising from fundamental research,
18 of the social and economic benefits and problems
19 arising from the increasing pace of information tech-
20 nology transformations.

21 (11) Scientific and engineering research and the
22 availability of a skilled workforce are critical to con-
23 tinued economic growth driven by information tech-
24 nology.

1 (12) In 1997, private industry provided most of
2 the funding for research and development in the in-
3 formation technology sector. The information tech-
4 nology sector now receives, in absolute terms, one-
5 third of all corporate spending on research and de-
6 velopment in the United States economy.

7 (13) The private sector tends to focus its
8 spending on short-term, applied research.

9 (14) The Federal Government is uniquely posi-
10 tioned to support long-term fundamental research.

11 (15) Federal applied research in information
12 technology has grown at almost twice the rate of
13 Federal basic research since 1986.

14 (16) Federal science and engineering programs
15 must increase their emphasis on long-term, high-risk
16 research.

17 (17) Current Federal programs and support for
18 fundamental research in information technology is
19 inadequate if we are to maintain the Nation's global
20 leadership in information technology.

21 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

22 (a) NATIONAL SCIENCE FOUNDATION.Ð Section
23 201(b) of the High-Performance Computing Act of 1991
24 (15 U.S.C. 5521(b)) is amendedÐ

1 (1) by striking "From sums otherwise author-
2 ized to be appropriated, there" and inserting
3 "There";

4 (2) by striking "1995; and" and inserting
5 "1995"; and

6 (3) by striking the period at the end and insert-
7 ing "; \$520,000,000 for fiscal year 2000;
8 \$645,000,000 for fiscal year 2001; \$672,000,000 for
9 fiscal year 2002; \$736,000,000 for fiscal year 2003;
10 and \$771,000,000 for fiscal year 2004. Amounts au-
11 thorized under this subsection shall be the total
12 amounts authorized to the National Science Founda-
13 tion for a fiscal year for the Program, and shall not
14 be in addition to amounts previously authorized by
15 law for the purposes of the Program."

16 (b) NATIONAL AERONAUTICS AND SPACE ADMINIS-
17 TRATION. Section 202(b) of the High-Performance Com-
18 puting Act of 1991 (15 U.S.C. 5522(b)) is amended

19 (1) by striking "From sums otherwise author-
20 ized to be appropriated, there" and inserting
21 "There";

22 (2) by striking "1995; and" and inserting
23 "1995"; and

24 (3) by striking the period at the end and insert-
25 ing "; \$164,400,000 for fiscal year 2000;

1 \$201,000,000 for fiscal year 2001; \$208,000,000 for
2 fiscal year 2002; \$224,000,000 for fiscal year 2003;
3 and \$231,000,000 for fiscal year 2004."

4 (e) DEPARTMENT OF ENERGY.Ð Section 203(e)(1) of
5 the High-Performance Computing Act of 1991 (15 U.S.C.
6 5523(e)(1)) is amendedÐ

7 (1) by striking "1995; and" and inserting
8 "1995;"; and

9 (2) by striking the period at the end and insert-
10 ing `; \$120,000,000 for fiscal year 2000;
11 \$108,600,000 for fiscal year 2001; \$112,300,000 for
12 fiscal year 2002; \$131,100,000 for fiscal year 2003;
13 and \$135,000,000 for fiscal year 2004."

14 (d) NATIONAL INSTITUTE OF STANDARDS AND
15 TECHNOLOGY.Ð (1) Section 204(d)(1) of the High-Per-
16 formance Computing Act of 1991 (15 U.S.C. 5524(d)(1))
17 is amendedÐ

18 (A) by striking "1995; and" and inserting
19 "1995;"; and

20 (B) by striking "1996; and" and inserting
21 "1996; \$9,000,000 for fiscal year 2000; \$9,500,000
22 for fiscal year 2001; \$10,500,000 for fiscal year
23 2002; \$16,000,000 for fiscal year 2003; and
24 \$17,000,000 for fiscal year 2004; and".

1 (2) Section 204(d) of the High-Performance Com-
2 puting Act of 1991 (15 U.S.C. 5524(d)) is amended by
3 striking "From sums otherwise authorized to be appro-
4 priated, there" and inserting "There".

