

consensus-based technical standards, best practices, benchmarks, methodologies, metrology, testbeds, and conformance criteria for identity management, taking into account appropriate user concerns to—

- (1) improve interoperability and portability among identity management technologies;
- (2) strengthen identity proofing and verification methods used in identity management systems commensurate with the level of risk, including identity and attribute validation services provided by Federal, State, and local governments;
- (3) improve privacy protection in identity management systems; and
- (4) improve the accuracy, usability, and inclusivity of identity management systems.

(b) Digital identity technical roadmap

The Director, in consultation with other relevant Federal agencies and stakeholders from the private sector, shall develop and maintain a technical roadmap for digital identity management research and development focused on enabling the voluntary use and adoption of modern digital identity solutions that align with the four criteria in subsection (a).

(c) Digital identity management guidance

(1) In general

The Director shall develop, and periodically update, in collaboration with other public and private sector organizations, common definitions and voluntary guidance for digital identity management systems, including identity and attribute validation services provided by Federal, State, and local governments.

(2) Guidance

The Guidance shall—

- (A) align with the four criteria in subsection (a), as practicable;
- (B) provide case studies of implementation of guidance;
- (C) incorporate voluntary technical standards and industry best practices; and
- (D) not prescribe or otherwise require the use of specific technology products or services.

(3) Consultation

In carrying out this subsection, the Director shall consult with—

- (A) Federal and State agencies;
- (B) industry;
- (C) potential end-users and individuals that will use services related to digital identity verification; and
- (D) experts with relevant experience in the systems that enable digital identity verification, as determined by the Director.

(Pub. L. 113-274, title V, § 504, Dec. 18, 2014, 128 Stat. 2987; Pub. L. 117-167, div. B, title II, § 10225, Aug. 9, 2022, 136 Stat. 1478.)

Editorial Notes

AMENDMENTS

2022—Pub. L. 117-167 amended section generally. Prior to amendment, section related to Director's continuance of program to support development of voluntary and cost-effective technical standards, metrology,

testbeds, and conformance criteria, taking into account appropriate user concerns.

**CHAPTER 101—NANOTECHNOLOGY
RESEARCH AND DEVELOPMENT**

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§ 7501. National Nanotechnology Program

(a) National Nanotechnology Program

The President shall implement a National Nanotechnology Program. Through appropriate agencies, councils, and the National Nanotechnology Coordination Office established in section 7502 of this title, the Program shall—

- (1) establish the goals, priorities, and metrics for evaluation for Federal nanotechnology research, development, and other activities;
- (2) invest in Federal research and development programs in nanotechnology and related sciences to achieve those goals; and
- (3) provide for interagency coordination of Federal nanotechnology research, development, and other activities undertaken pursuant to the Program.

(b) Program activities

The activities of the Program shall include—

- (1) developing a fundamental understanding of matter that enables control and manipulation at the nanoscale;
- (2) providing grants to individual investigators and interdisciplinary teams of investigators;
- (3) establishing a network of advanced technology user facilities and centers;
- (4) establishing, on a merit-reviewed and competitive basis, interdisciplinary nanotechnology research centers, which shall—
 - (A) interact and collaborate to foster the exchange of technical information and best practices;
 - (B) involve academic institutions or national laboratories and other partners, which may include States and industry;
 - (C) make use of existing expertise in nanotechnology in their regions and nationally;
 - (D) make use of ongoing research and development at the micrometer scale to support their work in nanotechnology; and
 - (E) to the greatest extent possible, be established in geographically diverse locations, encourage the participation of Historically Black Colleges and Universities that are part B institutions as defined in section 1061(2) of title 20 and minority institutions (as defined in section 1067k(3) of title 20), and include institutions located in States participating in the Experimental Program to Stimulate Competitive Research (EPSCoR);

(5) ensuring United States global leadership in the development and application of nanotechnology;

(6) advancing the United States productivity and industrial competitiveness through stable, consistent, and coordinated investments in long-term scientific and engineering research in nanotechnology;

(7) accelerating the deployment and application of nanotechnology research and development in the private sector, including startup companies;

