



Federal Laboratory Consortium
for Technology Transfer

Federal Technology Transfer
Legislation and Policy
The Green Book

Prepared by the Federal Laboratory Consortium for Technology Transfer



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Sixth Edition

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OTHER FLC PUBLICATIONS AND RESOURCES

In addition to The Green Book, the FLC offers a wide range of publications and materials for technology transfer (T2) professionals and the general public. These publications and resources include:

- *FLC Technology Transfer Desk Reference*—A comprehensive introduction to T2 and the background, concepts, and practical knowledge required for T2 practitioners. This guide offers a great primer for Office of Research and Technology Applications (ORTA) personnel and others new to the T2 field.
- *Technology Transfer Playbook*—An online compilation of 15 key “plays,” or best practices, currently being utilized at federal laboratories nationwide to improve the T2 process.
- Success Stories Gallery—The FLC’s online gallery that features stories of successfully commercialized federal laboratory technology from over the years. Located on the FLC website, the Gallery is searchable by state, region, agency or laboratory and includes an interactive U.S. map.
- LabTech in Your Life—An interactive virtual environment that reveals the common technologies people use every day that were originally developed inside a federal laboratory and later introduced to the commercial marketplace.
- Learning Center—A variety of interactive e-courses, on-demand webinars, and white papers on diverse technology transfer topics, hosted on the FLC website.
- FLC Business—An online comprehensive database designed for industry, agencies, and academia to search the abundance of federal laboratories, ready-to-license technologies, facilities, equipment, programs and funding resources available to aid business development and accelerate technology transfer.
- *FLC Digest*—A customized digital newsletter that features FLC news, T2 and member laboratory news, ready-for-transfer technologies, events, careers and more.
- *FLC Annual Report to the President and Congress*—Published annually, the FLC Annual Report details the organization’s mission initiatives, activities, efforts and achievements that take place during a fiscal year period.
- *FLC Planner*—An annual collection of images that showcase the innovative scientific and technological research and development that takes place every day throughout our federal laboratory system.
- *T2 Mechanisms Database*—An online reference guide to technology transfer mechanisms used by federal agencies. This product includes a searchable database to help users explore the wide variety of T2 agreement paths available and locate sample agreements used at various agencies.

All of these resources are available on the FLC website, www.federalabs.org.

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INTRODUCTION TO TECHNOLOGY TRANSFER

LEGISLATION AND POLICY

Over the past several decades, presidents, Congress, and federal agencies have worked together to establish a policy framework that enables the federal government to transfer its technology to the nonfederal sector, which includes industry, state and local governments, and academic institutions. Through this technology transfer process, federal laboratories share the benefits of the national investment in research and development (R&D) with all segments of society.

The Federal Laboratory Consortium for Technology Transfer (FLC) is pleased to publish this sixth edition of Federal Technology Transfer Legislation and Policy (“The Green Book”), which provides the principal statutory, regulatory, and executive policies that constitute the framework of the federal technology transfer program. It is intended to assist government policy makers and technology transfer practitioners by serving as a legal reference resource. At the same time, The Green Book is intended to help those outside government acquire a fundamental understanding of the legal framework within which technology transfer works.

The FLC published its first consolidated guide to technology transfer legislation in 1991. Subsequent editions were published in 1994, 2005, 2009, and 2013. The fifth edition, published in 2013, added agencies’ regulations as covered in the Code of Federal Regulations and expanded the section on executive guidance.

This sixth edition provides a general update of the text of various laws and regulations, particularly the revisions to Title 37, Chapter IV, Parts 401, published by the National Institute of Standards and Technology (NIST) on April 13, 2018. It also adds several pieces of legislation governing prize competitions. It omits Executive Order 10096 of 1950, the contents of which are incorporated into other regulations that are in this book. It maintains the “Technology Innovation Legislation Highlights,” which summarizes technology transfer legislation and executive orders since the Stevenson-Wydler Technology Innovation Act of 1980. The Green Book contains a detailed table of contents, as well as an index keyed to page numbers.

The Green Book is not intended to be used as the authoritative state of the law, and this edition does not contain statutory notes. Frequent reminders are provided throughout for the reader to refer to the website of the U.S. House of Representatives Office of the Law Revision Counsel, <http://uscode.house.gov>, for the legislative history and the latest changes to the U.S. Code section(s) of interest, and to www.ecfr.gov for the latest federal regulations.

The reader is advised that although this guide includes the legislation and policies that establish technology transfer policy, as well as many federal departments’ and agencies’ regulations concerning its practice, each department or agency may develop its own policies, procedures, and boilerplate agreements that further guide how technology transfer works within its organization.

The FLC's mission is to promote, facilitate, and educate federal T2 among its member labs and institutions so they can easily reach their commercialization goals, and create social and economic impacts with new innovative technologies. To advance this mission, our Management Support Office (MSO) and numerous committees staffed by federal technology transfer professionals are happy to offer additional assistance in response to your questions. Their contact information can be found at the FLC website, www.federallabs.org, which also provides additional information about the FLC and is where you can find an online edition of The Green Book.

The Green Book is also available in ePub and Kindle formats at Barnes and Noble, Amazon, and iTunes.



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TECHNOLOGY INNOVATION LEGISLATION HIGHLIGHTS

Since 1980, Congress has enacted a series of laws to promote technology transfer and to provide technology transfer mechanisms and incentives. The intent of these laws and related Executive Orders is to encourage the pooling of resources when developing commercial technologies. The bidirectional sharing between federal laboratories and private industry includes not only technologies, but personnel, facilities, methods, expertise, and technical information in general.

Highlights of major technology transfer legislation are discussed on the following pages.

Stevenson-Wydler Technology Innovation Act of 1980 (P.L. 96-480)

The Stevenson-Wydler Act of 1980 is the first of a continuing series of laws to define and promote technology transfer. It made it easier for federal laboratories to transfer technology to nonfederal parties and provided outside organizations with a means to access federal laboratory developments.

The primary focus of the Stevenson-Wydler Act concerned the dissemination of information from the federal government and getting federal laboratories more involved in the technology transfer process. The law requires laboratories to take an active role in technical cooperation and to set apart a percentage of the laboratory budget specifically for technology transfer activities. The law also established an Office of Research and Technology Applications (ORTA) in each laboratory to coordinate and promote technology transfer.

Bayh-Dole Act of 1980 (P.L. 96-517)

The Bayh-Dole Act of 1980, together with P.L. 98-620, established more boundaries regarding patents and licenses for federally funded research and development. Small businesses, universities, and not-for-profit organizations were allowed to obtain titles to inventions developed with federal funds. Government owned and government operated (GOGO) laboratories were permitted to grant exclusive patent licenses to commercial organizations.

Small Business Innovation Development Act of 1982 (P.L. 97-219)

The Small Business Innovation Development Act of 1982 established the Small Business Innovation Research (SBIR) Program, requiring agencies to provide special funds for small business R&D connected to the agencies' missions.