5 (e) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-
6 ISTRATION.Ð Section 204(d)(2) of the High-Performance
7 Computing Act of 1991 (15 U.S.C. 5524(d)(2)) is
8 amendedÐ

9 (1) by striking "1995; and" and inserting
10 "1995;"; and

11 (2) by striking the period at the end and insert-
12 ing "; \$13,500,000 for fiscal year 2000;
13 \$13,900,000 for fiscal year 2001; \$14,300,000 for
14 fiscal year 2002; \$14,800,000 for fiscal year 2003;
15 and \$15,200,000 for fiscal year 2004."

16 (f) ENVIRONMENTAL PROTECTION AGENCY.Ð Sec-
17 tion 205(b) of the High-Performance Computing Act of
18 1991 (15 U.S.C. 5525(b)) is amendedÐ

19 (1) by striking "From sums otherwise author-
20 ized to be appropriated, there" and inserting
21 "There";

22 (2) by striking "1995; and" and inserting
23 "1995;"; and

24 (3) by striking the period at the end and insert-
25 ing "; \$4,200,000 for fiscal year 2000; \$4,300,000

1 for fiscal year 2001; \$4,500,000 for fiscal year
2 2002; \$4,600,000 for fiscal year 2003; and
3 \$4,700,000 for fiscal year 2004."

4 (g) NATIONAL INSTITUTES OF HEALTH.Ð Title II of
5 the High-Performance Computing Act of 1991 (15 U.S.C.
6 5521 et seq.) is amended by inserting after section 205
7 the following new section:

8 "SEC. 205A. NATIONAL INSTITUTES OF HEALTH ACTIVITIES.

9 "(a) GENERAL RESPONSIBILITIES.Ð As part of the
10 Program described in title I, the National Institutes of
11 Health shall conduct research directed toward the ad-
12 vancement and dissemination of computational techniques
13 and software tools in support of its mission of biomedical
14 and behavioral research.

15 "(b) AUTHORIZATION OF APPROPRIATIONS.Ð There
16 are authorized to be appropriated to the Secretary of
17 Health and Human Services for the purposes of the Pro-
18 gram \$223,000,000 for fiscal year 2000, \$233,000,000
19 for fiscal year 2001, \$242,000,000 for fiscal year 2002,
20 \$250,000,000 for fiscal year 2003, and \$250,000,000 for
21 fiscal year 2004."

22 (h) AUTHORIZATION OF APPROPRIATIONS.Ð

23 (1) NATIONAL SCIENCE FOUNDATION.Ð Not-
24 withstanding the amendment made by subsection
25 (a)(3) of this section, the total amount authorized

1 for the National Science Foundation under section
 2 201(b) of the High-Performance Computing Act of
 3 1991 shall be \$580,000,000 for fiscal year 2000;
 4 \$699,300,000 for fiscal year 2001; \$728,150,000 for
 5 fiscal year 2002; \$801,550,000 for fiscal year 2003;
 6 and \$838,500,000 for fiscal year 2004.

7 (2) DEPARTMENT OF ENERGY.Ð Notwith-
 8 standing the amendment made by subsection (c)(2)
 9 of this section, the total amount authorized for the
 10 Department of Energy under section 203(e)(1) of
 11 the High-Performance Computing Act of 1991 shall
 12 be \$60,000,000 for fiscal year 2000; \$54,300,000
 13 for fiscal year 2001; \$56,150,000 for fiscal year
 14 2002; \$65,550,000 for fiscal year 2003; and
 15 \$67,500,000 for fiscal year 2004.

16 **SEC. 4. NETWORKING AND INFORMATION TECHNOLOGY**
 17 **RESEARCH AND DEVELOPMENT.**

18 (a) NATIONAL SCIENCE FOUNDATION.Ð Section 201
 19 of the High-Performance Computing Act of 1991 (15
 20 U.S.C. 5521) is amended by adding at the end the fol-
 21 lowing new subsections:

22 (c) NETWORKING AND INFORMATION TECHNOLOGY
 23 RESEARCH AND DEVELOPMENT.Ð (1) Of the amounts au-
 24 thorized under subsection (b), \$350,000,000 for fiscal
 25 year 2000; \$421,000,000 for fiscal year 2001;

1 \$442,000,000 for fiscal year 2002; \$486,000,000 for fis-
2 cal year 2003; and \$515,000,000 for fiscal year 2004 shall
3 be available for grants for long-term basic research on net-
4 working and information technology, with priority given
5 to research that helps address issues related to high end
6 computing and software; network stability, fragility, reli-
7 ability, security (including privacy and counterinitiatives),
8 and scalability; and the social and economic consequences
9 (including the consequences for healthcare) of information
10 technology.

