(4) approving all new programs within the Directorate;

(5) developing and testing diverse merit-review models and mechanisms for selecting and providing awards for use-inspired and translational research and development at different scales, from individual investigator awards to large multi-institution collaborations;

(6) assessing the success of programs;

(7) administering awards to achieve the purposes described in section 19102 of this title; and

(8) performing other such duties pertaining to the purposes in section 19102 of this title as are required by the Director.

(d) Relationship to the Director

The Assistant Director shall report to the Director.

(e) Relationship to other programs

No other directorate within the Foundation shall report to the Assistant Director.

(Pub. L. 117–167, div. B, title III, § 10385, Aug. 9, 2022, 136 Stat. 1577.)

§ 19106. Advisory committee

(a) In general

In accordance with the Federal Advisory Committee Act (5 U.S.C. App.)[1] the Director shall establish an advisory committee to assess, and make recommendations regarding, the activities carried out under this part.

(b) Membership

The advisory committee members shall—

(1) be individuals with relevant experience or expertise, including individuals from industry and national labs, educators, academic subject matter experts, including individuals with knowledge of key technology focus areas and their impact on United States national security and geostrategic leadership, the technical and social dimensions of science and technology, technology transfer experts, labor organizations, representatives of civil society, and other nongovernmental organizations; and

(2) consist of at least 10 members broadly representative of stakeholders, including no less than 3 members from the private sector, none of whom shall be an employee of the Federal Government, and no less than 1 member with significant expertise in United States national security and economic competitiveness.

(c) Responsibilities

The Committee's responsibilities shall include—

(1) reviewing and advising on activities carried out under this part;

(2) proposing strategies for fulfilling the purposes in section 19102 of this title;

(3) proposing potential areas of research, particularly as relevant to United States societal, national, and geostrategic challenges; and

(4) other relevant issues as determined by the Director.

[1] See References in Text note below.

(Pub. L. 117–167, div. B, title III, § 10386, Aug. 9, 2022, 136 Stat. 1578.)

Editorial Notes

REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (a), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, which was set out in the Appendix to Title 5, Government Organization and Employees, and was substantially repealed and restated in chapter 10 (§ 1001 et seq.) of Title 5 by Pub. L. 117–286, §§ 3(a), 7, Dec. 27, 2022, 136 Stat. 4197, 4361. For disposition of sections of the Act into chapter 10 of Title 5, see Disposition Table preceding section 101 of Title 5.

§ 19107. Challenges and focus areas

(a) In general

In consultation with the Assistant Director, the Board, and the interagency working group established under part D of subchapter VI, the Director shall identify, and annually review and update as appropriate, a list of—

(1) not more than 5 United States societal, national, and geostrategic challenges that may be addressed by technology to guide activities under this part; and

(2) not more than 10 key technology focus areas to guide activities under this part.

(b) Initial list of societal, national, and geostrategic challenges

The initial list of societal, national, and geostrategic challenges are the following:

(1) United States national security.

(2) United States manufacturing and industrial productivity.

(3) United States workforce development and skills gaps.

(4) Climate change and environmental sustainability.

(5) Inequitable access to education, opportunity, or other services.

(c) Initial list of key technology focus areas

The initial list of key technology focus areas are the following:

(1) Artificial intelligence, machine learning, autonomy, and related advances.

(2) High performance computing, semiconductors, and advanced computer hardware and software.

(3) Quantum information science and technology.

(4) Robotics, automation, and advanced manufacturing.

(5) Natural and anthropogenic disaster prevention or mitigation.

(6) Advanced communications technology and immersive technology.

(7) Biotechnology, medical technology, genomics, and synthetic biology.

(8) Data storage, data management, distributed ledger technologies, and cybersecurity, including biometrics.

(9) Advanced energy and industrial efficiency technologies, such as batteries and advanced nuclear technologies, including but not limited to for the purposes of electric generation (consistent with section 1874 of this title.

(10) Advanced materials science, including composites 2D materials, other next-genera-