SBIR is a highly competitive program designed to encourage innovation, as well as the commercialization of products and processes developed by small businesses through federal funds. Each year, 11 federal departments and agencies are required to reserve a portion (3.2 percent in FY 2017) of their extramural R&D budgets for SBIR awards. These agencies designate SBIR R&D topics and accept proposals. SBIR

awards or grants are awarded competitively to U.S.-owned commercial businesses with less than 500 employees that submit proposals addressing topics published by the agencies. In response, agencies make SBIR awards based on technical merit, degree of innovation, and future market potential. Award of a contract or grant provides entry to a three-phase program. Participants are down-selected through the phases, with the objective of phase III being commercialization or use of the innovation. The SBIR Program provides protection for data created in the program, and the awardee obtains title to any inventions made by its participation. There are special considerations when an SBIR awardee partners with a federal laboratory. For more information on the SBIR Program, visit the SBA SBIR/STTR website at www.sbir.gov.

Federal Technology Transfer Act of 1986 (P.L. 99-502)

The Federal Technology Transfer Act of 1986 was the second major piece of legislation to focus directly on technology transfer. All federal laboratory scientists and engineers are required to consider technology transfer an individual responsibility, and technology transfer activities are to be considered in employee performance evaluations.

This 1986 law also established a charter and funding mechanism for the previously existing Federal Laboratory Consortium for Technology Transfer (FLC). In addition, the law enabled government owned, government operated (GOGO) laboratories to enter into Cooperative Research and Development Agreements (CRADAs) and to negotiate licensing arrangements for patented inventions made at the laboratories. It also required that government-employed inventors share in royalties from patent licenses. Further, the law provided for the exchange of personnel, services, and equipment among the laboratories and nonfederal partners.

Other specific requirements, incentives and authorities were added, including the ability of GOGO laboratories to grant or waive rights to laboratory inventions and intellectual property, and permission for current and former federal employees to participate in commercial development, to the extent that there is no conflict of interest.

Executive Order 12591 (1987)

Executive Order 12591, Facilitating Access to Science and Technology (1987), was written to ensure that federal laboratories and agencies assist universities and the private sector by transferring technical knowledge. The order required agency and laboratory heads to identify and encourage individuals who would act as conduits of information among federal laboratories, universities, and the private sector. It also underscored the government's commitment to technology transfer and urged GOGOs to enter into cooperative agreements to the limits permitted by law.

The order also promoted commercialization of federally funded inventions by requiring that, to the extent permitted by law, laboratories grant to contractors the title to patents developed in whole or in part with federal funds, as long as the government is given a royalty-free license for use.

Omnibus Trade and Competitiveness Act of 1988 (P.L. 100-418)

The Omnibus Trade and Competitiveness Act of 1988 emphasized the need for public/private cooperation in realizing the benefits of R&D, established centers for transferring manufacturing technology, established Industrial Extension Services and an information clearinghouse on state and local technology programs, and extended royalty payment requirements to non-government employees of federal laboratories. It also changed the name of the National Bureau of Standards to the National Institute of Standards and Technology (NIST) and broadened its technology transfer role, including making NIST the FLC's host agency.

National Competitiveness Technology Transfer Act of 1989 (P.L. 101-189)

The National Competitiveness Technology Transfer Act of 1989 provided additional guidelines and coverage for the use of CRADAs, extending to government owned and contractor operated (GOCO) laboratories essentially the same ability to enter into CRADAs that previously had been granted to GOGO laboratories by the Federal Technology Transfer Act of 1986.

To protect the commercial nature of the agreements, the Act allowed information and innovations that were created through a CRADA, or brought into a CRADA, to be protected from disclosure to third parties.

The Act also provided a technology transfer mission for the Department of Energy's (DOE) nuclear weapons laboratories.

American Technology Preeminence Act of 1991 (P.L. 102-245)

The American Technology Preeminence Act of 1991 contained several provisions covering the FLC and the use of CRADAs. The mandate for the FLC was extended to 1996, the requirement that the FLC conduct a grant program was removed, and a requirement for an independent annual audit was added.

With respect to CRADAs, the Act included intellectual property as a potential laboratory contribution under CRADAs. The exchanging of intellectual property among the parties to an agreement was allowed. It also allowed laboratory directors to give excess equipment to educational institutions and nonprofit organizations as a gift.

Small Business Research and Development Enhancement Act of 1992 (P.L. 102-564)

This Act established the Small Business Technology Transfer (STTR) Program. STTR is a three-phase program similar to the SBIR Program in many ways. The key differences are that STTR funding is available only from five agencies and the small business must partner a minimum of 30% of the effort with a U.S. college or university, nonprofit research organization, or federally funded research and development center (FFRDC). The designated agencies select R&D topics, accept proposals, and award grants for a three-phase program that mirrors the SBIR Program. Awards are based on small business/nonprofit research institution qualifications, degree of innovation, and future market potential. The STTR Program provides early-stage R&D funding directly to small companies working cooperatively with researchers at other research institutions. The objectives of the STTR Program are to bridge the funding gap between basic research and commercial products, and to provide a way for researchers to pursue commercial applications of technologies. Unlike SBIR, a small business may partner with a federal laboratory that is an FFRDC, without the need of a waiver from SBA. For more information about the STTR Program, visit the SBA SBIR/STTR website www.sbir.gov.

National Department of Defense Authorization Act for 1994 (P.L. 103-160)

This Act broadened the definition of a laboratory to include weapons production facilities at the DOE.

National Technology Transfer and Advancement Act of 1995 (P.L. 104-113)

This law amended the Stevenson-Wydler Act to make CRADAs more attractive to both federal laboratories and scientists and to private industry. The law provides assurances to U.S. companies that they will be granted sufficient intellectual property rights to justify prompt commercialization of inventions arising from a CRADA with a federal laboratory, and gives the collaborating party in a CRADA the right to choose an exclusive or nonexclusive license for a pre-negotiated field of use for an invention resulting from joint research under a CRADA. The CRADA partner may also retain title to an invention made solely by its employees in exchange for granting the government a worldwide license to use the invention. Financial rewards for federal scientists who develop marketable technology were revised—increasing the annual limit of payment of royalties to laboratories from \$100,000 per person to \$150,000.

In addition, the Act permanently provided the FLC with funding from the agencies.

Technology Transfer Commercialization Act of 2000 (P.L. 106-404)

This Act recognizes the success of CRADAs for federal technology transfer and broadens the CRADA licensing authority to include preexisting government inventions to make CRADAs more attractive to private industry and increase the transfer of federal technology. The Act permits federal laboratories to grant a license for a federally owned invention that was created prior to the signing of a CRADA. In addition, the Act requires an agency to provide a 15-day public notice before granting an exclusive or partially exclusive license, and requires licensees to provide a plan for development and/or marketing of the invention and to make a commitment to achieve a practical application of the invention within a reasonable period of time; however, the Act exempts from these requirements the licensing of any inventions made under a CRADA.

Energy Policy Act of 2005 (P.L. 109-58)

This Act established, within the Department of Energy, a technology transfer coordinator as the principal advisor to the secretary on all matters related to technology transfer and commercialization; a technology transfer working group to coordinate technology transfer activities at the DOE labs (with oversight by the technology transfer coordinator); and an energy technology commercialization fund to provide matching funds with private partners to promote energy technologies for commercial purposes.

