

are possible enemies of the United States, but are currently engaged in cyber attacks, should be able to be funded by this program.

But with that said, the purpose of the program is terrific. We need to do it, and we need to do it right. And I congratulate my friends and my colleagues for the good job they've done.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I yield 5 minutes to the gentleman from Rhode Island (Mr. LANGEVIN).

(Mr. LANGEVIN asked and was given permission to revise and extend his remarks.)

Mr. LANGEVIN. I thank the gentleman for yielding.

Before I begin, let me just say that my heart goes out to all those who lost their lives and were injured in the terrorist attack at the Boston Marathon yesterday. My thoughts and prayers are with them and their families, and we pray for a quick recovery for all of those who were hurt. And our thoughts and prayers are with everyone in Boston at this difficult time.

I also would like to take a minute just to comment on and to lend my support to the previous bill that was just debated, H.R. 1163, the FISMA reform bill that was before the House, vitally important for updating our reporting of cybersecurity incidents and other issues relating to enhancing our cybersecurity. And I commend Chairman ISSA for his leadership on that, as well as others on the committee who are supporting that bill.

But, Mr. Speaker, I am pleased today to rise as a supporter and cosponsor of the Cybersecurity Enhancement Act, offered by my good friend and colleague, the chairman of the Homeland Security Committee, as well as the co-chair, along with me, on the Cybersecurity Caucus, Chairman MCCAUL.

Mr. Speaker, it seems that every week we read about a new cyber attack taking place. Last month, the Mandiant Report detailed a campaign of espionage against hundreds of corporations around the world. The New York Times and other media companies have also been victims of recent attacks; and we saw in South Korea last month the financial and communications sectors can clearly be vulnerable to these pernicious attacks as well.

Mr. Speaker, the cyber threat is real. Protecting our networks is a complex task that we, in Congress, need to focus more on and address. Chairman MCCAUL and I served together on the CSIS Commission on Cybersecurity for the 44th Presidency, and I am happy to report that the Cybersecurity Enhancement Act builds on the important work that we did there.

As we are constantly reminded, today's threat may not be tomorrow's, due to the prodigious rate of technological innovation. This bill before us today encourages coordination between Federal agencies tasked with cyber research and development and requires

them to develop a strategic plan for R&D activities.

Success in this area demands a skilled cyber workforce, something that we currently lack. This bill takes an important first step in correcting our course by reauthorizing NSF graduate fellowships in cybersecurity and requiring the President to issue a report addressing our critical cyber workforce shortage.

So, Mr. Speaker, with that, let me again thank the gentleman from Texas for his outstanding leadership on this issue. He's been a visionary on working to protect our Nation's cybersecurity, and I greatly appreciate his efforts and that of many others. I look forward to continuing to work with him, and I'm pleased to support this bipartisan piece of legislation.

I also recognize Mr. LIPINSKI and his leadership on this issue as well.

Mr. SMITH of Texas. Mr. Speaker, we have no more requests for time on this side, so we'll be prepared to yield back at the right time.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I yield 1 minute to the gentlewoman from Texas (Ms. JACKSON LEE).

Ms. JACKSON LEE. Let me thank the chairman and the ranking member for their leadership on the Science Committee, and thank the proponents of this legislation, my chairman on the Homeland Security Committee, Mr. MCCAUL, and Mr. LIPINSKI, for their bipartisan leadership on something that is enormously crucial; and it is certainly crucial for those of us who serve on both Judiciary and Homeland Security and probably a number of others.

What I want to applaud most of all is the R&D and expanded training. We will need to have a cadre, an army of civilians, who understand the protection of America's cyber landscape, if you will. And it is a domestic issue, as well as a security issue, because America's energy and utilities and medical care all are tied into the cybersphere.

Whether or not it is a youngster who wants to hack, or whether or not it is an aggressive foreign country, it is valuable and important for us to be trained. I'd like to offer the importance of Historically Black Colleges and Hispanic-serving Colleges as well, being part of this very important effort and, as well, to educate the private sector, which has 85 to 80 to 90 percent, in essence, of the private sector dealing with cybersecurity.

Let me complete, Mr. Speaker, by saying as we move forward, I think it is important for Homeland Security to be a lead on some of these issues, particularly the bill coming forward. But I applaud this legislation. I congratulate the proponents and sponsors and ask my colleagues to support this legislation.

The SPEAKER pro tempore. Members are reminded to please heed the gavel.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I have no further

requests for time. I'd like to just urge that we support the bill, and I thank the chairman.

I yield back the balance of my time.

□ 1320

Mr. SMITH of Texas. I yield back the balance of my time.

Ms. ESTY. Mr. Speaker, I rise today in support of H.R. 756, the Cybersecurity Enhancement Act of 2013—legislation that I'm proud to cosponsor, which will both enhance our national security and help boost our economy.

Cybersecurity is increasingly essential to our national defense and to our economic security in the 21st century.

As the Internet and other communication networks have grown and become more sophisticated, so have the threats from individual hackers, criminal syndicates, and even other governments.

It's critical that we take steps today to encourage and better coordinate the research and development of cybersecurity technology on a national scale.

The Cybersecurity Enhancement Act will help ensure that our country is prepared to face the security threats of the 21st century, that our businesses have the IT protections they need to compete on a global scale. I am proud that we're making critical investments in science and IT education for our young people and our educational institutions.

By authorizing grants and prioritizing research areas with the National Science Foundation and the National Institute of Standards and Technology, this legislation will help boost workforce development. In Connecticut, home to high-tech manufacturing and top-quality universities and technical schools, these workforce investments are essential to our economic future.