(8) encouraging interdisciplinary research, and ensuring that processes for solicitation and evaluation of proposals under the Program encourage interdisciplinary projects and collaborations;

(9) providing effective education and training for researchers and professionals skilled in the interdisciplinary perspectives necessary for nanotechnology so that a true interdisciplinary research culture for nanoscale science, engineering, and technology can emerge;

(10) ensuring that ethical, legal, environmental, and other appropriate societal concerns, including the potential use of nanotechnology in enhancing human intelligence and in developing artificial intelligence which exceeds human capacity, are considered during the development of nanotechnology by—

(A) establishing a research program to identify ethical, legal, environmental, and other appropriate societal concerns related to nanotechnology, and ensuring that the results of such research are widely disseminated;

(B) requiring that interdisciplinary nanotechnology research centers established under paragraph (4) include activities that address societal, ethical, and environmental concerns;

(C) insofar as possible, integrating research on societal, ethical, and environmental concerns with nanotechnology research and development, and ensuring that advances in nanotechnology bring about improvements in quality of life for all Americans; and

(D) providing, through the National Nanotechnology Coordination Office established in section 7502 of this title, for public input and outreach to be integrated into the Program by the convening of regular and ongoing public discussions, through mechanisms such as citizens' panels, consensus conferences, and educational events, as appropriate; and

(11) encouraging research on nanotechnology advances that utilize existing processes and technologies.

(c) Program management

The National Science and Technology Council shall oversee the planning, management, and coordination of the Program. The Council, itself or through an appropriate subgroup it designates or establishes, shall—

(1) establish goals and priorities for the Program, based on national needs for a set of broad applications of nanotechnology;

(2) establish program component areas, with specific priorities and technical goals, that reflect the goals and priorities established for the Program;

(3) oversee interagency coordination of the Program, including with the activities of the Defense Nanotechnology Research and Development Program established under section 246 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314) and the National Institutes of Health;

(4) develop, not later than 5 years after the date of the release of the most-recent strategic plan, and update every 5 years thereafter, a strategic plan to guide the activities described under subsection (b) that describes—

(A) the near-term and long-term objectives for the Program;

(B) the anticipated schedule for achieving the near-term objectives; and¹

(C) the metrics that will be used to assess progress toward the near-term and long-term objectives;

(D) how the Program will move results out of the laboratory and into application for the benefit of society;

(E) the Program's support for long-term funding for interdisciplinary research and development in nanotechnology; and

(F) the allocation of funding for interagency nanotechnology projects;

(5) propose a coordinated interagency budget for the Program to the Office of Management and Budget to ensure the maintenance of a balanced nanotechnology research portfolio and an appropriate level of research effort;

(6) exchange information with academic, industry, State and local government (including State and regional nanotechnology programs), and other appropriate groups conducting research on and using nanotechnology;

(7) develop a plan to utilize Federal programs, such as the Small Business Innovation Research Program and the Small Business Technology Transfer Research Program, in support of the activity stated in subsection (b)(7);

(8) identify research areas that are not being adequately addressed by the agencies' current research programs and address such research areas;

(9) encourage progress on Program activities through the utilization of existing manufacturing facilities and industrial infrastructures such as, but not limited to, the employment of underutilized manufacturing facilities in areas of high unemployment as production engineering and research testbeds; and

(10) in carrying out its responsibilities under paragraphs (1) through (9), take into consideration the recommendations of the Advisory Panel, suggestions or recommendations developed pursuant to subsection (b)(10)(D), and the views of academic, State, industry, and other appropriate groups conducting research on and using nanotechnology.