11 “(2) In each of the fiscal years 2000 and 2001, the
12 National Science Foundation shall award under this sub-
13 section up to 25 large grants of up to \$1,000,000 each,
14 and in each of the fiscal years 2002, 2003, and 2004, the
15 National Science Foundation shall award under this sub-
16 section up to 35 large grants of up to \$1,000,000 each.

17 “(3)(A) Of the amounts described in paragraph (1),
18 \$40,000,000 for fiscal year 2000; \$45,000,000 for fiscal
19 year 2001; \$50,000,000 for fiscal year 2002; \$55,000,000
20 for fiscal year 2003; and \$60,000,000 for fiscal year 2004
21 shall be available for grants of up to \$5,000,000 each for
22 Information Technology Research Centers.

23 “(B) For purposes of this paragraph, the term ‘Infor-
24 mation Technology Research Centers’ means groups of six
25 or more researchers collaborating across scientific and en-

1 gineering disciplines on large-scale long-term research
2 projects which will significantly advance the science sup-
3 porting the development of information technology or the
4 use of information technology in addressing scientific
5 issues of national importance.

6 “(d) MAJOR RESEARCH EQUIPMENT.Ð (1) In addi-
7 tion to the amounts authorized under subsection (b), there
8 are authorized to be appropriated to the National Science
9 Foundation \$70,000,000 for fiscal year 2000,
10 \$70,000,000 for fiscal year 2001, \$80,000,000 for fiscal
11 year 2002, \$80,000,000 for fiscal year 2003, and
12 \$85,000,000 for fiscal year 2004 for grants for the devel-
13 opment of major research equipment to establish terascale
14 computing capabilities at one or more sites and to promote
15 diverse computing architectures. Awards made under this
16 subsection shall provide for support for the operating ex-
17 penses of facilities established to provide the terascale
18 computing capabilities, with funding for such operating
19 expenses derived from amounts available under subsection
20 (b).

21 “(2) Grants awarded under this subsection shall be
22 awarded through an open, nationwide, peer-reviewed com-
23 petition. Awardees may include consortia consisting of
24 members from some or all of the following types of institu-
25 tions:

1 “(A) Academic supercomputer centers.

2 “(B) State-supported supercomputer centers.

3 “(C) Supercomputer centers that are supported
4 as part of federally funded research and development
5 centers.

6 Notwithstanding any other provision of law, regulation, or
7 agency policy, a federally funded research and develop-
8 ment center may apply for a grant under this subsection,
9 and may compete on an equal basis with any other appli-
10 cant for the awarding of such a grant.

11 “(3) As a condition of receiving a grant under this
12 subsection, an awardee must agree

13 “(A) to connect to the National Science Foun-
14 dation's Partnership for Advanced Computational
15 Infrastructure network;

16 “(B) to the maximum extent practicable, to co-
17 ordinate with other federally funded large-scale com-
18 puting and simulation efforts; and

19 “(C) to provide open access to all grant recipi-
20 ents under this subsection or subsection (e).

21 “(e) INFORMATION TECHNOLOGY EDUCATION AND
22 TRAINING GRANTS.

23 “(1) INFORMATION TECHNOLOGY GRANTS.

24 The National Science Foundation shall provide
25 grants under the Scientific and Advanced Tech-

1 nology Act of 1992 for the purposes of section 3(a)
2 and (b) of that Act, except that the activities sup-
3 ported pursuant to this paragraph shall be limited to
4 improving education in fields related to information
5 technology. The Foundation shall encourage institu-
6 tions with a substantial percentage of student enroll-
7 ments from groups underrepresented in information
8 technology industries to participate in the competi-
9 tion for grants provided under this paragraph.

