(2) 1 or more years of service

If a circumstance described in subparagraph (D) or (E) of subsection (g)(2) occurs after the completion of 1 or more years of a post-award employment obligation under this section, the total amount of scholarship awards received by the individual under this section, reduced by the ratio of the number of years of service completed divided by the number of years of service required, shall—

(A) be repaid; or

(B) be treated as a loan to be repaid in accordance with subsection (j).

(j) Repayments

A loan described subsection (i) shall-

- (1) be treated as a Federal Direct Unsubsidized Stafford Loan under part D of title IV of the Higher Education Act of 1965 (20 U.S.C. 1087a et seq.); and
- (2) be subject to repayment, together with interest thereon accruing from the date of the scholarship award, in accordance with terms and conditions specified by the Director of the National Science Foundation (in consultation with the Secretary of Education) in regulations promulgated to carry out this subsection.

(k) Collection of repayment

(1) In general

In the event that a scholarship recipient is required to repay the scholarship award under this section, the qualified institution of higher education providing the scholarship shall—

- (A) determine the repayment amounts and notify the recipient and the Director of the National Science Foundation of the amounts owed; and
- (B) collect the repayment amounts within a period of time as determined by the Director of the National Science Foundation, or the repayment amounts shall be treated as a loan in accordance with subsection (j).

(2) Returned to Treasury

Except as provided in paragraph (3), any repayment under this subsection shall be returned to the Treasury of the United States.

(3) Retain percentage

A qualified institution of higher education may retain a percentage of any repayment the institution collects under this subsection to defray administrative costs associated with the collection. The Director of the National Science Foundation shall establish a single, fixed percentage that will apply to all eligible entities.

(l) Exceptions

The Director of the National Science Foundation may provide for the partial or total waiver or suspension of any service or payment obligation by an individual under this section whenever compliance by the individual with the obligation is impossible or would involve extreme hardship to the individual, or if enforcement of such obligation with respect to the individual would be unconscionable.

(m) Evaluation and report

The Director of the National Science Foundation shall evaluate and report periodically to

Congress on the success of recruiting individuals for scholarships under this section and on hiring and retaining those individuals in the public sector workforce.

(Pub. L. 113–274, title III, §302, Dec. 18, 2014, 128 Stat. 2982.)

REFERENCES IN TEXT

The Higher Education Act of 1965, referred to in subsec. (j)(1), is Pub. L. 89–329, Nov. 8, 1965, 79 Stat. 1219. Part D of title IV of the Act is classified to part C (§1087a et seq.) of subchapter IV of chapter 28 of Title 20, Education. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of Title 20 and Tables.

SUBCHAPTER III—CYBERSECURITY AWARENESS AND PREPAREDNESS

§7451. National cybersecurity awareness and education program

(a) National cybersecurity awareness and education program

The Director of the National Institute of Standards and Technology (referred to in this section as the "Director"), in consultation with appropriate Federal agencies, industry, educational institutions, National Laboratories, the Networking and Information Technology Research and Development program, and other organizations shall continue to coordinate a national cybersecurity awareness and education program, that includes activities such as—

- (1) the widespread dissemination of cybersecurity technical standards and best practices identified by the Director;
- (2) efforts to make cybersecurity best practices usable by individuals, small to mediumsized businesses, educational institutions, and State, local, and tribal governments;
- (3) increasing public awareness of cybersecurity, cyber safety, and cyber ethics;
- (4) increasing the understanding of State, local, and tribal governments, institutions of higher education, and private sector entities of—
 - (A) the benefits of ensuring effective risk management of information technology versus the costs of failure to do so; and
 - (B) the methods to mitigate and remediate vulnerabilities;
- (5) supporting formal cybersecurity education programs at all education levels to prepare and improve a skilled cybersecurity and computer science workforce for the private sector and Federal, State, local, and tribal government; and
- (6) promoting initiatives to evaluate and forecast future cybersecurity workforce needs of the Federal Government and develop strategies for recruitment, training, and retention.

(b) Considerations

In carrying out the authority described in subsection (a), the Director, in consultation with appropriate Federal agencies, shall leverage existing programs designed to inform the public of safety and security of products or services, including self-certifications and independently verified assessments regarding the quantification and valuation of information security risk.

(c) Strategic plan

The Director, in cooperation with relevant Federal agencies and other stakeholders, shall build upon programs and plans in effect as of December 18, 2014, to develop and implement a strategic plan to guide Federal programs and activities in support of the national cybersecurity awareness and education program under subsection (a).

(d) Report

Not later than 1 year after December 18, 2014, and every 5 years thereafter, the Director shall transmit the strategic plan under subsection (c) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(Pub. L. 113–274, title IV, §401, Dec. 18, 2014, 128 Stat. 2985.)

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, $\S501$, 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 stake-

(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

Sec. 7501. National Nanotechnology Program. 7502. 7503. Program coordination. Advisory Panel. Triennial external review of the National 7504. Nanotechnology Program. 7505. Authorization of appropriations. 7506. Department of Commerce programs. Department of Energy programs. 7507. Additional centers. 7508. Definitions.

§7501. National Nanotechnology Program

(a) National Nanotechnology Program

The President shall implement a National Nanotechnology Program. Through appropriate