(d) Annual report

The Council shall prepare an annual report, to be submitted to the Senate Committee on Com-

¹ So in original. The word "and" probably should not appear.

merce, Science, and Transportation and the House of Representatives Committee on Science, and other appropriate committees, at the time of the President's budget request to Congress, that includes—

(1) the Program budget, for the current fiscal year, for each agency that participates in the Program, including a breakout of spending for the development and acquisition of research facilities and instrumentation, for each program component area, and for all activities pursuant to subsection (b)(10);

(2) the proposed Program budget for the next fiscal year, for each agency that participates in the Program, including a breakout of spending for the development and acquisition of research facilities and instrumentation, for each program component area, and for all activities pursuant to subsection (b)(10);

(3) an analysis of the progress made toward achieving the goals and priorities established for the Program;

(4) an analysis of the extent to which the Program has incorporated the recommendations of the Advisory Panel; and

(5) an assessment of how Federal agencies are implementing the plan described in subsection (c)(7), and a description of the amount of Small Business Innovative Research and Small Business Technology Transfer Research funds supporting the plan.

(Pub. L. 108–153, §2, Dec. 3, 2003, 117 Stat. 1923; Pub. L. 114–329, title II, §204(b)(1), Jan. 6, 2017, 130 Stat. 2999.)

Editorial Notes

REFERENCES IN TEXT

Section 246 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003, referred to in subsec. (c)(3), is section 246 of Pub. L. 107–314, which is set out as a note under section 2358 of Title 10, Armed Forces.

AMENDMENTS

2017—Subsec. (c)(4). Pub. L. 114–329 amended par. (4) generally. Prior to amendment, par. (4) read as follows: “develop, within 12 months after December 3, 2003, and update every 3 years thereafter, a strategic plan to guide the activities described under subsection (b), meet the goals, priorities, and anticipated outcomes of the participating agencies, and describe—

“(A) how the Program will move results out of the laboratory and into application for the benefit of society;

“(B) the Program's support for long-term funding for interdisciplinary research and development in nanotechnology; and

“(C) the allocation of funding for interagency nanotechnology projects;”.

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

SHORT TITLE

Pub. L. 108–153, §1, Dec. 3, 2003, 117 Stat. 1923, provided that: “This Act [enacting this chapter] may be cited as

the ‘21st Century Nanotechnology Research and Development Act’.”

§ 7502. Program coordination

(a) In general

The President shall establish a National Nanotechnology Coordination Office, with a Director and full-time staff, which shall—

(1) provide technical and administrative support to the Council and the Advisory Panel;

(2) serve as the point of contact on Federal nanotechnology activities for government organizations, academia, industry, professional societies, State nanotechnology programs, interested citizen groups, and others to exchange technical and programmatic information;

(3) conduct public outreach, including dissemination of findings and recommendations of the Advisory Panel, as appropriate; and

(4) promote access to and early application of the technologies, innovations, and expertise derived from Program activities to agency missions and systems across the Federal Government, and to United States industry, including startup companies.

(b) Funding

The National Nanotechnology Coordination Office shall be funded through interagency funding in accordance with section 631 of Public Law 108–7.

(c) Report

Within 90 days after December 3, 2003, the Director of the Office of Science and Technology Policy shall report to the Senate Committee on Commerce, Science, and Transportation, and the House of Representatives Committee on Science on the funding of the National Nanotechnology Coordination Office. The report shall include—

(1) the amount of funding required to adequately fund the Office;

(2) the adequacy of existing mechanisms to fund this Office; and

(3) the actions taken by the Director to ensure stable funding of this Office.

(Pub. L. 108–153, §3, Dec. 3, 2003, 117 Stat. 1926.)

Editorial Notes

REFERENCES IN TEXT

Section 631 of Public Law 108–7, referred to in subsec. (b), is section 631 of Pub. L. 108–7, div. J, title VI, Feb. 20, 2003, 117 Stat. 471, which is not classified to the Code.

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

§ 7503. Advisory Panel

(a) In general

The President shall establish or designate a National Nanotechnology Advisory Panel.

(b) Qualifications

The Advisory Panel established or designated by the President under subsection (a) shall consist primarily of members from academic institutions and industry. Members of the Advisory Panel shall be qualified to provide advice and information on nanotechnology research, development, demonstrations, education, technology transfer, commercial application, or societal and ethical concerns. In selecting or designating an Advisory Panel, the President may also seek and give consideration to recommendations from the Congress, industry, the scientific community (including the National Academy of Sciences, scientific professional societies, and academia), the defense community, State and local governments, regional nanotechnology programs, and other appropriate organizations.