10 “(2) INTERNSHIP GRANTS.Ð The National
11 Science Foundation shall provideÐ

12 “(A) grants to institutions of higher edu-
13 cation to establish scientific internship pro-
14 grams in information technology research at
15 private sector companies; and

16 “(B) supplementary awards to institutions
17 funded under the Louis Stokes Alliances for Mi-
18 nority Participation program for internships in
19 information technology research at private sec-
20 tor companies.

21 “(3) MATCHING FUNDS.Ð Awards under para-
22 graph (2) shall be made on the condition that at
23 least an equal amount of funding for the internship
24 shall be provided by the private sector company at
25 which the internship will take place.

1 `'(4) DEFINITION.Ð For purposes of this sub-
2 section, the term 'institution of higher education'
3 has the meaning given that term in section 1201(a)
4 of the Higher Education Act of 1965 (20 U.S.C.
5 1141(a)).

6 `'(5) AVAILABILITY OF FUNDS.Ð Of the
7 amounts described in subsection (e)(1), \$10,000,000
8 for fiscal year 2000, \$15,000,000 for fiscal year
9 2001, \$20,000,000 for fiscal year 2002,
10 \$25,000,000 for fiscal year 2003, and \$25,000,000
11 for fiscal year 2004 shall be available for carrying
12 out this subsection.

13 `'(f) EDUCATIONAL TECHNOLOGY RESEARCH.Ð

14 `'(1) RESEARCH PROGRAM.Ð As part of its re-
15 sponsibilities under subsection (a)(1), the National
16 Science Foundation shall establish a research pro-
17 gram to develop, demonstrate, assess, and dissemi-
18 nate effective applications of information and com-
19 puter technologies for elementary and secondary
20 education. Such program shallÐ

21 `'(A) support research projects, including
22 collaborative projects involving academic re-
23 searchers and elementary and secondary
24 schools, to develop innovative educational mate-
25 rials, including software, and pedagogical ap-

1 proaches based on applications of information
2 and computer technology;

3 “(B) support empirical studies to deter-
4 mine the educational effectiveness and the cost
5 effectiveness of specific, promising educational
6 approaches, techniques, and materials that are
7 based on applications of information and com-
8 puter technologies; and

9 “(C) include provision for the widespread
10 dissemination of the results of the studies car-
11 ried out under subparagraphs (A) and (B), in-
12 cluding maintenance of electronic libraries of
13 the best educational materials identified acces-
14 sible through the Internet.

15 “(2) REPLICATION.Ð The research projects and
16 empirical studies carried out under paragraph (1)(A)
17 and (B) shall encompass a wide variety of edu-
18 cational settings in order to identify approaches,
19 techniques, and materials that have a high potential
20 for being successfully replicated throughout the
21 United States.

22 “(3) AVAILABILITY OF FUNDS.Ð Of the
23 amounts authorized under subsection (b),
24 \$10,000,000 for fiscal year 2000, \$10,500,000 for
25 fiscal year 2001, \$11,000,000 for fiscal year 2002,

1 \$12,000,000 for fiscal year 2003, and \$12,500,000
2 for fiscal year 2004 shall be available for the pur-
3 poses of this subsection.

4 “(g) PEER REVIEW.Ð All grants made under this sec-
5 tion shall be made only after being subject to peer review
6 by panels or groups having private sector representation.”.

7 (b) OTHER PROGRAM AGENCIES.Ð

8 (1) NATIONAL AERONAUTICS AND SPACE AD-
9 MINISTRATION.Ð Section 202(a) of the High-Per-
10 formance Computing Act of 1991 (15 U.S.C.
11 5522(a)) is amended by inserting “, and may par-
12 ticipate in or support research described in section
13 201(c)(1)” after “and experimentation”.

14 (2) DEPARTMENT OF ENERGY.Ð Section 203(a)
15 of the High-Performance Computing Act of 1991
16 (15 U.S.C. 5523(a)) is amended by striking the pe-
17 riod at the end and inserting a comma, and by add-
18 ing after paragraph (4) the following:

19 “and may participate in or support research described in
20 section 201(c)(1).”.