Mr. Speaker, for the sake of our nation's security, for the sake of our businesses, for the sake of our economy, I urge a yes vote on this bill.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Texas (Mr. SMITH) that the House suspend the rules and pass the bill, H.R. 756, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. SMITH of Texas. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, further proceedings on this motion will be postponed.

#### ADVANCING AMERICA'S NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT ACT OF 2013

Mr. SMITH of Texas. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 967) to amend the High-Performance Computing Act of 1991 to authorize activities for support of networking and information technology research, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 967

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 “Advancing America’s Networking and Information Technology Research and Development Act of 2013”.

**SEC. 2. PROGRAM PLANNING AND COORDINATION.**

(a) PERIODIC REVIEWS.—Section 101 of the High-Performance Computing Act of 1991 (15 U.S.C. 5511) is amended by adding at the end the following new subsection:

“(d) PERIODIC REVIEWS.—The agencies identified in subsection (a)(3)(B) shall—

“(1) periodically assess the contents and funding levels of the Program Component Areas and restructure the Program when warranted, taking into consideration any relevant recommendations of the advisory committee established under subsection (b); and

“(2) ensure that the Program includes large-scale, long-term, interdisciplinary research and development activities, including activities described in section 104.”

(b) DEVELOPMENT OF STRATEGIC PLAN.—Section 101 of such Act (15 U.S.C. 5511) is amended further by adding after subsection (d), as added by subsection (a) of this Act, the following new subsection:

“(e) STRATEGIC PLAN.—

“(1) IN GENERAL.—The agencies identified in subsection (a)(3)(B), working through the National Science and Technology Council and with the assistance of the National Coordination Office described under section 102, shall develop, within 12 months after the date of enactment of the Advancing America’s Networking and Information Technology Research and Development Act of 2013, and update every 3 years thereafter, a 5-year strategic plan to guide the activities described under subsection (a)(1).

“(2) CONTENTS.—The strategic plan shall specify near-term and long-term objectives for the Program, the anticipated time frame for achieving the near-term objectives, the metrics to be used for assessing progress toward the objectives, and how the Program will—

“(A) foster the transfer of research and development results into new technologies and applications for the benefit of society, including through cooperation and collaborations with networking and information technology research, development, and technology transition initiatives supported by the States;

“(B) encourage and support mechanisms for interdisciplinary research and development in networking and information technology, including through collaborations across agencies, across Program Component Areas, with industry, with Federal laboratories (as defined in section 4 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3703)), and with international organizations;

“(C) address long-term challenges of national importance for which solutions require large-scale, long-term, interdisciplinary research and development;

“(D) place emphasis on innovative and high-risk projects having the potential for substantial societal returns on the research investment;

“(E) strengthen all levels of networking and information technology education and training programs to ensure an adequate, well-trained workforce; and

“(F) attract more women and underrepresented minorities to pursue postsecondary degrees in networking and information technology.

(3) NATIONAL RESEARCH INFRASTRUCTURE.—The strategic plan developed in accordance with paragraph (1) shall be accompanied by milestones and roadmaps for establishing and maintaining the national research infrastructure required to support the Program, including the roadmap required by subsection (a)(2)(E).

“(4) RECOMMENDATIONS.—The entities involved in developing the strategic plan under paragraph (1) shall take into consideration the recommendations—

“(A) of the advisory committee established under subsection (b); and

“(B) of the stakeholders whose input was solicited by the National Coordination Office, as required under section 102(b)(3).

(5) REPORT TO CONGRESS.—The Director of the National Coordination Office shall transmit the strategic plan required under paragraph (1) to the advisory committee, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science, Space, and Technology of the House of Representatives.”

(c) ADDITIONAL RESPONSIBILITIES OF DIRECTOR.—Section 101(a)(2) of such Act (15 U.S.C. 5511(a)(2)) is amended—

(1) in subparagraph (A) by inserting “education,” before “and other activities”; and

(2) by redesignating subparagraphs (E) and (F) as subparagraphs (F) and (G), respectively; and

(3) by inserting after subparagraph (D) the following new subparagraph:

“(E) encourage and monitor the efforts of the agencies participating in the Program to allocate the level of resources and management attention necessary to ensure that the strategic plan under subsection (e) is developed and executed effectively and that the objectives of the Program are met;”

(d) ADVISORY COMMITTEE.—Section 101(b)(1) of such Act (15 U.S.C. 5511(b)(1)) is amended—

(1) after the first sentence, by inserting the following: “The co-chairs of the advisory committee shall meet the qualifications of committee membership and may be members of the President’s Council of Advisors on Science and Technology.”; and

(2) in subparagraph (D), by striking “high-performance” and inserting “high-end”.

(e) REPORT.—Section 101(a)(3) of such Act (15 U.S.C. 5511(a)(3)) is amended—

(1) in subparagraph (B)—

(A) by redesignating clauses (vii) through (xi) as clauses (viii) through (xii), respectively; and

(B) by inserting after clause (vi) the following: “(vii) the Department of Homeland Security;”

(2) in subparagraph (C)—

(A) by striking “is submitted,” and inserting “is submitted, the levels for the previous fiscal year,”; and

(B) by striking “each Program Component Area,” and inserting “each Program Component Area and research area supported in accordance with section 104;”

(3) in subparagraph (D)—

(A) by striking “each Program Component Area and research area supported in accordance with section 104,”; and

(B) by striking “is submitted,” and inserting “is submitted, the levels for the previous fiscal year,”; and

(C) by striking “and” after the semicolon;

(4) by redesignating subparagraph (E) as subparagraph (G); and

(5) by inserting after subparagraph (D) the following new subparagraphs:

“(E) include a description of how the objectives for each Program Component Area, and the objectives for activities that involve multiple Program Component Areas, relate to the objectives of the Program identified in the strategic plan required under subsection (e);

“(F) include—

“(i) a description of the funding required by the National Coordination Office to perform the functions specified under section 102(b) for the next fiscal year by category of activity;

“(ii) a description of the funding required by such Office to perform the functions specified under section 102(b) for the current fiscal year by category of activity; and

“(iii) the amount of funding provided for such Office for the current fiscal year by each agency participating in the Program; and”.