(c) Duties

The Advisory Panel shall advise the President and the Council on matters relating to the Program, including assessing—

- (1) trends and developments in nanotechnology science and engineering;
- (2) progress made in implementing the Program;
- (3) the need to revise the Program;
- (4) the balance among the components of the Program, including funding levels for the program component areas;
- (5) whether the program component areas, priorities, and technical goals developed by the Council are helping to maintain United States leadership in nanotechnology;
- (6) the management, coordination, implementation, and activities of the Program; and
- (7) whether societal, ethical, legal, environmental, and workforce concerns are adequately addressed by the Program.

(d) Reports

Not later than 4 years after the date of the most recent assessment under subsection (c), and quadrennially thereafter, the Advisory Panel shall submit to the President, 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 its¹ assessments under subsection (c) and its recommendations for ways to improve the Program.

(e) Travel expenses of non-Federal members

Non-Federal members of the Advisory Panel, while attending meetings of the Advisory Panel or while otherwise serving at the request of the head of the Advisory Panel 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 Panel 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.

(f) Exemption from sunset

Section 1013 of title 5 shall not apply to the Advisory Panel.

¹ So in original.

(Pub. L. 108-153, §4, Dec. 3, 2003, 117 Stat. 1927; Pub. L. 114-329, title II, §204(b)(2), Jan. 6, 2017, 130 Stat. 2999; Pub. L. 117-286, §4(a)(78), Dec. 27, 2022, 136 Stat. 4314.)

Editorial Notes**AMENDMENTS**

2022—Subsec. (f). Pub. L. 117-286 substituted “Section 1013 of title 5” for “Section 14 of the Federal Advisory Committee Act”.

2017—Subsec. (d). Pub. L. 114-329 amended subsec. (d) generally. Prior to amendment, text read as follows: “The Advisory Panel shall report, not less frequently than once every 2 fiscal years, to the President on its assessments under subsection (c) and its recommendations for ways to improve the Program. The first report under this subsection shall be submitted within 1 year after December 3, 2003. The Director of the Office of Science and Technology Policy shall transmit a copy of each report under this subsection to the Senate Committee on Commerce, Science, and Technology, the House of Representatives Committee on Science, and other appropriate committees of the Congress.”

Executive Documents**TRANSFER OF FUNCTIONS**

President’s Council of Advisors on Science and Technology to serve as the advisory panel identified in this section and to be known as the National Nanotechnology Advisory Panel when performing the functions of such advisory committee, see section 3(b)(iv) of Ex. Ord. No. 14007, set out in a note under section 6601 of Title 42, The Public Health and Welfare.

§ 7504. Quadrennial external review of the National Nanotechnology Program**(a) In general**

The Director of the National Nanotechnology Coordination Office shall enter into an arrangement with the National Research Council of the National Academy of Sciences to conduct a quadrennial evaluation of the Program, including—

- (1) an evaluation of the technical accomplishments of the Program, including a review of whether the Program has achieved the goals under the metrics established by the Council;
- (2) a review of the Program’s management and coordination across agencies and disciplines;
- (3) a review of the funding levels at each agency for the Program’s activities and the ability of each agency to achieve the Program’s stated goals with that funding;
- (4) an evaluation of the Program’s success in transferring technology to the private sector;
- (5) an evaluation of whether the Program has been successful in fostering interdisciplinary research and development;
- (6) an evaluation of the extent to which the Program has adequately considered ethical, legal, environmental, and other appropriate societal concerns;
- (7) recommendations for new or revised Program goals;
- (8) recommendations for new research areas, partnerships, coordination and management mechanisms, or programs to be established to achieve the Program’s stated goals;
- (9) recommendations on policy, program, and budget changes with respect to

nanotechnology research and development activities;

(10) recommendations for improved metrics to evaluate the success of the Program in accomplishing its stated goals;

(11) a review of the performance of the National Nanotechnology Coordination Office and its efforts to promote access to and early application of the technologies, innovations, and expertise derived from Program activities to agency missions and systems across the Federal Government and to United States industry;

(12) an analysis of the relative position of the United States compared to other nations with respect to nanotechnology research and development, including the identification of any critical research areas where the United States should be the world leader to best achieve the goals of the Program; and

(13) an analysis of the current impact of nanotechnology on the United States economy and recommendations for increasing its future impact.