America COMPETES Act (P.L. 110-69)

This Act authorized programs in multiple agencies focused on the overarching themes of increasing funding for basic research; strengthening teacher capabilities and encouraging student opportunities in science, technology, engineering and mathematics (STEM) educational programs; enhancing support for higher risk, higher reward research; and supporting early career research programs for young investigators. The primary impact on technology transfer included the elimination of the Department of Commerce Office of Technology Administration, and the associated Under Secretary, which had the principal reporting and analytical responsibilities for technology transfer activities government-wide (these duties were reassigned within Commerce).

America Invents Act (P.L. 112-29)

This law made major changes to the United States patent system. The most prominent change was changing the patent system from a first to invent system to a hybrid first inventor to file system. The inventor with the earliest filed patent application is entitled to the patent, not the earliest inventor. This harmonized the U.S. patent system with much of the rest of the world with the goal of making it more efficient, predictable, and easier for entrepreneurs to simultaneously market products worldwide. The law also allowed filing of patent applications by the owners of interests in the invention rather than exclusively by the inventor. This simplified

processing of inventions when inventors are obligated to assign their inventions to their employer. The law also established administrative procedures for challenging patents in order to improve patent quality.

Other Legislation

Other laws and policies that are part of the technology transfer effort, although perhaps not as directly as the previously discussed legislation, include:

- The Cooperative Research Act of 1984 (P.L. 98-462) established several R&D consortia (e.g., Semiconductor Research Corporation and Microelectronics and Computer Technology Corporation) and eliminated some of the antitrust concerns of companies wishing to pool R&D resources.
- P.L. 98-620 permitted patent license decisions to be made at the laboratory level in GOCO laboratories, and permitted contractors to receive patent royalties to support the R&D effort. Private companies were also permitted to obtain exclusive licenses.
- The Japanese Technical Literature Act of 1986 (P.L. 99-382) improved the availability of Japanese science and engineering literature in the U.S.
- The National Institute of Standards and Technology Authorization Act for FY 1989 (P.L. 100-519) permitted contractual consideration for intellectual property rights other than patents in CRADAs, and included software developers as eligible for technology transfer awards.
- The Defense Authorization Act for FY 1991 (P.L. 101-510) established model programs for national defense laboratories to demonstrate successful relationships between the federal government, state and local governments, and small businesses and permitted those laboratories to enter into a contract or a Memorandum of Understanding with an intermediary to perform services related to cooperative or joint activities with small businesses. This established Partnership Intermediary Agreements.
- The National Defense Authorization Act for FY 1993 (P.L. 102-484) extended the potential for CRADAs to some Department of Defense-funded FFRDCs not owned by the government.
- A variety of authorities have been given to agencies over the last ten years to award prizes based on solving technical problems.
- 37 CFR Parts 401 and 404 were revised in 2018 to update regulations related to rights in federally funded inventions and the licensing of government-owned inventions to conform with changes in patent laws, and address subject inventions when a federal employee is a co-inventor.

United States Code

All of the legislation included in The Green Book is embodied in the United States Code (USC), which provides a single source uniting the provisions of each law. The text of the USC contained in this book was downloaded from the website of the U.S. House of Representatives Office of the Law Revision Counsel, which prepares and publishes the USC. The latest official version of the USC is available at <http://uscode.house.gov>.

Code of Federal Regulations

The Code of Federal Regulations (CFR) annual edition is the codification of the general and permanent rules published in the Federal Register by the departments and agencies of the federal government. It is divided into 50 titles that represent broad areas subject to federal regulation. The 50 subject-matter titles contain one or more individual volumes, which are updated once each calendar year on a staggered basis. The annual update cycle is as follows: titles 1-16 are revised as of January 1; titles 17-27 are revised as of April 1; titles 28-41 are revised as of July 1; and titles 42-50 are revised as of October 1. Each title is divided into chapters, which usually bear the name of the issuing agency. Each chapter is further subdivided into parts that cover specific regulatory areas. Large parts may be subdivided into subparts. All parts are organized in sections, and most citations to the CFR refer to material at the section level. The latest federal regulations are at <http://www.ecfr.gov>.

SECTION 1

Technology Innovation Legislation Applicable to All Federal Agencies

TITLE 15 — COMMERCE AND TRADE

CHAPTER 63 — TECHNOLOGY INNOVATION

§3701. Findings

The Congress finds and declares that:

- (1) Technology and industrial innovation are central to the economic, environmental, and social well-being of citizens of the United States.
- (2) Technology and industrial innovation offer an improved standard of living, increased public and private sector productivity, creation of new industries and employment opportunities, improved public services and enhanced competitiveness of United States products in world markets.
- (3) Many new discoveries and advances in science occur in universities and Federal laboratories, while the application of this new knowledge to commercial and useful public purposes depends largely upon actions by business and labor. Cooperation among academia, Federal laboratories, labor, and industry, in such forms as technology transfer, personnel exchange, joint research projects, and others, should be renewed, expanded, and strengthened.
- (4) Small businesses have performed an important role in advancing industrial and technological innovation.
- (5) Industrial and technological innovation in the United States may be lagging when compared to historical patterns and other industrialized nations.
- (6) Increased industrial and technological innovation would reduce trade deficits, stabilize the dollar, increase productivity gains, increase employment, and stabilize prices.
- (7) Government antitrust, economic, trade, patent, procurement, regulatory, research and development, and tax policies have significant impacts upon industrial innovation and development of technology, but there is insufficient knowledge of their effects in particular sectors of the economy.
- (8) No comprehensive national policy exists to enhance technological innovation for commercial and public purposes. There is a need for such a policy, including a strong national policy supporting domestic technology transfer and utilization of the science and technology resources of the Federal Government.
- (9) It is in the national interest to promote the adaptation of technological innovations to State and local government uses. Technological innovations can improve services, reduce their costs, and increase productivity in State and local governments.
- (10) The Federal laboratories and other performers of federally funded research and development frequently provide scientific and technological developments of potential use to State and local governments and private industry. These developments, which include inventions, computer software, and training technologies, should be made accessible to those governments and industry. There is a need to provide means of access and to give adequate personnel and funding support to these means.

- (11) The Nation should give fuller recognition to individuals and companies which have made outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social well-being of the United States. There is a need to provide means of access and to give adequate personnel and funding support to these means.

(Pub. L. 96–480, §2, Oct. 21, 1980, 94 Stat. 2311; Pub. L. 99–502, §9(f)(1), Oct. 20, 1986, 100 Stat. 1797.)

§3702. Purpose

It is the purpose of this chapter to improve the economic, environmental, and social well-being of the United States by—

- (1) establishing organizations in the executive branch to study and stimulate technology;
- (2) promoting technology development through the establishment of cooperative research centers;
- (3) stimulating improved utilization of federally funded technology developments, including inventions, software, and training technologies, by State and local governments and the private sector;
- (4) providing encouragement for the development of technology through the recognition of individuals and companies which have made outstanding contributions in technology; and
- (5) encouraging the exchange of scientific and technical personnel among academia, industry, and Federal laboratories.

(Pub. L. 96–480, §3, Oct. 21, 1980, 94 Stat. 2312; Pub. L. 99–502, §9(b)(1), (f)(2), Oct. 20, 1986, 100 Stat. 1795, 1797.)