(f) DEFINITION.—Section 4 of such Act (15 U.S.C. 5503) is amended—

(1) by redesignating paragraphs (1) through (7) as paragraphs (2) through (8), respectively;

(2) by inserting before paragraph (2), as so redesignated, the following new paragraph:

“(1) ‘cyber-physical systems’ means physical or engineered systems whose networking and information technology functions and physical elements are deeply integrated and are actively connected to the physical world through sensors, actuators, or other means to perform monitoring and control functions;”;

(3) in paragraph (3), as so redesignated, by striking “high-performance computing” and inserting “networking and information technology”;

(4) in paragraph (4), as so redesignated—

(A) by striking “high-performance computing” and inserting “networking and information technology”; and

(B) by striking “supercomputer” and inserting “high-end computing”;

(5) in paragraph (6), as so redesignated, by striking “network referred to as” and all that follows through the semicolon and inserting “network, including advanced computer networks of Federal agencies and departments;”;

(6) in paragraph (7), as so redesignated, by striking “National High-Performance Computing Program” and inserting “networking and information technology research and development program”.

**SEC. 3. LARGE-SCALE RESEARCH IN AREAS OF NATIONAL IMPORTANCE.**

Title I of such Act (15 U.S.C. 5511) is amended by adding at the end the following new section:

**“SEC. 104. LARGE-SCALE RESEARCH IN AREAS OF NATIONAL IMPORTANCE.**

“(a) IN GENERAL.—The Program shall encourage agencies identified in section 101(a)(3)(B) to support large-scale, long-term, interdisciplinary research and development activities in networking and information technology directed toward application areas that have the potential for significant contributions to national economic competitiveness and for other significant societal benefits. Such activities, ranging from basic research to the demonstration of technical solutions, shall be designed to advance the development of research discoveries. The advisory committee established under section 101(b) shall make recommendations to the Program for candidate research and development areas for support under this section.

“(b) CHARACTERISTICS.—

“(1) IN GENERAL.—Research and development activities under this section shall—

“(A) include projects selected on the basis of applications for support through a competitive, merit-based process;

“(B) involve collaborations among researchers in institutions of higher education and industry, and may involve nonprofit research institutions and Federal laboratories, as appropriate;

“(C) when possible, leverage Federal investments through collaboration with related State initiatives; and

“(D) include a plan for fostering the transfer of research discoveries and the results of technology demonstration activities, including from institutions of higher education and Federal laboratories, to industry for commercial development.

“(2) COST-SHARING.—In selecting applications for support, the agencies shall give special consideration to projects that include cost sharing from non-Federal sources.

“(3) AGENCY COLLABORATION.—If 2 or more agencies identified in section 101(a)(3)(B), or other appropriate agencies, are working on large-scale research and development activities in the same area of national importance, then

such agencies shall strive to collaborate through joint solicitation and selection of applications for support and subsequent funding of projects.

“(4) **INTERDISCIPLINARY RESEARCH CENTERS.**—Research and development activities under this section may be supported through interdisciplinary research centers that are organized to investigate basic research questions and carry out technology demonstration activities in areas described in subsection (a). Research may be carried out through existing interdisciplinary centers, including those authorized under section 7024(b)(2) of the America COMPETES Act (Public Law 110-69; 42 U.S.C. 1862o-10).”

**SEC. 4. CYBER-PHYSICAL SYSTEMS.**

(a) **ADDITIONAL PROGRAM CHARACTERISTICS.**—Section 101(a)(1) of such Act (15 U.S.C. 5511(a)(1)) is amended—

(1) in subparagraph (H), by striking “and” after the semicolon;

(2) in subparagraph (I)—

(A) by striking “improving the security” and inserting “improving the security, reliability, and resilience”; and

(B) by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following new subparagraphs:

“(J) provide for increased understanding of the scientific principles of cyber-physical systems and improve the methods available for the design, development, and operation of cyber-physical systems that are characterized by high reliability, safety, and security; and

“(K) provide for research and development on human-computer interactions, visualization, and big data.”

(b) **WORKSHOP.**—Title I of such Act (15 U.S.C. 5511) is amended further by adding after section 104, as added by section 3 of this Act, the following new section:

**“SEC. 105. UNIVERSITY/INDUSTRY WORKSHOP.**

“(a) **ESTABLISHMENT.**—Not later than 1 year after the date of enactment of the Advancing America’s Networking and Information Technology Research and Development Act of 2013, the Director of the National Coordination Office shall convene a workshop, with participants from institutions of higher education, Federal laboratories, and industry, to explore mechanisms for carrying out collaborative research and development activities for cyber-physical systems, including the related technologies required to enable these systems, and to develop grand challenges in cyber-physical systems research and development.

“(b) **FUNCTIONS.**—The workshop participants shall—

“(1) develop options for models for research and development partnerships among institutions of higher education, Federal laboratories, and industry, including mechanisms for the support of research and development carried out under these partnerships;

“(2) develop options for grand challenges in cyber-physical systems research and development that would be addressed through such partnerships;

“(3) propose guidelines for assigning intellectual property rights and for the transfer of research results to the private sector; and

“(4) make recommendations for how Federal agencies participating in the Program can help support research and development partnerships in cyber-physical systems, including through existing or new grant programs.