(b) Study on molecular self-assembly

As part of the first quadrennial review conducted in accordance with subsection (a), the National Research Council shall conduct a one-time study to determine the technical feasibility of molecular self-assembly for the manufacture of materials and devices at the molecular scale.

(c) Study on the responsible development of nanotechnology

As part of the first quadrennial review conducted in accordance with subsection (a), the National Research Council shall conduct a one-time study to assess the need for standards, guidelines, or strategies for ensuring the responsible development of nanotechnology, including, but not limited to—

- (1) self-replicating nanoscale machines or devices;
- (2) the release of such machines in natural environments;
- (3) encryption;
- (4) the development of defensive technologies;
- (5) the use of nanotechnology in the enhancement of human intelligence; and
- (6) the use of nanotechnology in developing artificial intelligence.

(d) Report

(1) In general

Not later than 30 days after the date the first evaluation under subsection (a) is received, and quadrennially thereafter, the Director of the National Nanotechnology Coordination Office shall report to the President its assessments under subsection (c) and its recommendations for ways to improve the Program.

(2) Congress

Not later than 30 days after the date the President receives the report under paragraph (1), the Director of the Office of Science and Technology Policy shall transmit a copy of the report to Congress.

(Pub. L. 108–153, § 5, Dec. 3, 2003, 117 Stat. 1928; Pub. L. 114–329, title II, § 204(b)(3), Jan. 6, 2017, 130 Stat. 2999.)

Editorial Notes

AMENDMENTS

2017—Pub. L. 114–329, § 204(b)(3)(A)–(D), substituted “Quadrennial” for “Triennial” in section catchline and “quadrennial” for “triennial” in subsecs. (a) to (c).

Subsec. (d). Pub. L. 114–329, § 204(b)(3)(E), amended subsec. (d) generally. Prior to amendment, text read as follows: “The Director of the National Nanotechnology Coordination Office shall transmit the results of any evaluation for which it made arrangements under subsection (a) to the Advisory Panel, the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science upon receipt. The first such evaluation shall be transmitted no later than June 10, 2005, with subsequent evaluations transmitted to the Committees every 3 years thereafter.”

§ 7505. Authorization of appropriations

(a) National Science Foundation

There are authorized to be appropriated to the Director of the National Science Foundation to carry out the Director’s responsibilities under this chapter—

- (1) \$385,000,000 for fiscal year 2005;
- (2) \$424,000,000 for fiscal year 2006;
- (3) \$449,000,000 for fiscal year 2007; and
- (4) \$476,000,000 for fiscal year 2008.

(b) Department of Energy

There are authorized to be appropriated to the Secretary of Energy to carry out the Secretary’s responsibilities under this chapter—

- (1) \$317,000,000 for fiscal year 2005;
- (2) \$347,000,000 for fiscal year 2006;
- (3) \$380,000,000 for fiscal year 2007; and
- (4) \$415,000,000 for fiscal year 2008.

(c) National Aeronautics and Space Administration

There are authorized to be appropriated to the Administrator of the National Aeronautics and Space Administration to carry out the Administrator’s responsibilities under this chapter—

- (1) \$34,100,000 for fiscal year 2005;
- (2) \$37,500,000 for fiscal year 2006;
- (3) \$40,000,000 for fiscal year 2007; and
- (4) \$42,300,000 for fiscal year 2008.

(d) National Institute of Standards and Technology

There are authorized to be appropriated to the Director of the National Institute of Standards and Technology to carry out the Director’s responsibilities under this chapter—

- (1) \$68,200,000 for fiscal year 2005;
- (2) \$75,000,000 for fiscal year 2006;
- (3) \$80,000,000 for fiscal year 2007; and
- (4) \$84,000,000 for fiscal year 2008.