§3703. Definitions

As used in this chapter, unless the context otherwise requires, the term—

- (1) “Secretary” means the Secretary of Commerce.
- (2) “Centers” means the Cooperative Research Centers established under section 3705 or 3707 of this title.
- (3) “Nonprofit institution” means an organization owned and operated exclusively for scientific or educational purposes, no part of the net earnings of which inures to the benefit of any private shareholder or individual.
- (4) “Federal laboratory” means any laboratory, any federally funded research and development center, or any center established under section 3705 or 3707 of this title that is owned, leased, or otherwise used by a Federal agency and funded by the Federal Government, whether operated by the Government or by a contractor.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.
For the latest federal regulations, the reader should refer to www.ecfr.gov.

- (5) “Supporting agency” means either the Department of Commerce or the National Science Foundation, as appropriate.
- (6) “Federal agency” means any executive agency as defined in section 105 of title 5 and the military departments as defined in section 102 of such title, as well as any agency of the legislative branch of the Federal Government.
- (7) “Invention” means any invention or discovery which is or may be patentable or otherwise protected under title 35 or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (8) “Made” when used in conjunction with any invention means the conception or first actual reduction to practice of such invention.
- (9) “Small business firm” means a small business concern as defined in section 632 of this title and implementing regulations of the Administrator of the Small Business Administration.
- (10) “Training technology” means computer software and related materials which are developed by a Federal agency to train employees of such agency, including but not limited to software for computer-based instructional systems and for interactive video disc systems.
- (11) “Clearinghouse” means the Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation established by section 3704a of this title.

(Pub. L. 96–480, §4, Oct. 21, 1980, 94 Stat. 2312; Pub. L. 99–502, §9(b)(2), (d), Oct. 20, 1986, 100 Stat. 1795, 1796; Pub. L. 100–418, title V, §5122(b), Aug. 23, 1988, 102 Stat. 1439; Pub. L. 100–519, title II, §201(d)(1), Oct. 24, 1988, 102 Stat. 2594; Pub. L. 102–245, title III, §304, Feb. 14, 1992, 106 Stat. 20; Pub. L. 106–404, §7(1), (2), Nov. 1, 2000, 114 Stat. 1745; Pub. L. 110–69, title III, §3002(c)(3), Aug. 9, 2007, 121 Stat. 586.)

§3704. Experimental Program to Stimulate Competitive Technology

(a) Program establishment

(1) In general

Beginning in fiscal year 1999, the Secretary shall establish a program to be known as the Experimental Program to Stimulate Competitive Technology (referred to in this subsection as the “program”). The purpose of the program shall be to strengthen the technological competitiveness of those States that have historically received less Federal research and development funds than those received by a majority of the States.

(2) Arrangements

In carrying out the program, the Secretary shall—

(A) enter into such arrangements as may be necessary to provide for the coordination of the program through the State committees established under the Experimental Program to Stimulate Competitive Research of the National Science Foundation; and

(B) cooperate with—

- (i) any State science and technology council established under the program under subparagraph (A); and
- (ii) representatives of small business firms and other appropriate technology-based businesses.

(3) Grants and cooperative agreements

In carrying out the program, the Secretary may make grants or enter into cooperative agreements to provide for—

- (A) technology research and development;
- (B) technology transfer from university research;
- (C) technology deployment and diffusion; and
- (D) the strengthening of technological capabilities through consortia comprised of—
 - (i) technology-based small business firms;
 - (ii) industries and emerging companies;
 - (iii) universities; and
 - (iv) State and local development agencies and entities.

(4) Requirements for making awards

- (A) In general—In making awards under this subsection, the Secretary shall ensure that the awards are awarded on a competitive basis that includes a review of the merits of the activities that are the subject of the award.
- (B) Matching requirement—The non-Federal share of the activities (other than planning activities) carried out under an award under this subsection shall be not less than 25 percent of the cost of those activities.

(5) Criteria for States

The Secretary shall establish criteria for achievement by each State that participates in the program. Upon the achievement of all such criteria, a State shall cease to be eligible to participate in the program.

(b) Coordination

To the extent practicable, in carrying out subsection (a), the Secretary shall coordinate the program with other programs of the Department of Commerce.

(c) Minority Serving Institution Digital and Wireless Technology Opportunity Program

(1) In general

The Secretary shall establish a Minority Serving Institution Digital and Wireless Technology Opportunity Program that awards grants, cooperative agreements, and contracts to eligible institutions to enable the eligible institutions in acquiring, and augmenting the institutions' use of, digital and wireless networking technologies to improve the quality and delivery of educational services at eligible institutions.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.
For the latest federal regulations, the reader should refer to www.ecfr.gov.

(2) Application and review procedures

(A) In general

To be eligible to receive a grant, cooperative agreement, or contract under this subsection, an eligible institution shall submit an application to the Secretary at such time, in such manner, and containing such information as the Secretary may require. Such application, at a minimum, shall include a description of how the funds will be used, including a description of any digital and wireless networking technology to be acquired, and a description of how the institution will ensure that digital and wireless networking technology will be made accessible to, and employed by, students, faculty, and administrators. The Secretary, consistent with subparagraph (C) and in consultation with the advisory council established under subparagraph (B), shall establish procedures to review such applications. The Secretary shall publish the application requirements and review criteria in the Federal Register, along with a statement describing the availability of funds.

(B) Advisory council

The Secretary shall establish an advisory council to advise the Secretary on the best approaches to encourage maximum participation by eligible institutions in the program established under paragraph (1), and on the procedures to review applications submitted to the program. In selecting the members of the advisory council, the Secretary shall consult with representatives of appropriate organizations, including representatives of eligible institutions, to ensure that the membership of the advisory council includes representatives of minority businesses and eligible institution communities. The Secretary shall also consult with experts in digital and wireless networking technology to ensure that such expertise is represented on the advisory council.

(C) Review panels

Each application submitted under this subsection by an eligible institution shall be reviewed by a panel of individuals selected by the Secretary to judge the quality and merit of the proposal, including the extent to which the eligible institution can effectively and successfully utilize the proposed grant, cooperative agreement, or contract to carry out the program described in paragraph (1). The Secretary shall ensure that the review panels include representatives of minority serving institutions and others who are knowledgeable about eligible institutions and technology issues. The Secretary shall ensure that no individual assigned under this subsection to review any application has a conflict of interest with regard to that application. The Secretary shall take into consideration the recommendations of the review panel in determining whether to award a grant, cooperative agreement, or contract to an eligible institution.

(3) Awards

(A) Limitation

An eligible institution that receives a grant, cooperative agreement, or contract under this subsection that exceeds \$2,500,000 shall not be eligible to receive another grant, cooperative agreement, or contract under this subsection.

(B) Consortia

Grants, cooperative agreements, and contracts may only be awarded to eligible institutions. Eligible institutions may seek funding under this subsection for consortia, which may include other eligible institutions, a State or a State educational agency, local educational agencies, institutions of higher education, community-based organizations, national nonprofit organizations, or businesses, including minority businesses.

(C) Planning grants

The Secretary may provide funds to develop strategic plans to implement grants, cooperative agreements, or contracts awarded under this subsection.

(D) Institutional diversity

In awarding grants, cooperative agreements, and contracts to eligible institutions, the Secretary shall ensure, to the extent practicable, that awards are made to all types of institutions eligible for assistance under this subsection.

(E) Need

In awarding funds under this subsection, the Secretary shall give priority to the eligible institution with the greatest demonstrated need for assistance.

