through existing programs and activities, shall support research that will lead to the development of a scientific foundation for the field of cybersecurity, including research that increases understanding of the underlying principles of securing complex networked systems, enables repeatable experimentation, and creates quantifiable security metrics.

(Pub. L. 113-274, title II, §201, Dec. 18, 2014, 128 Stat. 2974.)

## CODIFICATION

Section is comprised of section 201 of Pub. L. 113-274. Subsec. (e) of section 201 of Pub. L. 113-274 amended section 7403 of this title.

## SUBCHAPTER II—EDUCATION AND WORKFORCE DEVELOPMENT

## §7441. Cybersecurity competitions and challenges

## (a) In general

The Secretary of Commerce, Director of the National Science Foundation, and Secretary of Homeland Security, in consultation with the Director of the Office of Personnel Management, shall—

(1) support competitions and challenges under section 3719 of this title (as amended by section 105 of the America COMPETES Reauthorization Act of 2010 (124 Stat. 3989)) or any other provision of law, as appropriate—

(A) to identify, develop, and recruit talented individuals to perform duties relating to the security of information technology in Federal, State, local, and tribal government agencies, and the private sector; or

(B) to stimulate innovation in basic and applied cybersecurity research, technology development, and prototype demonstration that has the potential for application to the information technology activities of the Federal Government; and

(2) ensure the effective operation of the competitions and challenges under this section.

## (b) Participation

Participants in the competitions and challenges under subsection (a)(1) may include—

(1) students enrolled in grades 9 through 12;

(2) students enrolled in a postsecondary program of study leading to a baccalaureate degree at an institution of higher education;

(3) students enrolled in a postbaccalaureate program of study at an institution of higher education;

(4) institutions of higher education and research institutions;

(5) veterans; and

(6) other groups or individuals that the Secretary of Commerce, Director of the National Science Foundation, and Secretary of Homeland Security determine appropriate.

#### (c) Affiliation and cooperative agreements

Competitions and challenges under this section may be carried out through affiliation and cooperative agreements with—

(1) Federal agencies;

(2) regional, State, or school programs supporting the development of cyber professionals; (3) State, local, and tribal governments; or (4) other private sector organizations.

#### (d) Areas of skill

Competitions and challenges under subsection (a)(1)(A) shall be designed to identify, develop,

and recruit exceptional talent relating to-(1) ethical hacking:

(2) penetration testing;

(3) vulnerability assessment;

(4) continuity of system operations;

4) continuity of system operations

(5) security in design;(6) cyber forensics;

(7) offensive and defensive cyber operations; and

(8) other areas the Secretary of Commerce, Director of the National Science Foundation, and Secretary of Homeland Security consider necessary to fulfill the cybersecurity mission.

## (e) Topics

In selecting topics for competitions and challenges under subsection (a)(1), the Secretary of Commerce, Director of the National Science Foundation, and Secretary of Homeland Security—

(1) shall consult widely both within and outside the Federal Government; and

(2) may empanel advisory committees.

## (f) Internships

The Director of the Office of Personnel Management may support, as appropriate, internships or other work experience in the Federal Government to the winners of the competitions and challenges under this section.

(Pub. L. 113-274, title III, §301, Dec. 18, 2014, 128 Stat. 2981.)

## References in Text

Section 3719 of this title (as amended by section 105 of the America COMPETES Reauthorization Act of 2010 (124 Stat. 3989)), referred to in subsec. (a)(1), probably means section 3719 of this title as enacted by section 105(a) of Pub. L. 111-358.

## §7442. Federal Cyber Scholarship-for-Service Program

# (a) In general

The Director of the National Science Foundation, in coordination with the Director of the Office of Personnel Management and Secretary of Homeland Security, shall continue a Federal cyber scholarship-for-service program to recruit and train the next generation of information technology professionals, industrial control system security professionals, and security managers to meet the needs of the cybersecurity mission for Federal, State, local, and tribal governments.

#### (b) Program description and components

The Federal Cyber Scholarship-for-Service Program shall—

(1) provide scholarships through qualified institutions of higher education, including community colleges, to students who are enrolled in programs of study at institutions of higher education leading to degrees or specialized program certifications in the cybersecurity field;

(2) provide the scholarship recipients with summer internship opportunities or other