(e) Environmental Protection Agency

There are authorized to be appropriated to the Administrator of the Environmental Protection Agency to carry out the Administrator’s responsibilities under this chapter—

- (1) \$5,500,000 for fiscal year 2005;
- (2) \$6,050,000 for fiscal year 2006;
- (3) \$6,413,000 for fiscal year 2007; and

(4) \$6,800,000 for fiscal year 2008.

(Pub. L. 108–153, § 6, Dec. 3, 2003, 117 Stat. 1929.)

§ 7506. Department of Commerce programs

(a) NIST programs

The Director of the National Institute of Standards and Technology shall—

(1) as part of the Program activities under section 7501(b)(7) of this title, establish a program to conduct basic research on issues related to the development and manufacture of nanotechnology, including metrology; reliability and quality assurance; processes control; and manufacturing best practices; and

(2) utilize the Manufacturing Extension Partnership program¹ to the extent possible to ensure that the research conducted under paragraph (1) reaches small- and medium-sized manufacturing companies.

(b) Clearinghouse

The Secretary of Commerce or his designee, in consultation with the National Nanotechnology Coordination Office and, to the extent possible, utilizing resources at the National Technical Information Service, shall establish a clearinghouse of information related to commercialization of nanotechnology research, including information relating to activities by regional, State, and local commercial nanotechnology initiatives; transition of research, technologies, and concepts from Federal nanotechnology research and development programs into commercial and military products; best practices by government, universities and private sector laboratories transitioning technology to commercial use; examples of ways to overcome barriers and challenges to technology deployment; and use of manufacturing infrastructure and workforce.

(Pub. L. 108–153, § 7, Dec. 3, 2003, 117 Stat. 1930.)

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

The Manufacturing Extension Partnership Program, referred to in subsec. (a), redesignated the Hollings Manufacturing Partnership Program by a provision of title II of div. B of Pub. L. 108–447, formerly set out as a note under section 278k of this title. Program subsequently designated the Hollings Manufacturing Extension Partnership by former section 278k(i) of this title, as added by Pub. L. 111–358, and by section 278k of this title, as generally amended by Pub. L. 114–329.

§ 7507. Department of Energy programs

(a) Research consortia

(1) Department of Energy program

The Secretary of Energy shall establish a program to support, on a merit-reviewed and competitive basis, consortia to conduct interdisciplinary nanotechnology research and development designed to integrate newly developed nanotechnology and microfluidic tools with systems biology and molecular imaging.

(2) Authorization of appropriations

Of the sums authorized for the Department of Energy under section 7505(b) of this title,

\$25,000,000 shall be used for each fiscal year 2005 through 2008 to carry out this section. Of these amounts, not less than \$10,000,000 shall be provided to at least 1 consortium for each fiscal year.

(b) Research centers and major instrumentation

The Secretary of Energy shall carry out projects to develop, plan, construct, acquire, operate, or support special equipment, instrumentation, or facilities for investigators conducting research and development in nanotechnology.

(Pub. L. 108–153, § 8, Dec. 3, 2003, 117 Stat. 1930.)

§ 7508. Additional centers

(a) American Nanotechnology Preparedness Center

The Program shall provide for the establishment, on a merit-reviewed and competitive basis, of an American Nanotechnology Preparedness Center which shall—

(1) conduct, coordinate, collect, and disseminate studies on the societal, ethical, environmental, educational, legal, and workforce implications of nanotechnology; and

(2) identify anticipated issues related to the responsible research, development, and application of nanotechnology, as well as provide recommendations for preventing or addressing such issues.

(b) Center for nanomaterials manufacturing

The Program shall provide for the establishment, on a merit reviewed and competitive basis, of a center to—

(1) encourage, conduct, coordinate, commission, collect, and disseminate research on new manufacturing technologies for materials, devices, and systems with new combinations of characteristics, such as, but not limited to, strength, toughness, density, conductivity, flame resistance, and membrane separation characteristics; and

(2) develop mechanisms to transfer such manufacturing technologies to United States industries.