“(c) **PARTICIPANTS.**—The Director of the National Coordination Office shall ensure that participants in the workshop are individuals with knowledge and expertise in cyber-physical systems and that participants represent a broad mix of relevant stakeholders, including academic and industry researchers, cyber-physical systems and technologies manufacturers, cyber-physical systems and technologies users, and, as appropriate, Federal government regulators.

“(d) **REPORT.**—Not later than 18 months after the date of enactment of the Advancing Amer-

ica’s Networking and Information Technology Research and Development Act of 2013, the Director of the National Coordination Office shall transmit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report describing the findings and recommendations resulting from the workshop required under this section.”

**SEC. 5. CLOUD COMPUTING SERVICES FOR RESEARCH.**

Title I of such Act (15 U.S.C. 5511) is amended further by adding after section 105, as added by section 4(b) of this Act, the following new section:

**“SEC. 106. CLOUD COMPUTING SERVICES FOR RESEARCH.**

“(a) **INTERAGENCY WORKING GROUP.**—Not later than 180 days after the date of enactment of the Advancing America’s Networking and Information Technology Research and Development Act of 2013, the Director of the National Coordination Office, working through the National Science and Technology Council, shall convene an interagency working group to examine—

“(1) the research and development needed—

“(A) to enhance the effectiveness and efficiency of cloud computing environments;

“(B) to increase the trustworthiness of cloud applications and infrastructure; and

“(C) to enhance the foundations of cloud architectures, programming models, and interoperability; and

“(2) how Federal science agencies can facilitate the use of cloud computing for federally funded science and engineering research, including—

“(A) making recommendations on changes in funding mechanisms, budget models, and policies needed to remove barriers to the adoption of cloud computing services for research and for data preservation and sharing; and

“(B) providing guidance to organizations and researchers on opportunities and guidelines for using cloud computing services for federally supported research and related activities.

“(b) **CONSULTATION.**—In carrying out the tasks in paragraphs (1) and (2) of subsection (a), the working group shall consult with academia, industry, Federal laboratories, and other relevant organizations and institutions, as appropriate.

“(c) **REPORT.**—Not later than 1 year after the date of enactment of the Advancing America’s Networking and Information Technology Research and Development Act of 2013, the Director of the National Coordination Office shall transmit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report describing the findings and any recommendations of the working group.

“(d) **TERMINATION.**—The interagency working group shall terminate upon transmittal of the report required under subsection (c).”

**SEC. 6. NATIONAL COORDINATION OFFICE.**

Section 102 of such Act (15 U.S.C. 5512) is amended to read as follows:

**“SEC. 102. NATIONAL COORDINATION OFFICE.**

“(a) **OFFICE.**—The Director shall continue a National Coordination Office with a Director and full-time staff.

“(b) **FUNCTIONS.**—The National Coordination Office shall—

“(1) provide technical and administrative support to—

“(A) the agencies participating in planning and implementing the Program, including such support as needed in the development of the strategic plan under section 101(e); and

“(B) the advisory committee established under section 101(b);

“(2) serve as the primary point of contact on Federal networking and information technology

activities for government organizations, academia, industry, professional societies, State computing and networking technology programs, interested citizen groups, and others to exchange technical and programmatic information;

“(3) solicit input and recommendations from a wide range of stakeholders during the development of each strategic plan required under section 101(e) through the convening of at least 1 workshop with invitees from academia, industry, Federal laboratories, and other relevant organizations and institutions;

“(4) conduct public outreach, including the dissemination of findings and recommendations of the advisory committee, as appropriate; and

“(5) promote access to and early application of the technologies, innovations, and expertise derived from Program activities to agency missions and systems across the Federal Government and to United States industry.

“(c) **SOURCE OF FUNDING.**—

“(1) **IN GENERAL.**—The operation of the National Coordination Office shall be supported by funds from each agency participating in the Program.

“(2) **SPECIFICATIONS.**—The portion of the total budget of such Office that is provided by each agency for each fiscal year shall be in the same proportion as each such agency’s share of the total budget for the Program for the previous fiscal year, as specified in the report required under section 101(a)(3).”

**SEC. 7. IMPROVING NETWORKING AND INFORMATION TECHNOLOGY EDUCATION.**

Section 201(a) of such Act (15 U.S.C. 5521(a)) is amended—

(1) by redesignating paragraphs (2) through (4) as paragraphs (3) through (5), respectively; and

(2) by inserting after paragraph (1) the following new paragraph:

“(2) the National Science Foundation shall use its existing programs, in collaboration with other agencies, as appropriate, to improve the teaching and learning of networking and information technology at all levels of education and to increase participation in networking and information technology fields, including by women and underrepresented minorities;”

**SEC. 8. CONFORMING AND TECHNICAL AMENDMENTS.**

(a) **SECTION 3.**—Section 3 of such Act (15 U.S.C. 5502) is amended—

(1) in the matter preceding paragraph (1), by striking “HIGH-PERFORMANCE COMPUTING” and inserting “NETWORKING AND INFORMATION TECHNOLOGY”;

(2) in paragraph (1)—

(A) in the matter preceding subparagraph (A), by striking “high-performance computing” and inserting “networking and information technology”;

(B) in subparagraphs (A), (F), and (G), by striking “high-performance computing” each place it appears and inserting “networking and information technology”; and

(C) in subparagraph (H), by striking “high-performance” and inserting “high-end”; and

(3) in paragraph (2)—

(A) by striking “high-performance computing and” and inserting “networking and information technology and”; and

(B) by striking “high-performance computing network” and inserting “networking and information technology”.

(b) **TITLE I.**—The heading of title I of such Act (15 U.S.C. 5511) is amended by striking “HIGH-PERFORMANCE COMPUTING” and inserting “NETWORKING AND INFORMATION TECHNOLOGY”.