21 (3) NATIONAL INSTITUTE OF STANDARDS AND
22 TECHNOLOGY.Ð Section 204(a)(1) of the High-Per-
23 formance Computing Act of 1991 (15 U.S.C.
24 5524(a)(1)) is amended by striking “; and” at the

1 end of subparagraph (C) and inserting a comma,
 2 and by adding after subparagraph (C) the following:
 3 ``and may participate in or support research de-
 4 scribed in section 201(c)(1); and''.

5 (4) NATIONAL OCEANIC AND ATMOSPHERIC AD-
 6 MINISTRATION.Ð Section 204(a)(2) of the High-Per-
 7 formance Computing Act of 1991 (15 U.S.C.
 8 5524(a)(2)) is amended by inserting ``and may
 9 participate in or support research described in sec-
 10 tion 201(c)(1)'' after ``agency missions''.

11 (5) ENVIRONMENTAL PROTECTION AGENCY.Ð
 12 Section 205(a) of the High-Performance Computing
 13 Act of 1991 (15 U.S.C. 5525(a)) is amended by in-
 14 serting ``and may participate in or support re-
 15 search described in section 201(c)(1)'' after ``dynam-
 16 ics models''.

17 (6) UNITED STATES GEOLOGICAL SURVEY.Ð
 18 Title II of the High-Performance Computing Act of
 19 1991 (15 U.S.C. 5521 et seq.) is amendedÐ

20 (A) by redesignating sections 207 and 208
 21 as sections 208 and 209, respectively; and

22 (B) by inserting after section 206 the fol-
 23 lowing new section:

1 **"SEC. 207. UNITED STATES GEOLOGICAL SURVEY.**

2 "The United States Geological Survey may partici-
3 pate in or support research described in section
4 201(e)(1)."

5 **SEC. 5. NEXT GENERATION INTERNET.**

6 Section 103 of the High-Performance Computing Act
7 of 1991 (15 U.S.C. 5513) is amended

8 (1) by amending subsection (c) to read as fol-
9 lows:

10 "(c) **STUDY OF INTERNET PRIVACY.**

11 "(1) **STUDY.** Not later than 90 days after the
12 date of the enactment of the Networking and Infor-
13 mation Technology Research and Development Act,
14 the National Science Foundation may enter into an
15 arrangement with the National Research Council of
16 the National Academy of Sciences for that Council
17 to conduct a study of privacy on the Internet.

18 "(2) **SUBJECTS.** The study shall address

19 "(A) research needed to develop technology
20 for protection of privacy on the Internet;

21 "(B) current public and private plans for
22 the deployment of privacy technology, stand-
23 ards, and policies;

24 "(C) policies, laws, and practices under
25 consideration or formally adopted in other

1 countries and jurisdictions to protect privacy on
2 the Internet;

3 (D) Federal legislation and other regu-
4 latory steps needed to ensure the development
5 of privacy technology, standards, and policies;
6 and

7 (E) other matters that the National Re-
8 search Council determines to be relevant to
9 Internet privacy.

10 (3) TRANSMITTAL TO CONGRESS. The Na-
11 tional Science Foundation shall transmit to the Con-
12 gress within 21 months of the date of the enactment
13 of the Networking and Information Technology Re-
14 search and Development Act a report setting forth
15 the findings, conclusions, and recommendations of
16 the National Research Council.

17 (4) FEDERAL AGENCY COOPERATION. Fed-
18 eral agencies shall cooperate fully with the National
19 Research Council in its activities in carrying out the
20 study under this subsection.

21 (5) AVAILABILITY OF FUNDS. Of the
22 amounts described in subsection (d)(2), \$900,000
23 shall be available for the study conducted under this
24 subsection."; and

25 (2) in subsection (d)

1 (A) in paragraph (1)Ð

2 (i) by striking "1999 and" and insert-
3 ing "1999,"; and

4 (ii) by inserting ", \$15,000,000 for
5 fiscal year 2001, and \$15,000,000 for fis-
6 cal year 2002" after "fiscal year 2000";

7 (B) in paragraph (2), by inserting ", and
8 \$25,000,000 for fiscal year 2001 and
9 \$25,000,000 for fiscal year 2002" after "Act of
10 1998";