(4) Authorized activities

An eligible institution may use a grant, cooperative agreement, or contract awarded under this subsection—

- (A) to acquire equipment, instrumentation, networking capability, hardware and software, digital network technology, wireless technology, and infrastructure to further the objective of the program described in paragraph (1);
- (B) to develop and provide training, education, and professional development programs, including faculty development, to increase the use of, and usefulness of, digital and wireless networking technology;
- (C) to provide teacher education, including the provision of preservice teacher training and in-service professional development at eligible institutions, library and media specialist training, and preschool and teacher aid certification to individuals who seek to acquire or enhance technology skills in order to use digital and wireless networking technology in the classroom or instructional process, including instruction in science, mathematics, engineering, and technology subjects;
- (D) to obtain capacity-building technical assistance, including through remote technical support, technical assistance workshops, and distance learning services; or
- (E) to foster the use of digital and wireless networking technology to improve research and education, including scientific, mathematics, engineering, and technology instruction.

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For the latest federal regulations, the reader should refer to www.ecfr.gov.

(5) Information dissemination

The Secretary shall convene an annual meeting of eligible institutions receiving grants, cooperative agreements, or contracts under this subsection to foster collaboration and capacity-building activities among eligible institutions.

(6) Matching requirement

The Secretary may not award a grant, cooperative agreement, or contract to an eligible institution under this subsection unless such institution agrees that, with respect to the costs incurred by the institution in carrying out the program for which the grant, cooperative agreement, or contract was awarded, such institution shall make available, directly, or through donations from public or private entities, non-Federal contributions in an amount equal to 25 percent of the grant, cooperative agreement, or contract awarded by the Secretary, or \$500,000, whichever is the lesser amount. The Secretary shall waive the matching requirement for any institution or consortium with no endowment, or an endowment that has a current dollar value lower than \$50,000,000.

(7) Annual report and assessments

(A) Annual report required from recipients

Each eligible institution that receives a grant, cooperative agreement, or contract awarded under this subsection shall provide an annual report to the Secretary on its use of the grant, cooperative agreement, or contract.

(B) Independent assessments

(i) Contract to conduct assessments

Not later than 6 months after August 14, 2008, the Secretary shall enter into a contract with the National Academy of Public Administration to conduct periodic assessments of the program established under paragraph (1). The assessments shall be conducted once every 3 years during the 10-year period following August 14, 2008.

(ii) Evaluations and recommendations

The assessments described in clause (i) shall include—

(I) an evaluation of the effectiveness of the program established under paragraph (1) in improving the education and training of students, faculty, and staff at eligible institutions that have been awarded grants, cooperative agreements, or contracts under the program;

(II) an evaluation of the effectiveness of the program in improving access to, and familiarity with, digital and wireless networking technology for students, faculty, and staff at all eligible institutions;

(III) an evaluation of the procedures established under paragraph (2) (A); and

(IV) recommendations for improving the program, including recommendations concerning the continuing need for Federal support.

(iii) Review of reports

In carrying out the assessments under this subparagraph, the National Academy of Public Administration shall review the reports submitted

to the Secretary under subparagraph (A).

(iv) Report to Congress

Upon completion of each assessment under this subparagraph, the Secretary shall transmit the assessment to Congress along with a summary of the Secretary's plans, if any, to implement the recommendations of the National Academy of Public Administration.

(8) Definitions

In this subsection:

(A) Digital and wireless networking technology

The term "digital and wireless networking technology" means computer and communications equipment and software that facilitates the transmission of information in a digital format.

(B) Eligible institution

The term "eligible institution" means an institution that is—

- (i) a part B institution, as defined in section 1061(2) of title 20, an institution identified in subparagraph (A), (B), or (C) of section 1063b(e)(1) of title 20, or a consortium of institutions described in this clause;
- (ii) a Hispanic-serving institution, as defined in section 1101a(a)(5) of title 20;
- (iii) a Tribal College or University, as defined in section 1059c(b)(3) of title 20;
- (iv) an Alaska Native-serving institution, as defined in section 1059d(b) of title 20;
- (v) a Native Hawaiian-serving institution, as defined in section 1059d(b) of title 20;
- (vi) a Predominately Black Institution, as defined in section 1059e of title 20;
- (vii) a Native American-serving, nontribal institution, as defined in section 1059f of title 20;
- (viii) an Asian American and Native American Pacific Islander-serving institution, as defined in section 1059g of title 20; or
- (ix) a minority institution, as defined in section 1067k of title 20, with an enrollment of needy students, as defined in section 1058(d) of title 20.

(C) Institution of higher education

The term "institution of higher education" has the meaning given the term in section 1001 of title 20.

(D) Local educational agency

The term "local educational agency" has the meaning given the term in section 7801 of title 20.

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(E) Minority business

The term “minority business” includes HUBZone small business concerns (as defined in section 632(p) of this title).

(F) Minority individual

The term “minority individual” means an American Indian, Alaskan Native, Black (not of Hispanic origin), Hispanic (including persons of Mexican, Puerto Rican, Cuban, and Central or South American origin), or Pacific Islander individual.

(G) State

The term “State” has the meaning given the term in section 7801 of title 20.

(H) State educational agency

The term “State educational agency” has the meaning given the term in section 7801 of title 20.

(Pub. L. 96–480, §5, Oct. 21, 1980, 94 Stat. 2312; Pub. L. 99–382, §2, Aug. 14, 1986, 100 Stat. 811; Pub. L. 99–502, §9(b)(3)–(5), (e)(2)(A), Oct. 20, 1986, 100 Stat. 1795, 1797; Pub. L. 100–519, title II, §201(a)–(c), (d)(2), Oct. 24, 1988, 102 Stat. 2593, 2594; Pub. L. 102–245, title III, §306, Feb. 14, 1992, 106 Stat. 20; Pub. L. 105–309, §9, Oct. 30, 1998, 112 Stat. 2938; Pub. L. 106–404, §7(3), Nov. 1, 2000, 114 Stat. 1745; Pub. L. 110–69, title III, §3002(a), Aug. 9, 2007, 121 Stat. 586; Pub. L. 110–315, title IX, §971, Aug. 14, 2008, 122 Stat. 3473; Pub. L. 114–95, title IX, §9215(sss), Dec. 10, 2015, 129 Stat. 2190.)

§3704a. Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation

(a) Establishment

There is established within the Office of Productivity, Technology, and Innovation a Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation. The Clearinghouse shall serve as a central repository of information on initiatives by State and local governments to enhance the competitiveness of American business through the stimulation of productivity, technology, and innovation and Federal efforts to assist State and local governments to enhance competitiveness.

(b) Responsibilities

The Clearinghouse may—

- (1) establish relationships with State and local governments, and regional and multistate organizations of such governments, which carry out such initiatives;
- (2) collect information on the nature, extent, and effects of such initiatives, particularly information useful to the Congress, Federal agencies, State and local governments, regional and multistate organizations of such governments, businesses, and the public throughout the United States;
- (3) disseminate information collected under paragraph (2) through reports, directories, handbooks, conferences, and seminars;
- (4) provide technical assistance and advice to such governments with respect to such initiatives, including assistance in determining sources of assistance from

Federal agencies which may be available to support such initiatives;

- (5) study ways in which Federal agencies, including Federal laboratories, are able to use their existing policies and programs to assist State and local governments, and regional and multistate organizations of such governments, to enhance the competitiveness of American business;
- (6) make periodic recommendations to the Secretary, and to other Federal agencies upon their request, concerning modifications in Federal policies and programs which would improve Federal assistance to State and local technology and business assistance programs;
- (7) develop methodologies to evaluate State and local programs, and, when requested, advise State and local governments, and regional and multistate organizations of such governments, as to which programs are most effective in enhancing the competitiveness of American business through the stimulation of productivity, technology, and innovation; and
- (8) make use of, and disseminate, the nationwide study of State industrial extension programs conducted by the Secretary.