(c) **SECTION 101.**—Section 101 of such Act (15 U.S.C. 5511) is amended—

(1) in the section heading, by striking “HIGH-PERFORMANCE COMPUTING” and inserting “NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT”;

(2) in subsection (a)—  
 (A) in the subsection heading, by striking “NATIONAL HIGH-PERFORMANCE COMPUTING” and inserting “NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT”;

(B) in paragraph (1) of such subsection—  
 (i) in the matter preceding subparagraph (A), by striking “National High-Performance Computing Program” and inserting “networking and information technology research and development program”;

(ii) in subparagraph (A), by striking “high-performance computing, including networking” and inserting “networking and information technology”;

(iii) in subparagraphs (B) and (G), by striking “high-performance” each place it appears and inserting “high-end”;

(iv) in subparagraph (C), by striking “high-performance computing and networking” and inserting “high-end computing, distributed, and networking”;

(C) in paragraph (2) of such subsection—

(i) in subparagraphs (A) and (C)—  
 (I) by striking “high-performance computing” each place it appears and inserting “networking and information technology”;

(II) by striking “development, networking,” each place it appears and inserting “development,”;

(ii) in subparagraphs (F) and (G), as redesignated by section 2(c)(1) of this Act, by striking “high-performance” each place it appears and inserting “high-end”;

(3) in subsection (b)—  
 (A) in paragraph (1), in the matter preceding subparagraph (A), by striking “high-performance computing” both places it appears and inserting “networking and information technology”;

(B) in paragraph (2), in the second sentence, by striking “2” and inserting “3”;

(4) in subsection (c)(1)(A), by striking “high-performance computing” and inserting “networking and information technology”.

(d) SECTION 201.—Section 201(a)(1) of such Act (15 U.S.C. 5521(a)(1)) is amended by striking “high-performance computing” and all that follows through “networking;” and inserting “networking and information research and development;”.

(e) SECTION 202.—Section 202(a) of such Act (15 U.S.C. 5522(a)) is amended by striking “high-performance computing” and inserting “networking and information technology”.

(f) SECTION 203.—Section 203(a) of such Act (15 U.S.C. 5523(a)(1)) is amended—

(1) in paragraph (1), by striking “high-performance computing and networking” and inserting “networking and information technology”;

(2) in paragraph (2)(A), by striking “high-performance” and inserting “high-end”.

(g) SECTION 204.—Section 204 of such Act (15 U.S.C. 5524) is amended—

(1) in subsection (a)(1)—  
 (A) in subparagraph (A), by striking “high-performance computing systems and networks” and inserting “networking and information technology systems and capabilities”;

(B) in subparagraph (B), by striking “interoperability of high-performance computing systems in networks and for common user interfaces to systems” and inserting “interoperability and usability of networking and information technology systems”;

(C) in subparagraph (C), by striking “high-performance computing” and inserting “networking and information technology”;

(2) in subsection (b)—  
 (A) in the heading, by striking “HIGH-PERFORMANCE COMPUTING AND NETWORK” and inserting “NETWORKING AND INFORMATION TECHNOLOGY”;

(B) by striking “sensitive”.

(h) SECTION 205.—Section 205(a) of such Act (15 U.S.C. 5525(a)) is amended by striking “computational” and inserting “networking and information technology”.

(i) SECTION 206.—Section 206(a) of such Act (15 U.S.C. 5526(a)) is amended by striking “computational research” and inserting “networking and information technology research”.

(j) SECTION 207.—Section 207(b) of such Act (15 U.S.C. 5527(b)) is amended by striking “high-performance computing” and inserting “networking and information technology”.

(k) SECTION 208.—Section 208 of such Act (15 U.S.C. 5528) is amended—

(1) in the section heading, by striking “HIGH-PERFORMANCE COMPUTING” and inserting “NETWORKING AND INFORMATION TECHNOLOGY”;

(2) in subsection (a)—  
 (A) in paragraph (1), by striking “High-performance computing and associated” and inserting “Networking and information”;

(B) in paragraph (2), by striking “high-performance computing” and inserting “networking and information technologies”;

(C) in paragraph (3), by striking “high-performance” and inserting “high-end”;

(D) in paragraph (4), by striking “high-performance computers and associated” and inserting “networking and information”;

(E) in paragraph (5), by striking “high-performance computing and associated” and inserting “networking and information”.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Texas (Mr. SMITH) and the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) each will control 20 minutes.

The Chair recognizes the gentleman from Texas.

GENERAL LEAVE

Mr. SMITH of Texas. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks and include extraneous material on H.R. 967, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Texas?

There was no objection.  
 Mr. SMITH of Texas. I yield myself such time as I may consume.

Mr. Speaker, I thank the gentlewoman from Wyoming (Mrs. LUMMIS) for her work on this bill. And I'm pleased to join the Science Committee's ranking member, Ms. JOHNSON, as a cosponsor of H.R. 967, the Advancing America's Networking and Information Technology Research and Development Act of 2013. This bill had broad bipartisan support in the last Congress, and I hope it will receive that same level of support today.

In the digital age, protecting our Nation's computer networking systems is more important than ever. This bill provides the coordinated research and development efforts necessary to improve cyber and data security nationwide. And better network security promotes U.S. competitiveness, enhances national security, and creates high-tech jobs.

The NITRD program is an extension of the High-Performance Computing Act of 1991. It represents the Federal Government's main R&D investment portfolio for unclassified networking, computing, software, cybersecurity, and related information technologies. Currently, 15 Federal agencies are contributing members of NITRD, with an

additional 20 or so participating in the program.

This bill serves as the mechanism for interagency coordination of R&D to ensure no duplication of research efforts among Federal agencies or the private sector. It rebalances R&D portfolios to focus less on short-term goals and more on large-scale, long-term interdisciplinary research.