11 (C) in paragraph (4)Ð

12 (i) by striking "1999 and" and insert-
13 ing "1999,"; and

14 (ii) by inserting ", \$10,000,000 for
15 fiscal year 2001, and \$10,000,000 for fis-
16 cal year 2002" after "fiscal year 2000";
17 and

18 (D) in paragraph (5)Ð

19 (i) by striking "1999 and" and insert-
20 ing "1999,"; and

21 (ii) by inserting ", \$5,500,000 for fis-
22 cal year 2001, and \$5,500,000 for fiscal
23 year 2002" after "fiscal year 2000".

1 **SEC. 6. REPORTING REQUIREMENTS.**

2 Section 101 of the High-Performance Computing Act
3 of 1991 (15 U.S.C. 5511) is amended

4 (1) in subsection (b)

5 (A) by redesignating paragraphs (1)
6 through (5) as subparagraphs (A) through (E),
7 respectively;

8 (B) by inserting "(1)" after "ADVISORY
9 COMMITTEE"; and

10 (C) by adding at the end the following new
11 paragraph:

12 "(2) In addition to the duties outlined in paragraph
13 (1), the advisory committee shall conduct periodic evalua-
14 tions of the funding, management, implementation, and
15 activities of the Program, the Next Generation Internet
16 program, and the Networking and Information Tech-
17 nology Research and Development program, and shall re-
18 port not less frequently than once every 2 fiscal years to
19 the Committee on Science of the House of Representatives
20 and the Committee on Commerce, Science, and Transpor-
21 tation of the Senate on its findings and recommendations.
22 The first report shall be due within 1 year after the date
23 of the enactment of the Networking and Information
24 Technology Research and Development Act."; and

25 (2) in subsection (c)(1)(A) and (2), by inserting
26 "; including the Next Generation Internet program

1 and the Networking and Information Technology
 2 Research and Development program" after "Pro-
 3 gram" each place it appears.

4 **SEC. 7. EVALUATION OF CAPABILITIES OF FOREIGN**
 5 **ENCRYPTION.**

6 (a) **STUDY.** The National Science Foundation shall
 7 undertake a study comparing the availability of encryption
 8 technologies in foreign countries to the encryption tech-
 9 nologies subject to export restrictions in the United
 10 States.

11 (b) **REPORT TO CONGRESS.** Not later than 6
 12 months after the date of the enactment of this Act, the
 13 National Science Foundation shall transmit to the Con-
 14 gress a report on the results of the study undertaken
 15 under subsection (a).

16 **SEC. 8. REPORT TO CONGRESS.**

17 Section 103 of the High-Performance Computing Act
 18 of 1991 (15 U.S.C. 5513), as amended by section 5 of
 19 this Act, is further amended by redesignating subsections
 20 (b), (c), and (d) as subsections (c), (d), and (e), respec-
 21 tively, and by inserting after subsection (a) the following
 22 new subsection:

23 (b) **REPORT TO CONGRESS.**

24 (1) **REQUIREMENT.** The Director of the Na-
 25 tional Science Foundation shall conduct a study of

1 the issues described in paragraph (3), and not later
2 than 1 year after the date of the enactment of the
3 Networking and Information Technology Research
4 and Development Act, shall transmit to the Congress
5 a report including recommendations to address those
6 issues. Such report shall be updated annually for 6
7 additional years.

8 “(2) CONSULTATION.Ð In preparing the reports
9 under paragraph (1), the Director of the National
10 Science Foundation shall consult with the National
11 Aeronautics and Space Administration, the National
12 Institute of Standards and Technology, and such
13 other Federal agencies and educational entities as
14 the Director of the National Science Foundation
15 considers appropriate.

16 “(3) ISSUES.Ð The reports shallÐ

17 “(A) identify the current status of high-
18 speed, large bandwidth capacity access to all
19 public elementary and secondary schools and li-
20 braries in the United States;

21 “(B) identify how high-speed, large band-
22 width capacity access to the Internet to such
23 schools and libraries can be effectively utilized
24 within each school and library;

1 “(C) consider the effect that specific or re-
 2 gional circumstances may have on the ability of
 3 such institutions to acquire high-speed, large
 4 bandwidth capacity access to achieve universal
 5 connectivity as an effective tool in the education
 6 process; and

7 “(D) include options and recommendations
 8 for the various entities responsible for elemen-
 9 tary and secondary education to address the
 10 challenges and issues identified in the reports.”.