(c) Contracts

In carrying out subsection (b), the Secretary may enter into contracts for the purpose of collecting information on the nature, extent, and effects of initiatives.

(Pub. L. 96–480, §6, as added Pub. L. 100–418, title V, §5122(a)(2), Aug. 23, 1988, 102 Stat. 1438.)

§3704b. National Technical Information Service

(a) Powers

- (1) The Secretary of Commerce, acting through the Director of the National Technical Information Service (hereafter in this section referred to as the “Director”) is authorized to do the following:
 - (A) Enter into such contracts, cooperative agreements, joint ventures, and other transactions, in accordance with all relevant provisions of Federal law applicable to such contracts and agreements, and under reasonable terms and conditions, as may be necessary in the conduct of the business of the National Technical Information Service (hereafter in this section referred to as the “Service”).
 - (B) In addition to the authority regarding fees contained in section 2 of the Act entitled “An Act to provide for the dissemination of technological, scientific, and engineering information to American business and industry, and for other purposes” enacted September 9, 1950 (15 U.S.C. 1152), retain and, subject to appropriations Acts, utilize its net revenues to the extent necessary to implement the plan submitted under subsection (f)(3) (D).
 - (C) Enter into contracts for the performance of part or all of the functions

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performed by the Promotion Division of the Service prior to October 24, 1988. The details of any such contract, and a statement of its effect on the operations and personnel of the Service, shall be provided to the appropriate committees of the Congress 30 days in advance of the execution of such contract.

(D) Employ such personnel as may be necessary to conduct the business of the Service.

(E) For the period of October 1, 1991 through September 30, 1992, only, retain and use all earned and unearned monies heretofore or hereafter received, including receipts, revenues, and advanced payments and deposits, to fund all obligations and expenses, including inventories and capital equipment. An increase or decrease in the personnel of the Service shall not affect or be affected by any ceilings on the number or grade of personnel.

(2) The functions and activities of the Service specified in subsection (e)(1) through (6) are permanent Federal functions to be carried out by the Secretary through the Service and its employees, and shall not be transferred from the Service, by contract or otherwise, to the private sector on a permanent or temporary basis without express approval of the Congress. Functions or activities—

(A) for the procurement of supplies, materials, and equipment by the Service;

(B) referred to in paragraph (1)(C); or

(C) to be performed through joint ventures or cooperative agreements which do not result in a reduction in the Federal workforce of the affected programs of the service, shall not be considered functions or activities for purposes of this paragraph.

(3) For the purposes of this subsection, the term “net revenues” means the excess of revenues and receipts from any source, other than royalties and other income described in section 3710c(a)(4) of this title, over operating expenses.

(4) Omitted.

(b) Director of the Service

The management of the Service shall be vested in a Director who shall report to the Director of the National Institute of Standards and Technology and the Secretary of Commerce.

(c) Advisory Board

(1) There is established the Advisory Board of the National Technical Information Service, which shall be composed of a chairman and four other members appointed by the Secretary.

(2) In appointing members of the Advisory Board the Secretary shall solicit recommendations from the major users and beneficiaries of the Service's activities and shall select individuals experienced in providing or utilizing technical information.

(3) The Advisory Board shall review the general policies and operations of the Service, including policies in connection with fees and charges for its services, and shall advise the Secretary and the Director with respect thereto.

(4) The Advisory Board shall meet at the call of the Secretary, but not less often

than once each six months.

(d) Audits

The Secretary of Commerce shall provide for annual independent audits of the Service's financial statements beginning with fiscal year 1988, to be conducted in accordance with generally accepted accounting principles.

(e) Functions

The Secretary of Commerce, acting through the Service, shall—

- (1) establish and maintain a permanent repository of nonclassified scientific, technical, and engineering information;
- (2) cooperate and coordinate its operations with other Government scientific, technical, and engineering information programs;
- (3) make selected bibliographic information products available in a timely manner to depository libraries as part of the Depository Library Program of the Government Publishing Office;
- (4) in conjunction with the private sector as appropriate, collect, translate into English, and disseminate unclassified foreign scientific, technical, and engineering information;
- (5) implement new methods or media for the dissemination of scientific, technical, and engineering information, including producing and disseminating information products in electronic format; and
- (6) carry out the functions and activities of the Secretary under the Act entitled "An Act to provide for the dissemination of technological, scientific, and engineering information to American business and industry, and for other purposes" enacted September 9, 1950 [15 U.S.C. 1151 et seq.], and the functions and activities of the Secretary performed through the National Technical Information Service as of October 24, 1988, under this chapter.

(f) Notification of Congress

- (1) The Secretary of Commerce and the Director shall keep the appropriate committees of Congress fully and currently informed about all activities related to the carrying out of the functions of the Service, including changes in fee policies.
- (2) Within 90 days after October 24, 1988, the Secretary of Commerce shall submit to the Congress a report on the current fee structure of the Service, including an explanation of the basis for the fees, taking into consideration all applicable costs, and the adequacy of the fees, along with reasons for the declining sales at the Service of scientific, technical, and engineering publications. Such report shall explain any actions planned or taken to increase such sales at reasonable fees.
- (3) The Secretary shall submit an annual report to the Congress which shall—
 - (A) summarize the operations of the Service during the preceding year, including financial details and staff levels broken down by major activities;

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- (B) detail the operating plan of the Service, including specific expense and staff needs, for the upcoming year;
 - (C) set forth details of modernization progress made in the preceding year;
 - (D) describe the long-term modernization plans of the Service; and
 - (E) include the results of the most recent annual audit carried out under subsection (d).
- (4) The Secretary shall also give the Congress detailed advance notice of not less than 30 calendar days of—
- (A) any proposed reduction-in-force;
 - (B) any joint venture or cooperative agreement which involves a financial incentive to the joint venturer or contractor; and
 - (C) any change in the operating plan submitted under paragraph (3)(B) which would result in a variation from such plan with respect to expense levels of more than 10 percent.

(Pub. L. 100–519, title II, §212, Oct. 24, 1988, 102 Stat. 2594; Pub. L. 102–140, title II, Oct. 28, 1991, 105 Stat. 804; Pub. L. 102–245, title V, §506(c), Feb. 14, 1992, 106 Stat. 27; Pub. L. 110–161, div. B, title I, §109, Dec. 26, 2007, 121 Stat. 1893; Pub. L. 113–235, div. H, title I, §1301(b), Dec. 16, 2014, 128 Stat. 2537.)

