velopment must be significantly increased to—

 (A) improve vulnerability assessment and technological and systems solutions;

 (B) expand and improve the pool of information security professionals, including researchers, in the United States workforce; and

 (C) better coordinate information sharing and collaboration among industry, government, and academic research projects.

(6) While African-Americans, Hispanics, and Native Americans constitute 25 percent of the total United States workforce and 30 percent of the college-age population, members of these minorities comprise less than 7 percent of the United States computer and information science workforce.

(Pub. L. 107–305, §2, Nov. 27, 2002, 116 Stat. 2367.)

SHORT TITLE

Pub. L. 107–305, §1, Nov. 27, 2002, 116 Stat. 2367, provided that: ''This Act [enacting this chapter and section 278h of this title, amending sections 278g–3, 1511e, and 7301 of this title and section 1862 of Title 42, The Public Health and Welfare, and redesignating section 278h of this title as 278q of this title] may be cited as the 'Cyber Security Research and Development Act'.''

§ 7402. Definitions

In this chapter:

(1) Director

The term ''Director'' means the Director of the National Science Foundation.

(2) Institution of higher education

The term ''institution of higher education'' has the meaning given that term in section 1001(a) of title 20.

(Pub. L. 107–305, §3, Nov. 27, 2002, 116 Stat. 2368.)

REFERENCES IN TEXT

This chapter, referred to in text, was in the original ''this Act'', meaning Pub. L. 107–305, Nov. 27, 2002, 116 Stat. 2367, known as the Cyber Security Research and Development Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

§ 7403. National Science Foundation research

(a) Computer and network security research grants

(1) In general

The Director shall award grants for basic research on innovative approaches to the structure of computer and network hardware and software that are aimed at enhancing computer security. Research areas may include—

 (A) authentication, cryptography, and other secure data communications technology;

 (B) computer forensics and intrusion detection;

 (C) reliability of computer and network applications, middleware, operating systems, control systems, and communications infrastructure;

 (D) privacy and confidentiality;

 (E) network security architecture, including tools for security administration and analysis;

 (F) emerging threats;

 (G) vulnerability assessments and techniques for quantifying risk;

 (H) remote access and wireless security; and

 (I) enhancement of law enforcement ability to detect, investigate, and prosecute cyber-crimes, including those that involve piracy of intellectual property.

(2) Merit review; competition

Grants shall be awarded under this section on a merit-reviewed competitive basis.

(3) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation to carry out this subsection—

 (A) $35,000,000 for fiscal year 2003;

 (B) $40,000,000 for fiscal year 2004;

 (C) $46,000,000 for fiscal year 2005;

 (D) $52,000,000 for fiscal year 2006; and

 (E) $60,000,000 for fiscal year 2007.

(b) Computer and network security research centers

(1) In general

The Director shall award multiyear grants, subject to the availability of appropriations, to institutions of higher education, nonprofit research institutions, or consortia thereof to establish multidisciplinary Centers for Computer and Network Security Research. Institutions of higher education, nonprofit research institutions, or consortia thereof receiving such grants may partner with 1 or more government laboratories or for-profit institutions, or other institutions of higher education or nonprofit research institutions.

(2) Merit review; competition

Grants shall be awarded under this subsection on a merit-reviewed competitive basis.

(3) Purpose

The purpose of the Centers shall be to generate innovative approaches to computer and network security by conducting cutting-edge, multidisciplinary research in computer and network security, including the research areas described in subsection (a)(1) of this section.

(4) Applications

An institution of higher education, nonprofit research institution, or consortia thereof seeking funding under this subsection shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum, a description of—

 (A) the research projects that will be undertaken by the Center and the contributions of each of the participating entities;

 (B) how the Center will promote active collaboration among scientists and engineers from different disciplines, such as computer scientists, engineers, mathematicians, and social science researchers;

 (C) how the Center will contribute to increasing the number and quality of computer and network security researchers and other professionals, including individuals