

outcomes of the Federal departments and agencies described in subsection (b), the Subcommittee shall—

- (1) not later than 1 year after December 21, 2018, develop a 5-year strategic plan;
- (2) not later than 6 years after December 21, 2018, develop a subsequent 5-year strategic plan; and
- (3) periodically update each plan, as necessary.

(f) Submittal to Congress

The chairpersons of the Subcommittee shall submit to the President, the Advisory Committee, and the appropriate committees of Congress each strategic plan developed under subsection (e) and any updates thereto.

(g) Annual program budget report

(1) In general

Each year, concurrent with the annual budget request submitted by the President to Congress under section 1105 of title 31, the chairpersons of the Subcommittee shall submit to the appropriate committees of Congress and such other committees of Congress as the chairpersons deem appropriate a report on the budget for the Program.

(2) Contents

Each report submitted under paragraph (1) shall include the following:

- (A) The budget of the Program for the current fiscal year, for each Federal department and agency described in subsection (b).
- (B) The budget proposed for the Program for the next fiscal year, for each Federal department and agency described in subsection (b).
- (C) An analysis of the progress made toward achieving the goals and priorities established under subsection (d)(2).

(Pub. L. 115-368, title I, §103, Dec. 21, 2018, 132 Stat. 5095.)

TERMINATION OF SECTION

For termination of section, see section 8815 of this title.

§ 8814. National Quantum Initiative Advisory Committee

(a) In general

The President shall establish a National Quantum Initiative Advisory Committee.

(b) Qualifications

The Advisory Committee shall consist of members, appointed by the President, who are representative of industry, universities, and Federal laboratories and are qualified to provide advice and information on quantum information science and technology research, development, demonstrations, standards, education, technology transfer, commercial application, or national security and economic concerns.

(c) Membership consideration

In selecting the members of the Advisory Committee, the President may seek and give consideration to recommendations from the Congress, industry, the scientific community

(including the National Academy of Sciences, scientific professional societies, and universities), the defense community, and other appropriate organizations.

(d) Duties

(1) In general

The Advisory Committee shall advise the President and the Subcommittee and make recommendations for the President to consider when reviewing and revising the Program.

(2) Independent assessments

The Advisory Committee shall conduct periodic, independent assessments of—

- (A) any trends or developments in quantum information science and technology;
- (B) the progress made in implementing the Program;
- (C) the management, coordination, implementation, and activities of the Program;
- (D) whether the Program activities and the goals and priorities established under section 8813(d)(2) of this title are helping to maintain United States leadership in quantum information science and technology;
- (E) whether a need exists to revise the Program;
- (F) whether opportunities exist for international cooperation with strategic allies on research and development in, and the development of open standards for, quantum information science and technology; and
- (G) whether national security, societal, economic, legal, and workforce concerns are adequately addressed by the Program.

(e) Reports

Not later than 180 days after December 21, 2018, and at least biennially thereafter, the Advisory Committee shall submit to the President, the appropriate committees of Congress, and such other committees of Congress as the Advisory Committee deems appropriate a report on the findings of the independent assessment under subsection (d), including any recommendations for improvements to the Program.

(f) Travel expenses of non-Federal members

Non-Federal members of the Advisory Committee, while attending meetings of the Advisory Committee or while otherwise serving at the request of the head of the Advisory Committee away from their homes or regular places of business, may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, for individuals in the Government serving without pay. Nothing in this subsection shall be construed to prohibit members of the Advisory Committee who are officers or employees of the United States from being allowed travel expenses, including per diem in lieu of subsistence, in accordance with existing law.

(g) FACA exemption

The Advisory Committee shall be exempt from section 14 of the Federal Advisory Committee Act (5 U.S.C. App.).

(Pub. L. 115-368, title I, §104, Dec. 21, 2018, 132 Stat. 5096.)

TERMINATION OF SECTION

For termination of section, see section 8815 of this title.

REFERENCES IN TEXT

Section 14 of the Federal Advisory Committee Act, referred to in subsec. (g), is section 14 of Pub. L. 92-463, which is set out in the Appendix to Title 5, Government Organization and Employees.

§ 8815. Sunset**(a) In general**

Except as provided in subsection (b), the authority to carry out sections 8811, 8812, 8813, and 8814 of this title shall terminate on the date that is 11 years after December 21, 2018.

(b) Extension

The President may continue the activities under such sections if the President determines that such activities are necessary to meet national economic or national security needs.

(Pub. L. 115-368, title I, §105, Dec. 21, 2018, 132 Stat. 5097.)

SUBCHAPTER II—NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY QUANTUM ACTIVITIES

§ 8831. National Institute of Standards and Technology activities and quantum consortium**(a) National Institute of Standards and Technology activities**

As part of the Program, the Director of the National Institute of Standards and Technology—

(1) shall continue to support and expand basic and applied quantum information science and technology research and development of measurement and standards infrastructure necessary to advance commercial development of quantum applications;

(2) shall use the existing programs of the National Institute of Standards and Technology, in collaboration with other Federal departments and agencies, as appropriate, to train scientists in quantum information science and technology to increase participation in the quantum fields;

(3) shall establish or expand collaborative ventures or consortia with other public or private sector entities, including industry, universities, and Federal laboratories for the purpose of advancing the field of quantum information science and engineering; and

(4) may enter into and perform such contracts, including cooperative research and development arrangements and grants and cooperative agreements or other transactions, as may be necessary in the conduct of the work of the National Institute of Standards and Technology and on such terms as the Director considers appropriate, in furtherance of the purposes of this chapter.

(b) Quantum consortium**(1) In general**

Not later than 1 year after December 21, 2018, the Director of the National Institute of Standards and Technology shall convene a

consortium of stakeholders to identify the future measurement, standards, cybersecurity, and other appropriate needs for supporting the development of a robust quantum information science and technology industry in the United States.

(2) Goals

The goals of the consortium shall be—

(A) to assess the current research on the needs identified in paragraph (1);

(B) to identify any gaps in the research necessary to meet the needs identified in paragraph (1); and

(C) to provide recommendations on how the National Institute of Standards and Technology and the Program can address the gaps in the necessary research identified in subparagraph (B).

(3) Report to Congress

Not later than 2 years after December 21, 2018, the Director of the National Institute of Standards and Technology shall submit 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 summarizing the findings of the consortium.

(c) Funding

The Director of the National Institute of Standards and Technology shall allocate up to \$80,000,000 to carry out the activities under this section for each of fiscal years 2019 through 2023, subject to the availability of appropriations. Amounts made available to carry out this section shall be derived from amounts appropriated or otherwise made available to the National Institute of Standards and Technology.

(Pub. L. 115-368, title II, §201, Dec. 21, 2018, 132 Stat. 5098.)

SUBCHAPTER III—NATIONAL SCIENCE FOUNDATION QUANTUM ACTIVITIES

§ 8841. Quantum information science research and education program**(a) In general**

The Director of the National Science Foundation shall carry out a basic research and education program on quantum information science and engineering, including the competitive award of grants to institutions of higher education or eligible nonprofit organizations (or consortia thereof).

(b) Program components**(1) In general**

In carrying out the program under subsection (a), the Director of the National Science Foundation shall carry out activities that—

(A) support basic interdisciplinary quantum information science and engineering research; and

(B) support human resources development in all aspects of quantum information science and engineering.

(2) Requirements

The activities described in paragraph (1) shall include—