§3704b-2. Transfer of Federal scientific and technical information

(a) Transfer

The head of each Federal executive department or agency shall transfer in a timely manner to the National Technical Information Service unclassified scientific, technical, and engineering information which results from federally funded research and development activities for dissemination to the private sector, academia, State and local governments, and Federal agencies. Only information which would otherwise be available for public dissemination shall be transferred under this subsection. Such information shall include technical reports and information, computer software, application assessments generated pursuant to section 3710(c) of this title, and information regarding training technology and other federally owned or originated technologies. The Secretary shall issue regulations within one year after February 14, 1992, outlining procedures for the ongoing transfer of such information to the National Technical Information Service.

(b) Annual report to Congress

As part of the annual report required under section 3704b(f)(3) of this title, the Secretary shall report to Congress on the status of efforts under this section to ensure access to Federal scientific and technical information by the public. Such report shall include—

- (1) an evaluation of the comprehensiveness of transfers of information by each Federal executive department or agency under subsection (a);
- (2) a description of the use of Federal scientific and technical information;

- (3) plans for improving public access to Federal scientific and technical information; and
- (4) recommendations for legislation necessary to improve public access to Federal scientific and technical information.

(Pub. L. 102–245, title I, §108, Feb. 14, 1992, 106 Stat. 13.)

§3705. Cooperative Research Centers

(a) Establishment

The Secretary shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with any university, or other nonprofit institution, or group thereof, that applies for and is awarded a grant or enters into a cooperative agreement under this section. The objective of the Centers is to enhance technological innovation through—

- (1) the participation of individuals from industry and universities in cooperative technological innovation activities;
- (2) the development of the generic research base, important for technological advance and innovative activity, in which individual firms have little incentive to invest, but which may have significant economic or strategic importance, such as manufacturing technology;
- (3) the education and training of individuals in the technological innovation process;
- (4) the improvement of mechanisms for the dissemination of scientific, engineering, and technical information among universities and industry;
- (5) the utilization of the capability and expertise, where appropriate, that exists in Federal laboratories; and
- (6) the development of continuing financial support from other mission agencies, from State and local government, and from industry and universities through, among other means, fees, licenses, and royalties.

(b) Activities

The activities of the Centers shall include, but need not be limited to—

- (1) research supportive of technological and industrial innovation including cooperative industry-university research;
- (2) assistance to individuals and small businesses in the generation, evaluation, and development of technological ideas supportive of industrial innovation and new business ventures;
- (3) technical assistance and advisory services to industry, particularly small businesses; and
- (4) curriculum development, training, and instruction in invention, entrepreneurship, and industrial innovation. Each Center need not undertake all of the activities under this subsection.

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For the latest federal regulations, the reader should refer to www.ecfr.gov.

(c) Requirements

Prior to establishing a Center, the Secretary shall find that—

- (1) consideration has been given to the potential contribution of the activities proposed under the Center to productivity, employment, and economic competitiveness of the United States;
- (2) a high likelihood exists of continuing participation, advice, financial support, and other contributions from the private sector;
- (3) the host university or other nonprofit institution has a plan for the management and evaluation of the activities proposed within the particular Center, including:
 - (A) the agreement between the parties as to the allocation of patent rights on a nonexclusive, partially exclusive, or exclusive license basis to and inventions conceived or made under the auspices of the Center; and
 - (B) the consideration of means to place the Center, to the maximum extent feasible, on a self-sustaining basis;
- (4) suitable consideration has been given to the university's or other nonprofit institution's capabilities and geographical location; and
- (5) consideration has been given to any effects upon competition of the activities proposed under the Center.

(d) Planning grants

The Secretary is authorized to make available nonrenewable planning grants to universities or nonprofit institutions for the purpose of developing a plan required under subsection (c)(3).

(e) Research and development utilization

In the promotion of technology from research and development efforts by Centers under this section, chapter 18 of title 35 shall apply to the extent not inconsistent with this section.

(Pub. L. 96-480, §7, formerly §6, Oct. 21, 1980, 94 Stat. 2313; Pub. L. 99-502, §9(b)(6)-(10), Oct. 20, 1986, 100 Stat. 1796; renumbered §7, Pub. L. 100-418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438.)

§3706. Grants and cooperative agreements

(a) In general

The Secretary may make grants and enter into cooperative agreements according to the provisions of this section in order to assist any activity consistent with this chapter, including activities performed by individuals.

(b) Eligibility and procedure

Any person or institution may apply to the Secretary for a grant or cooperative agreement available under this section. Application shall be made in such form and manner, and with such content and other submissions, as the Assistant Secretary shall prescribe. The Secretary shall act upon each such application within 90 days after the date on which all required information is received.

(c) Terms and conditions

- (1) Any grant made, or cooperative agreement entered into, under this section shall be subject to the limitations and provisions set forth in paragraph (2) of

this subsection, and to such other terms, conditions, and requirements as the Secretary deems necessary or appropriate.

- (2) Any person who receives or utilizes any proceeds of any grant made or cooperative agreement entered into under this section shall keep such records as the Secretary shall by regulation prescribe as being necessary and appropriate to facilitate effective audit and evaluation, including records which fully disclose the amount and disposition by such recipient of such proceeds, the total cost of the program or project in connection with which such proceeds were used, and the amount, if any, of such costs which was provided through other sources.

(Pub. L. 96–480, §8, formerly §7, Oct. 21, 1980, 94 Stat. 2315; renumbered §8 and amended Pub. L. 100–418, title V, §§5115(b)(1), 5122(a)(1), Aug. 23, 1988, 102 Stat. 1433, 1438; Pub. L. 114–329, title II, §203, Jan. 6, 2017, 130 Stat. 2998.)

§3707. National Science Foundation Cooperative Research Centers

(a) Establishment and provisions

The National Science Foundation shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with a university, or other nonprofit institution, or a group thereof. The objective of the Centers is to enhance technological innovation as provided in section 3705(a) of this title through the conduct of activities as provided in section 3705(b) of this title.

(b) Planning grants

The National Science Foundation is authorized to make available nonrenewable planning grants to universities or nonprofit institutions for the purpose of developing the plan, as described under section 3705(c)(3) of this title.

(c) Terms and conditions

Grants, contracts, and cooperative agreements entered into by the National Science Foundation in execution of the powers and duties of the National Science Foundation under this chapter shall be governed by the National Science Foundation Act of 1950 [42 U.S.C. 1861 et seq.] and other pertinent Acts.

(Pub. L. 96–480, §9, formerly §8, Oct. 21, 1980, 94 Stat. 2316; Pub. L. 99–502, §9(b)(11), (12), (e)(2)(B), Oct. 20, 1986, 100 Stat. 1796, 1797; renumbered §9, Pub. L. 100–418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; Pub. L. 106–404, §7(4), Nov. 1, 2000, 114 Stat. 1745.)

§3708. Administrative arrangements

(a) Coordination

The Secretary and the National Science Foundation shall, on a continuing basis, obtain the advice and cooperation of departments and agencies whose missions contribute to or are affected by the programs established under this chapter,

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including the development of an agenda for research and policy experimentation. These departments and agencies shall include but not be limited to the Departments of Defense, Energy, Education, Health and Human Services, Housing and Urban Development, the Environmental Protection Agency, National Aeronautics and Space Administration, Small Business Administration, Council of Economic Advisers, Council on Environmental Quality, and Office of Science and Technology Policy.

