105TH CONGRESS
2D SESSION

S. 1609

AN ACT

To amend the High-Performance Computing Act of 1991 to authorize appropriations for fiscal years 1999 and 2000 for the Next Generation Internet program, to require the Advisory Committee on High-Performance Computing and Communications, Information Technology, and the Next Generation Internet to monitor and give advice concerning the development and implementation of the Next Generation Internet program and report to the President and the Congress on its activities, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Next Generation Internet Research Act of 1998''.

SEC. 2. DEFINITIONS.

(a) TERMS USED IN THIS ACT.—For purposes of this Act—

(1) INTERNET.—The term ''Internet'' has the meaning given such term by section 230(e)(1) of the Communications Act of 1934 (47 U.S.C. 230(e)(1)).

(2) 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.

(b) DEFINITION OF NETWORK IN HIGH-PERFORMANCE COMPUTING ACT OF 1991.—Paragraph (4) of section 4 of the High-Performance Computing Act of 1991 (15 U.S.C. 5503) is amended by striking ''network referred to as the National Research and Education Network established under section 102; and'' and inserting ''network, including advanced computer networks of Federal agencies and departments; and''.

SEC. 3. FINDINGS.

(a) IN GENERAL.—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.

(b) ADDITIONAL FINDINGS FOR THE 1991 ACT.—Section 2 of the High-Performance Computing Act of 1991 (15 U.S.C. 5501) is amended by—

(1) striking paragraph (4) and inserting the following:

''(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.''; and

(2) adding at the end thereof the following:

''(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.''.

SEC. 4. PURPOSES.

(a) IN GENERAL.—The purposes of this Act are—

(1) to serve as the first authorization in a series of computing, information, and communication technology initiatives outlines in the High-Performance Computing Act of 1991 (15 U.S.C. 5501 et seq.) that will include 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 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.

(b) MODIFICATION OF PURPOSES OF THE 1991 ACT.—Section 3 of the High-Performance Computing Act of 1991 (15 U.S.C. 5502) is amended by—

(1) striking the section caption and inserting the following:

"SEC. 3. PURPOSES.";

(2) striking ''purpose of this Act is'' and inserting ''purposes of this Act are'';

(3) striking ''universities; and'' in paragraph (1)(I) and inserting ''universities;'';

(4) striking ''efforts.'' in paragraph (2) and inserting ''network research and development programs;''; and

(5) adding at the end thereof the following:

''(3) promoting the further development of an information infrastructure of information stores, services, access mechanisms, and research facilities available for use through the Internet;

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

''(5) promoting the rapid adoption of open network standards.''.

SEC. 5. DUTIES OF ADVISORY COMMITTEE.

Title I of the High-Performance Computing Act of 1991 (15 U.S.C 5511 et seq.) is amended by adding at the end thereof the following:

''SEC. 103. ADVISORY COMMITTEE.

''(a) IN GENERAL.—In addition to its functions under Executive Order 13035 (62 F.R. 7231), the Advisory Committee on High-Performance Computing and Communications, Information Technology, and the Next Generation Internet, established by Executive Order No. 13035 of February 11, 1997 (62 F.R. 7231) shall—

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

''(A) carries out the purposes of this Act;

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

''(i) geographic penalties (as defined in section 2(2) of the Next Generation Internet Research Act of 1998); and

"(ii) technology transfer to and from the private sector; and

"(2) assess the extent to which—

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

"(B) each such agency and department concurs with the rule of each other participating agency or department.

"(b) REPORTS.—The Advisory Committee shall assess implementation of the Next Generation Internet initiative and report, not less frequently than annually, to the President, the United States Senate Committee on Commerce, Science, and Transportation, and the United States House of Representatives Committee on Science on its findings for the preceding fiscal year. The first such report shall be submitted 6 months after the date of enactment of the Next Generation Internet Research Act of 1998 the last report shall be submitted by September 30, 2000.".

SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

Title I of the High-Performance Computing Act of 1991 (15 U.S.C 5511 et seq.), as amended by section 5 of this Act, is amended by adding at the end thereof the following:

''SEC. 104. AUTHORIZATION OF APPROPRIATIONS.