(c) Reports

The Council, through the Director of the National Nanotechnology Coordination Office, shall submit to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science—

(1) within 6 months after December 3, 2003, a report identifying which agency shall be the lead agency and which other agencies, if any, will be responsible for establishing the Centers described in this section; and

(2) within 18 months after December 3, 2003, a report describing how the Centers described in this section have been established.

(Pub. L. 108–153, § 9, Dec. 3, 2003, 117 Stat. 1930.)

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee

¹ See Change of Name note below.

on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

§ 7509. Definitions

In this chapter:

(1) Advisory Panel

The term “Advisory Panel” means the President’s National Nanotechnology Advisory Panel established or designated under section 7503 of this title.

(2) Nanotechnology

The term “nanotechnology” means the science and technology that will enable one to understand, measure, manipulate, and manufacture at the atomic, molecular, and supramolecular levels, aimed at creating materials, devices, and systems with fundamentally new molecular organization, properties, and functions.

(3) Program

The term “Program” means the National Nanotechnology Program established under section 7501 of this title.

(4) Council

The term “Council” means the National Science and Technology Council or an appropriate subgroup designated by the Council under section 7501(c) of this title.

(5) Advanced technology user facility

The term “advanced technology user facility” means a nanotechnology research and development facility supported, in whole or in part, by Federal funds that is open to all United States researchers on a competitive, merit-reviewed basis.

(6) Program component area

The term “program component area” means a major subject area established under section 7501(c)(2) of this title under which is¹ grouped related individual projects and activities carried out under the Program.

(Pub. L. 108–153, § 10, Dec. 3, 2003, 117 Stat. 1931.)

CHAPTER 102—FAIRNESS TO CONTACT LENS CONSUMERS

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§ 7601. Availability of contact lens prescriptions to patients

(a) In general

When a prescriber completes a contact lens fitting, the prescriber—

(1) whether or not requested by the patient, shall provide to the patient a copy of the contact lens prescription; and

(2) shall, as directed by any person designated to act on behalf of the patient, provide or verify the contact lens prescription by electronic or other means.

(b) Limitations

A prescriber may not—

(1) require purchase of contact lenses from the prescriber or from another person as a condition of providing a copy of a prescription under subsection (a)(1) or (a)(2) or verification of a prescription under subsection (a)(2);

(2) require payment in addition to, or as part of, the fee for an eye examination, fitting, and evaluation as a condition of providing a copy of a prescription under subsection (a)(1) or (a)(2) or verification of a prescription under subsection (a)(2); or

(3) require the patient to sign a waiver or release as a condition of verifying or releasing a prescription.

(Pub. L. 108–164, § 2, Dec. 6, 2003, 117 Stat. 2024.)

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

Pub. L. 108–164, § 12, Dec. 6, 2003, 117 Stat. 2028, provided that: “This Act [enacting this chapter and provisions set out as a note below] shall take effect 60 days after the date of the enactment of this Act [Dec. 6, 2003].”

SHORT TITLE

Pub. L. 108–164, § 1, Dec. 6, 2003, 117 Stat. 2024, provided that: “This Act [enacting this chapter and provisions set out as a note above] may be cited as the ‘Fairness to Contact Lens Consumers Act’.”

§ 7602. Immediate payment of fees in limited circumstances

A prescriber may require payment of fees for an eye examination, fitting, and evaluation before the release of a contact lens prescription, but only if the prescriber requires immediate payment in the case of an examination that reveals no requirement for ophthalmic goods. For purposes of the preceding sentence, presentation of proof of insurance coverage for that service shall be deemed to be a payment.

(Pub. L. 108–164, § 3, Dec. 6, 2003, 117 Stat. 2024.)

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

Section effective 60 days after Dec. 6, 2003, see section 12 of Pub. L. 108–164, set out as a note under section 7601 of this title.

§ 7603. Prescriber verification

(a) Prescription requirement

A seller may sell contact lenses only in accordance with a contact lens prescription for the patient that is—

(1) presented to the seller by the patient or prescriber directly or by facsimile; or

(2) verified by direct communication.

(b) Record requirement

A seller shall maintain a record of all direct communications referred to in subsection (a).

¹ So in original. Probably should be “are”.