While this bill does not authorize specific funding amounts, NITRD spending totals over \$3.7 billion annually. Over \$1.1 billion of this is from the National Science Foundation and over \$550 million is from the Department of Energy. The bill updates the underlying High-Performance Computing statute and codifies work undertaken by the National Coordination Office, housed within NSF, to oversee the 15 different agencies.

The NITRD program has eight strategic priorities for its research: cybersecurity; autonomous, robotic systems; high-end computing and applications; exascale computing; human-computer interaction; large-scale networking, workforce development; and software design and productivity.

Technologies that come from these research priorities are applied by the commercial sector and the government to protect and enhance emergency communications, the power grid, air traffic control networks, and national defense systems. Networking and information technology support and boost American competitiveness, enhance national security, and help strengthen the economy.

American job creators also recognize the importance of networking and information technology research and development. Many industry partners and stakeholders have written letters in support of this bill. They include the National Association of Manufacturers, TechAmerica, Computing Research Association, Institute of Electrical and Electronic Engineers-USA, Society for Industrial and Applied Mathematics, and the U.S. Public Policy Council of the Association for Computing Machinery.

Cybersecurity provisions in the bill include research necessary to detect, prevent, and recover from actions that can compromise or threaten computer-based systems.

I again thank my Science Committee colleague, Representative LUMMIS, the chairwoman of the Energy Subcommittee, for her initiative on this issue. I urge my colleagues to support the bill, and I reserve the balance of my time.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I yield myself such time as I may consume.

I rise in support of H.R. 967, the Advancing America's Networking and Information Technology Research and Development Act of 2013. H.R. 967 is a good, bipartisan bill which I was pleased to join Mrs. LUMMIS from Wyoming and Mr. HALL from Texas in introducing.

H.R. 967 is largely based on a 2009 House-passed bill that was introduced by then-Chairman Gordon and Ranking Member HALL. But the current bill also includes some updates from the 2009 bill that reflect changes to the network and information technology landscape as well as policy and management recommendations made by an outside panel of experts charged with evaluating the NITRD program.

The NITRD program, as it is known, involves a collaboration of 15 Federal research and development agencies, each contributing its own unique expertise and effort to ensure that we make most effective use of our Federal R&D resources and remain a leader in these fields. H.R. 967 requires that all 15 agencies come together to develop and periodically update a strategic plan for Federal investments in NIT R&D.

H.R. 967 calls for increased support for large-scale, long-term interdisciplinary research in NIT that will help us tackle national challenges such as improving the effectiveness and efficiency of our health care and energy delivery service systems. The bill also promotes partnerships between the Federal Government, academia, and industry to foster technology transfer.

In particular, I'd like to highlight H.R. 967's role in ensuring that the education of the future NIT workforce remains an important component of the NITRD program. I am hearing every day from small and large companies alike that the demand for skilled IT professionals is much higher than the supply. We hear this same message from university faculty, who tell us their computer science graduates are snatched up the moment they graduate, regardless of the health of the overall job market. This gap between supply and demand exists despite the fact that these jobs are among the highest-paying and the most stable jobs in our economy today.

It is imperative that we encourage more young Americans to pursue studies in the NIT fields. In particular, because of the stark gender and racial gaps we see in computer science programs, it is imperative that we encourage more young women and students of color to enter these fields. We simply won't be able to remain a global leader in these important fields without more than 50 percent of our Nation's brainpower sitting on the sidelines.

H.R. 967 doesn't go quite as far as I'd like it to go in addressing these education challenges, but it still sends an important message about the need to educate more of our students in our NIT fields and provides the necessary authority for the agencies to play an important and appropriate role here.

Finally, I would be remiss not to mention that the NITRD program serves as a coordinating and planning umbrella for all unclassified Federal cybersecurity R&D. Our committee addressed specific needs in cybersecurity R&D separately in H.R. 756; but in

doing so, we made sure that both the intellectual and financial resources for cybersecurity R&D are appropriately integrated with the rest of the Federal NIT portfolio. Information security R&D should not take place in its own silo. IT bears on all networking and information technologies.

□ 1330

In closing, NIT technologies cut across every sector of our economy and our national defense infrastructure. Our relatively modest 20-year investment in the NITRD program has contributed immeasurably to our economic and national security by enabling innovation and job creation in NIT and providing American students with the skills to fill these jobs. Let's reauthorize this program today and ensure that it remains strong.

I want to thank my friend Ms. Lummis for reintroducing our bipartisan bill once again in this Congress. I'd also like to thank my staff—and in particular Dahlia Sokolov—for their hard work on this bill.

I urge my colleagues to support H.R. 967, and I reserve the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, I yield 5 minutes to the gentlewoman from Wyoming (Ms. Lummis), who is the sponsor of this legislation and who also chairs the Energy Subcommittee, the Science, Space, and Technology Committee.

Mrs. LUMMIS. Mr. Speaker, I want to start out by thanking Chairman SMITH and Ranking Member JOHNSON for their support in bringing this bipartisan legislation to the floor.

I have found, since being on the Science Committee, that it is an acronym-rich environment. Mr. Speaker, I'm an acronym-challenged individual, so I'll be talking about the Network and Information Technology Research and Development program. In the future, I'm just going to call it "the program." It's the Federal Government's main research and development effort in unclassified network, computing, software, cybersecurity, and related information technologies.

Research conducted under this program has led to scientific growth and innovation in several areas, including visualization technologies in science, engineering, and medicine; computer-based education and training; and near-real-time weather forecasts, which is really important in my State of Wyoming.

Currently, 15 Federal agencies are contributing members to the program, and even more participate.