11 **SEC. 9. STUDY OF ACCESSIBILITY TO INFORMATION TECH-**
 12 **NOLOGY.**

13 Section 201 of the High-Performance Computing Act
 14 of 1991 (15 U.S.C. 5524), as amended by sections 3(a)
 15 and 4(a) of this Act, is amended further by inserting after
 16 subsection (g) the following new subsection:

17 “(h) **STUDY OF ACCESSIBILITY TO INFORMATION**
 18 **TECHNOLOGY.**⌀

19 “(1) **STUDY.**⌀ Not later than 90 days after the
 20 date of the enactment of the Networking and Infor-
 21 mation Technology Research and Development Act,
 22 the Director of the National Science Foundation, in
 23 consultation with the National Institute on Dis-
 24 ability and Rehabilitation Research, shall enter into
 25 an arrangement with the National Research Council

1 of the National Academy of Sciences for that Coun-
2 cil to conduct a study of accessibility to information
3 technologies by individuals who are elderly, individ-
4 uals who are elderly with a disability, and individ-
5 uals with disabilities.

6 “(2) SUBJECTS.Ð The study shall addressÐ

7 “(A) current barriers to access to informa-
8 tion technologies by individuals who are elderly,
9 individuals who are elderly with a disability,
10 and individuals with disabilities;

11 “(B) research and development needed to
12 remove those barriers;

13 “(C) Federal legislative, policy, or regu-
14 latory changes needed to remove those barriers;
15 and

16 “(D) other matters that the National Re-
17 search Council determines to be relevant to ac-
18 cess to information technologies by individuals
19 who are elderly, individuals who are elderly with
20 a disability, and individuals with disabilities.

21 “(3) TRANSMITTAL TO CONGRESS.Ð The Direc-
22 tor of the National Science Foundation shall trans-
23 mit to the Congress within 2 years of the date of the
24 enactment of the Networking and Information Tech-
25 nology Research and Development Act a report set-

1 ting forth the findings, conclusions, and rec-
2 ommendations of the National Research Council.

3 “(4) FEDERAL AGENCY COOPERATION.Ð Fed-
4 eral agencies shall cooperate fully with the National
5 Research Council in its activities in carrying out the
6 study under this subsection.

7 “(5) AVAILABILITY OF FUNDS.Ð Funding for
8 the study described in this subsection shall be avail-
9 able, in the amount of \$700,000, from amounts de-
10 scribed in subsection (c)(1).”.

11 **SEC. 10. COMPTROLLER GENERAL STUDY.**

12 Not later than 1 year after the date of the enactment
13 of this Act, the Comptroller General shall transmit to the
14 Congress a report on the results of a detailed study ana-
15 lyzing the effects of this Act, and the amendments made
16 by this Act, on lower income families, minorities, and
17 women.

18 **SEC. 11. BUY AMERICAN.**

19 (a) COMPLIANCE WITH BUY AMERICAN ACT.Ð No
20 funds appropriated pursuant to this Act may be expended
21 by an entity unless the entity agrees that in expending
22 the assistance the entity will comply with sections 2
23 through 4 of the Buy American Act (41 U.S.C. 10a±10c).

24 (b) SENSE OF CONGRESS.Ð In the case of any equip-
25 ment or products that may be authorized to be purchased

1 with financial assistance provided under this Act, it is the
2 sense of the Congress that entities receiving such assist-
3 ance should, in expending the assistance, purchase only
4 American-made equipment and products.

5 (c) NOTICE TO RECIPIENTS OF ASSISTANCE. In
6 providing financial assistance under this Act, the head of
7 each Federal agency shall provide to each recipient of the
8 assistance a notice describing the statement made in sub-
9 section (b) by the Congress.

Passed the House of Representatives February 15,
2000.

Attest:

JEFF TRANDAHL,

Clerk.

Document No. 138

