

“(A) on the findings of the Director with respect to the assessment carried out under paragraph (1); and

“(B) with recommendations for effective methods for measuring the cybersecurity proficiency of learners.”

SUBCHAPTER III—CYBERSECURITY AWARENESS AND PREPAREDNESS

Editorial Notes

CODIFICATION

This subchapter was comprised of title IV of Pub. L. 113-274, Dec. 18, 2014, 128 Stat. 2985, prior to its repeal by Pub. L. 116-283, div. H, title XCIV, §9401(g)(2), Jan. 1, 2021, 134 Stat. 4809.

§ 7451. Transferred

Editorial Notes

CODIFICATION

Section, Pub. L. 113-274, title IV, §401, Dec. 18, 2014, 128 Stat. 2985, which related to national cybersecurity awareness and education program, was renumbered §303 of title III of Pub. L. 113-274, by Pub. L. 116-283, div. H, title XCIV, §9401(g)(1), Jan. 1, 2021, 134 Stat. 4809, and transferred to section 7443 of this title.

SUBCHAPTER IV—ADVANCEMENT OF CYBERSECURITY TECHNICAL STANDARDS

§ 7461. Definitions

In this subchapter:

(1) Director

The term “Director” means the Director of the National Institute of Standards and Technology.

(2) Institute

The term “Institute” means the National Institute of Standards and Technology.

(Pub. L. 113-274, title V, §501, Dec. 18, 2014, 128 Stat. 2986.)

§ 7462. International cybersecurity technical standards

(a) In general

The Director, in coordination with appropriate Federal authorities, shall—

(1) as appropriate, ensure coordination of Federal agencies engaged in the development of international technical standards related to information system security; and

(2) not later than 1 year after December 18, 2014, develop and transmit to Congress a plan for ensuring such Federal agency coordination.

(b) Consultation with the private sector

In carrying out the activities specified in subsection (a)(1), the Director shall ensure consultation with appropriate private sector stakeholders.

(Pub. L. 113-274, title V, §502, Dec. 18, 2014, 128 Stat. 2986.)

§ 7463. Cloud computing strategy

(a) In general

The Director, in coordination with the Office of Management and Budget, in collaboration

with the Federal Chief Information Officers Council, and in consultation with other relevant Federal agencies and stakeholders from the private sector, shall continue to develop and encourage the implementation of a comprehensive strategy for the use and adoption of cloud computing services by the Federal Government.

(b) Activities

In carrying out the strategy described under subsection (a), the Director shall give consideration to activities that—

(1) accelerate the development, in collaboration with the private sector, of standards that address interoperability and portability of cloud computing services;

(2) advance the development of conformance testing performed by the private sector in support of cloud computing standardization; and

(3) support, in coordination with the Office of Management and Budget, and in consultation with the private sector, the development of appropriate security frameworks and reference materials, and the identification of best practices, for use by Federal agencies to address security and privacy requirements to enable the use and adoption of cloud computing services, including activities—

(A) to ensure the physical security of cloud computing data centers and the data stored in such centers;

(B) to ensure secure access to the data stored in cloud computing data centers;

(C) to develop security standards as required under section 278g-3 of this title; and

(D) to support the development of the automation of continuous monitoring systems.

(Pub. L. 113-274, title V, §503, Dec. 18, 2014, 128 Stat. 2986.)

§ 7464. Identity management research and development

The Director shall continue a program to support the development of voluntary and cost-effective technical standards, metrology, testbeds, and conformance criteria, taking into account appropriate user concerns—

(1) to improve interoperability among identity management technologies;

(2) to strengthen authentication methods of identity management systems;

(3) to improve privacy protection in identity management systems, including health information technology systems, through authentication and security protocols; and

(4) to improve the usability of identity management systems.

(Pub. L. 113-274, title V, §504, Dec. 18, 2014, 128 Stat. 2987.)

CHAPTER 101—NANOTECHNOLOGY RESEARCH AND DEVELOPMENT

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§ 7501. National Nanotechnology Program

(a) National Nanotechnology Program

The President shall implement a National Nanotechnology Program. Through appropriate agencies, councils, and the National Nanotechnology Coordination Office established in section 7502 of this title, the Program shall—

(1) establish the goals, priorities, and metrics for evaluation for Federal nanotechnology research, development, and other activities;

(2) invest in Federal research and development programs in nanotechnology and related sciences to achieve those goals; and

(3) provide for interagency coordination of Federal nanotechnology research, development, and other activities undertaken pursuant to the Program.

(b) Program activities

The activities of the Program shall include—

(1) developing a fundamental understanding of matter that enables control and manipulation at the nanoscale;

(2) providing grants to individual investigators and interdisciplinary teams of investigators;

(3) establishing a network of advanced technology user facilities and centers;

(4) establishing, on a merit-reviewed and competitive basis, interdisciplinary nanotechnology research centers, which shall—

(A) interact and collaborate to foster the exchange of technical information and best practices;

(B) involve academic institutions or national laboratories and other partners, which may include States and industry;

(C) make use of existing expertise in nanotechnology in their regions and nationally;

(D) make use of ongoing research and development at the micrometer scale to support their work in nanotechnology; and

(E) to the greatest extent possible, be established in geographically diverse locations, encourage the participation of Historically Black Colleges and Universities that are part B institutions as defined in section 1061(2) of title 20 and minority institutions (as defined in section 1067k(3) of title 20), and include institutions located in States participating in the Experimental Program to Stimulate Competitive Research (EPSCoR);

(5) ensuring United States global leadership in the development and application of nanotechnology;

(6) advancing the United States productivity and industrial competitiveness through stable, consistent, and coordinated investments in long-term scientific and engineering research in nanotechnology;

(7) accelerating the deployment and application of nanotechnology research and development in the private sector, including startup companies;

(8) encouraging interdisciplinary research, and ensuring that processes for solicitation and evaluation of proposals under the Program encourage interdisciplinary projects and collaborations;

(9) providing effective education and training for researchers and professionals skilled in the interdisciplinary perspectives necessary for nanotechnology so that a true interdisciplinary research culture for nanoscale science, engineering, and technology can emerge;

(10) ensuring that ethical, legal, environmental, and other appropriate societal concerns, including the potential use of nanotechnology in enhancing human intelligence and in developing artificial intelligence which exceeds human capacity, are considered during the development of nanotechnology by—

(A) establishing a research program to identify ethical, legal, environmental, and other appropriate societal concerns related to nanotechnology, and ensuring that the results of such research are widely disseminated;

(B) requiring that interdisciplinary nanotechnology research centers established under paragraph (4) include activities that address societal, ethical, and environmental concerns;

(C) insofar as possible, integrating research on societal, ethical, and environmental concerns with nanotechnology research and development, and ensuring that advances in nanotechnology bring about improvements in quality of life for all Americans; and

(D) providing, through the National Nanotechnology Coordination Office established in section 7502 of this title, for public input and outreach to be integrated into the Program by the convening of regular and ongoing public discussions, through mechanisms such as citizens' panels, consensus conferences, and educational events, as appropriate; and

(11) encouraging research on nanotechnology advances that utilize existing processes and technologies.

(c) Program management

The National Science and Technology Council shall oversee the planning, management, and coordination of the Program. The Council, itself or through an appropriate subgroup it designates or establishes, shall—

(1) establish goals and priorities for the Program, based on national needs for a set of broad applications of nanotechnology;

(2) establish program component areas, with specific priorities and technical goals, that reflect the goals and priorities established for the Program;

(3) oversee interagency coordination of the Program, including with the activities of the Defense Nanotechnology Research and Development Program established under section 246 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314) and the National Institutes of Health;