H.R. 967, the bill in front of us, does two things: it updates the High-Performance Computing Act of 1991, and it reauthorizes the program to advance our Nation's networking and information technology research and development.

It's the digital age, Mr. Speaker. Advances in networking and information technology continue to transform our

quality of life, our economy, U.S. competitiveness, and our national security. This bill provides the coordination necessary for the United States to respond to rapid changes in these areas, it encourages innovation, and it protects our economy.

My home State of Wyoming is best known for its stunning mountains and open spaces. But not long ago, Wyoming also became home to a supercomputing center. It houses one of the world's most powerful supercomputers. Mr. Speaker, it makes a mind-boggling number of computations every second. It's sponsored by the University Coalition on Atmospheric Research, which sponsors the National Center on Atmospheric Research, and so it's partially funded by the National Science Foundation, which is the taxpayers. So they help fund it. These computations enable world-leading research projects in areas including atmospheric and geosciences. So this bill facilitates work in these fields, ranging from research being conducted at the supercomputing center to big data—and I mean big data—and cybersecurity as well.

H.R. 967 implements several recommendations from the 2007 and 2010 President's Council of Advisors on Science and Technology assessments to improve government coordination and planning with input from policy and technical experts. It adjusts research and development portfolios so we're focusing less on short-term goals and more on really long-term goals.

Now, specific to cybersecurity, the program includes research and development to detect, prevent, and recover from actions that compromise or threaten computer and network-based systems. Now, you heard from Congressman MCCAUL just moments ago some of the specific examples of the real threats that are directed at computer networks. So reauthorizing this program is an important step.

I thank the chairman, and I urge my colleagues to support the bill.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I yield 5 minutes to the gentleman from Illinois (Mr. LIPINSKI).

Mr. LIPINSKI. Mr. Speaker, I thank the gentlelady for yielding and for her work on this legislation. I'd also like to thank Chairman SMITH and Chairwoman LUMMIS for all their work on this bill.

It's been nearly 4 years since we last reauthorized and updated the NITRD program, and it's time we get this job done. The House, again, on this bill has passed legislation since that time, but we need to get this done today here and get this through the Senate and to the President's desk.

The NITRD program evolved from the High Performance Computing Act of 1991, which funded the development of Mosaic—the first commercial Web browser which made the Internet user friendly and led to its explosion in the 1990s. This innovation was created by a team of programmers at the National

Center for Supercomputing Applications at the University of Illinois.

As a brief aside, I was just at the NCSA in Urbana-Champaign at the University of Illinois for the launch of the Blue Waters supercomputer, one of the most powerful supercomputers in the world, which is also there at the University of Illinois. But Marc Andreessen, one of the lead programmers on the original project that created Mosaic and the founder of Netscape, summed up the importance of Federal investment in this research by saying:

If it had been left to private industry, it wouldn't have happened, at least, not until years later.

Innovative breakthroughs like the Mosaic Web browser changed our everyday lives and established the United States as the world leader in networking and information technologies, and the Federal Government played an important role in that. But today we find ourselves in a world in which we can no longer take U.S. supremacy for granted. As we heard during committee consideration of the bill, China, Japan, Germany, and several other countries are increasing their investments in NIT R&D as well as their capacity to convert R&D into new commercial technologies. We must prioritize cutting-edge, large-scale R&D and effective technology transfer policies, focused on the most advanced areas of network and information technology, in order to preserve our lead in these sectors.

H.R. 967, the Advancing America's Network and Information Technology Research and Development Act, achieves these ends through the development of a coordinated Federal R&D investment strategy. This bill requires Federal agencies involved in the R&D program to develop 5-year plans specifying near- and long-term objectives and to assess and evaluate progress periodically to ensure we maintain U.S. leadership in these fields.

Mr. Speaker, this legislation will focus our scientific community towards the innovative, large-scale, and collaborative R&D we need to remain a leader in networking and information technologies. This is a good, bipartisan bill, and I urge my colleagues to support it.

Mr. SMITH of Texas. Mr. Speaker, I reserve the balance of my time.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I am very supportive of the bill, and I yield back the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, I yield back the balance of my time as well.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Texas (Mr. SMITH) that the House suspend the rules and pass the bill, H.R. 967, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. SMITH of Texas. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, further proceedings on this motion will be postponed.

ANNOUNCEMENT BY THE SPEAKER PRO TEMPORE

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, proceedings will resume on motions to suspend the rules previously postponed.

Votes will be taken in the following order:

H.R. 1163, by the yeas and nays;

H.R. 756, by the yeas and nays;

H.R. 967, by the yeas and nays.

The first electronic vote will be conducted as a 15-minute vote. Remaining electronic votes will be conducted as 5-minute votes.

FEDERAL INFORMATION SECURITY AMENDMENTS ACT OF 2013

The SPEAKER pro tempore. The unfinished business is the vote on the motion to suspend the rules and pass the bill (H.R. 1163) to amend chapter 35 of title 44, United States Code, to revise requirements relating to Federal information security, and for other purposes, on which the yeas and nays were ordered.

The Clerk read the title of the bill.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from California (Mr. ISSA) that the House suspend the rules and pass the bill.