''There are authorized to be appropriated for the purpose of carrying out the Next Generation Internet program the following amounts:

''Agency	FY 1999	FY 2000
''Department of Defense	$40,000,000	$42,500,000
''Department of Energy	$20,000,000	$25,000,000
''National Science Foundation	$25,000,000	$25,000,000
''National Institutes of Health	$5,000,000	$7,500,000
''National Aeronautics and Space Administration	$10,000,000	$10,000,000
''National Institute of Standards and Technology	$5,000,000	$7,500,000.

The amount authorized for the Department of Defense for fiscal year 1999 under this section shall be the amount authorized pursuant to the National Defense Authorization Act for Fiscal Year 1999.''.

SEC. 7. STUDY OF EFFECTS ON TRADEMARKS AND INTELLECTUAL PROPERTY RIGHTS OF ADDING GENERIC TOP-LEVEL DOMAINS.

(a) STUDY BY NATIONAL RESEARCH COUNCIL.—Not later than 60 days after the date of enactment of this Act, the Secretary of Commerce shall request the National Re-

search Council of the National Academy of Sciences to conduct a comprehensive study, taking into account the diverse needs of domestic and international Internet users, of the short-term and long-term effects on trademark and intellectual property rights holders of adding new generic top-level domains and related dispute resolution procedures.

(b) MATTERS TO BE ASSESSED IN STUDY.—The study shall assess and, as appropriate, make recommendations for policy, practice, or legislative changes relating to—

(1) the short-term and long-term effects on the protection of trademark and intellectual property rights and consumer interests of increasing or decreasing the number of generic top-level domains;

(2) trademark and intellectual property rights clearance processes for domain names, including—

(A) whether domain name databases should be readily searchable through a common interface to facilitate the clearing of trademarks and intellectual property rights and proposed domain names across a range of generic top-level domains;

(B) the identification of what information from domain name databases should be acces-

sible for the clearing of trademarks and intellectual property rights; and

(C) whether generic top-level domain registrants should be required to provide certain information;

(3) domain name trademark and intellectual property rights dispute resolution mechanisms, including how to—

(A) reduce trademark and intellectual property rights conflicts associated with the addition of any new generic top-level domains; and

(B) reduce trademark and intellectual property rights conflicts through new technical approaches to Internet addressing;

(4) choice of law or jurisdiction for resolution of trademark and intellectual property rights disputes relating to domain names, including which jurisdictions should be available for trademark and intellectual property rights owners to file suit to protect such trademarks and intellectual property rights;

(5) trademark and intellectual property rights infringement liability for registrars, registries, or technical management bodies; and

(6) short-term and long-term technical and policy options for Internet addressing schemes and the impact of such options on current trademark and intellectual property rights issues.

(c) COOPERATION WITH STUDY.—

(1) INTERAGENCY COOPERATION.—The Secretary of Commerce shall—

(A) direct the Patent and Trademark Office, the National Telecommunications and Information Administration, and other Department of Commerce entities to cooperate fully with the National Research Council in its activities in carrying out the study under this section; and

(B) request all other appropriate Federal departments, Federal agencies, Government contractors, and similar entities to provide similar cooperation to the National Research Council.

(2) PRIVATE CORPORATION COOPERATION.—The Secretary of Commerce shall request that any private, not-for-profit corporation established to manage the Internet root server system and the top-level domain names provide similar cooperation to the National Research Council.

(d) REPORT.—

(1) IN GENERAL.—Not later than 12 months after the date of enactment of this Act, the National Research Council shall complete the study under this section and submit a report on the study to the Secretary of Commerce. The report shall set forth the findings, conclusions, and recommendations of the Council concerning the effects of adding new generic top-level domains and related dispute resolution procedures on trademark and intellectual property rights holders.

(2) SUBMISSION TO CONGRESSIONAL COMMITTEES.—Not later than 30 days after the date on which the report is submitted to the Secretary of Commerce, the Secretary shall submit the report to the Committees on Commerce and the Committees on the Judiciary of the Senate and House of Representatives.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $800,000 for the study conducted under this Act.

Passed the Senate June 26, 1998.

Attest:

Secretary.

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