The vote was taken by electronic device, and there were—yeas 416, nays 0, not voting 16, as follows:

[Roll No. 106]

YEAS—416

Table listing names of members of the House of Representatives who voted 'Yeas' on H.R. 1163. The names are arranged in three columns: Aderholt, Bucshon, Costa; Alexander, Burgess, Cotton; Amash, Bustos, Courtney; Amodei, Butterfield, Cramer; Andrews, Calvert, Crawford; Bachus, Camp, Crenshaw; Barber, Campbell, Crowley; Barletta, Cantor, Cuellar; Barr, Capito, Cummings; Barrow (GA), Capps, Daines; Barton, Capuano, Davis (CA); Bass, Cárdenas, Davis, Danny; Beatty, Carney, Davis, Rodney; Becerra, Carson (IN), DeFazio; Benishek, Carter, DeGette; Bentivolio, Cartwright, Delaney; Bera (CA), Cassidy, DeLauro; Bilirakis, Castor (FL), DelBene; Bishop (GA), Castro (TX), Denham; Bishop (NY), Chabot, Dent; Bishop (UT), Chaffetz, DeSantis; Black, Chu, DesJarlais; Blumenauer, Cicilline, Deutch; Bonamici, Clarke, Diaz-Balart; Bonner, Cleaver, Dingell; Boustany, Clyburn, Doggett; Brady (PA), Coble, Doyle; Brady (TX), Coffman, Duckworth; Braley (IA), Cohen, Duffy; Bridenstine, Cole, Duncan (SC); Brooks (AL), Collins (GA), Duncan (TN); Brooks (IN), Collins (NY), Edwards; Broun (GA), Conaway, Ellison; Brown (FL), Connolly, Ellmers; Brownley (CA), Cook, Engel; Buchanan, Cooper, Enyart.

Table listing names of members of the House of Representatives who voted 'Nays' on H.R. 1163. The names are arranged in three columns: Eshoo, Lance, Rahall; Esty, Langevin, Rangel; Farenthold, Lankford, Reed; Farr, Larsen (WA), Reichert; Fattah, Larson (CT), Renacci; Fitzpatrick, Latham, Ribble; Fleischmann, Latta, Rice (SC); Fleming, Lee (CA), Richmond; Flores, Levin, Rigell; Forbes, Lewis, Roby; Fortenberry, Lipinski, Roe (TN); Foster, LoBiondo, Rogers (AL); Foxx, Loeb sack, Rogers (KY); Frankel (FL), Lofgren, Rogers (MI); Franks (AZ), Long, Rohrabacher; Frelinghuysen, Lowenthal, Rokita; Fudge, Lowey, Rooney; Gabbard, Lucas, Ros-Lehtinen; Gallego, Luetskemeyer, Ross; Garamendi, Lujan Grisham, Rothfus; Garcia, (NM), Roybal-Allard; Gardner, Luján, Ben Ray, Royce; Garrett, (NM), Ruiz; Gerlach, Lummis, Runyan; Gibbs, Maffei, Ruppertsberger; Gibson, Maloney, Rush; Gingrey (GA), Carolyn, Ryan (OH); Gohmert, Maloney, Sean, Ryan (WI); Goodlatte, Marchant, Salmon; Gosar, Marino, Sánchez, Linda; Gowdy, Massie, T.; Granger, Matheson, Sanchez, Loretta; Graves (GA), Matsui, Sarbanes; Graves (MO), McCarthy (CA), Scalise; Grayson, McCarthy (NY), Schakowsky; Green, Al, McCaul, Schiff; Green, Gene, McClintock, Schneider; Griffin (AR), McCollum, Schock; Griffith (VA), McDermott, Schrader; Grijalva, McGovern, Schwartz; Grimm, McHenry, Schweikert; Guthrie, McIntyre, Scott (VA); Gutierrez, McKinley, Scott, Austin; Hahn, McMorris, Scott, David; Hall, Rodgers, Sensenbrenner; Hanabusa, McNerney, Serrano; Hanna, Meadows, Sessions; Harper, Meehan, Sewell (AL); Harris, Meeks, Shea-Porter; Hartzler, Messer, Sherman; Hastings (FL), Mica, Shimkus; Hastings (WA), Michaud, Shuster; Heck (NV), Miller (FL), Simpson; Heck (WA), Miller (MI), Sinema; Hensarling, Miller, George, Sires; Herrera Beutler, Moore, Slaughter; Higgins, Moran, Smith (NE); Himes, Mullin, Smith (NJ); Hinojosa, Mulvaney, Smith (TX); Holt, Murphy (FL), Smith (WA); Honda, Murphy (PA), Southerland; Horsford, Nadler, Speier; Hoyer, Napolitano, Stewart; Hudson, Neal, Stivers; Huelskamp, Negrete McLeod, Stockman; Huffman, Neugebauer, Stutzman; Huizenga (MI), Noem, Swalwell (CA); Hultgren, Nolan, Takano; Hunter, Nugent, Terry; Hurt, Nunes, Thompson (CA); Israel, Nunnelee, Thompson (MS); Issa, O'Rourke, Thompson (PA); Jackson Lee, Olson, Thornberry; Jeffries, Owens, Tiberi; Jenkins, Palazzo, Tierney; Johnson (GA), Pallone, Tipton; Johnson (OH), Pascrell, Titus; Johnson, E. B., Pastor (AZ), Tonko; Johnson, Sam, Paulsen, Tsongas; Jones, Pearce, Turner; Jordan, Pelosi, Upton; Joyce, Perlmutter, Valadao; Kaptur, Perry, Van Hollen; Keating, Peters (CA), Vargas; Kelly (IL), Peters (MI), Veasey; Kelly (PA), Peterson, Vela; Kildee, Petri, Velázquez; Kilmer, Pingree (ME), Visclosky; Kind, Pittenger, Wagner; King (IA), Pitts, Walberg; King (NY), Pocan, Walden; Kingston, Poe (TX), Walorski; Kinzinger (IL), Polis, Walz; Kirkpatrick, Pompeo, Wasserman; Kline, Posey, Schultz; Kuster, Price (GA), Waters; Labrador, Price (NC), Watt; LaMalfa, Quigley, Waxman; Lamborn, Radel, Weber (TX).