(b) Cooperation

It is the sense of the Congress that departments and agencies, including the Federal laboratories, whose missions are affected by, or could contribute to, the programs established under this chapter, should, within the limits of budgetary authorizations and appropriations, support or participate in activities or projects authorized by this chapter.

(c) Administrative authorization

(1) Departments and agencies described in subsection (b) are authorized to participate in, contribute to, and serve as resources for the Centers and for any other activities authorized under this chapter.

(2) The Secretary and the National Science Foundation are authorized to receive moneys and to receive other forms of assistance from other departments or agencies to support activities of the Centers and any other activities authorized under this chapter.

(d) Cooperative efforts

The Secretary and the National Science Foundation shall, on a continuing basis, provide each other the opportunity to comment on any proposed program of activity under section 3705, 3707, 3710, 3710d, 3711a, or 3712 of this title before funds are committed to such program in order to mount complementary efforts and avoid duplication.

(Pub. L. 96–480, §10, formerly §9, Oct. 21, 1980, 94 Stat. 2316; Pub. L. 99–502, §9(e)(2) (C), Oct. 20, 1986, 100 Stat. 1797; Pub. L. 100–107, §3(b), Aug. 20, 1987, 101 Stat. 727; renumbered §10 and amended Pub. L. 100–418, title V, §5122(a)(1), (c), Aug. 23, 1988, 102 Stat. 1438, 1439; Pub. L. 102–240, title VI, §6019, Dec. 18, 1991, 105 Stat. 2183.)

§3710. Utilization of Federal Technology

(a) Policy

(1) It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development. To this end the Federal Government shall strive where appropriate to transfer federally owned or originated technology to State and local governments and to the private sector.

(2) Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.

(3) Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory.

(b) Establishment of Research and Technology Applications Offices

Each Federal laboratory shall establish an Office of Research and technology Applications. Laboratories having existing organizational structures which perform the functions of this section may elect to combine the Office of Research and Technology Applications within the existing organization. The staffing and funding levels for these offices shall be determined between each Federal laboratory and the Federal agency operating or directing the laboratory, except that (1) each laboratory having 200 or more full-time equivalent scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions as staff for its Office of Research and Technology Applications, and (2) each Federal agency which operates or directs one or more Federal laboratories shall make available sufficient funding, either as a separate line item or from the agency's research and development budget, to support the technology transfer function at the agency and at its laboratories, including support of the Offices of Research and Technology Applications. Furthermore, individuals filling positions in an Office of Research and Technology Applications shall be included in the overall laboratory/agency management development program so as to ensure that highly competent technical managers are full participants in the technology transfer process.

(c) Functions of Research and Technology Applications Offices

It shall be the function of each Office of Research and Technology Applications—

- (1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the opinion of the laboratory may have potential commercial applications;
- (2) to provide and disseminate information on federally owned or originated products, processes, and services having potential application to State and local governments and to private industry;
- (3) to cooperate with and assist the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer, and other organizations which link the research and development resources of that laboratory and the Federal Government as a whole to potential users in State and local government and private industry;
- (4) to provide technical assistance to State and local government officials; and
- (5) to participate, where feasible, in regional, State, and local programs designed to facilitate or stimulate the transfer of technology for the benefit of the region, State, or local jurisdiction in which the Federal laboratory is located.

Agencies which have established organizational structures outside their Federal laboratories which have as their principal purpose the transfer of federally owned or originated technology to State and local government and to the private sector may elect to perform the functions of this subsection in such organizational structures. No Office of Research and Technology Applications or other organizational structures performing the functions of this subsection shall substantially compete with similar services available in the private sector.

(d) Dissemination of technical information

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For the latest federal regulations, the reader should refer to www.ecfr.gov.

The National Technical Information Service shall—

- (1) serve as a central clearinghouse for the collection, dissemination and transfer of information on federally owned or originated technologies having potential application to State and local governments and to private industry;
- (2) utilize the expertise and services of the National Science Foundation and the Federal Laboratory Consortium for Technology Transfer; particularly in dealing with State and local governments;
- (3) receive requests for technical assistance from State and local governments, respond to such requests with published information available to the Service, and refer such requests to the Federal Laboratory Consortium for Technology Transfer to the extent that such requests require a response involving more than the published information available to the Service;
- (4) provide funding, at the discretion of the Secretary, for Federal laboratories to provide the assistance specified in subsection (c)(3);
- (5) use appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems; and
- (6) maintain a permanent archival repository and clearinghouse for the collection and dissemination of nonclassified scientific, technical, and engineering information.

(e) Establishment of Federal Laboratory Consortium for Technology Transfer

- (1) There is hereby established the Federal Laboratory Consortium for Technology Transfer (hereinafter referred to as the “Consortium”) which, in cooperation with Federal laboratories and the private sector, shall—
 - (A) develop and (with the consent of the Federal laboratory concerned) administer techniques, training courses, and materials concerning technology transfer to increase the awareness of Federal laboratory employees regarding the commercial potential of laboratory technology and innovations;
 - (B) furnish advice and assistance requested by Federal agencies and laboratories for use in their technology transfer programs (including the planning of seminars for small business and other industry);
 - (C) provide a clearinghouse for requests, received at the laboratory level, for technical assistance from States and units of local governments, businesses, industrial development organizations, not-for-profit organizations including universities, Federal agencies and laboratories, and other persons, and—
 - (i) to the extent that such requests can be responded to with published information available to the National Technical Information Service, refer such requests to that Service, and
 - (ii) otherwise refer these requests to the appropriate Federal laboratories and agencies;
 - (D) facilitate communication and coordination between Offices of Research and Technology Applications of Federal laboratories;
 - (E) utilize (with the consent of the agency involved) the expertise and services of the National Science Foundation, the Department of Commerce, the

- National Aeronautics and Space Administration, and other Federal agencies, as necessary;
- (F) with the consent of any Federal laboratory, facilitate the use by such laboratory of appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems;
 - (G) with the consent of any Federal laboratory, assist such laboratory to establish programs using technical volunteers to provide technical assistance to communities related to such laboratory;
 - (H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations;
 - (I) when requested, assist colleges or universities, businesses, nonprofit organizations, State or local governments, or regional organizations to establish programs to stimulate research and to encourage technology transfer in such areas as technology program development, curriculum design, long-term research planning, personnel needs projections, and productivity assessments;
 - (J) seek advice in each Federal laboratory consortium region from representatives of State and local governments, large and small business, universities, and other appropriate persons on the effectiveness of the program (and any such advice shall be provided at no expense to the Government); and
 - (K) work with the Director of the National Institute on Disability and Rehabilitation Research to compile a compendium of current and projected Federal Laboratory technologies and projects that have or will have an intended or recognized impact on the available range of assistive technology for individuals with disabilities (as defined in section 3002 of title 29), including technologies and projects that incorporate the principles of universal design (as defined in section 3002 of title 29), as appropriate.
- (2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) and such other laboratories as may choose to join the Consortium. The representatives to the Consortium shall include a senior staff member of each Federal laboratory which is a member of the Consortium and a senior representative appointed from each Federal agency with one or more member laboratories.
 - (3) The representatives to the Consortium shall elect a Chairman of the Consortium.
 - (4) The Director of the National Institute of Standards and Technology shall provide the Consortium, on a reimbursable basis, with administrative services, such as office space, personnel, and support services of the Institute, as requested by the Consortium and approved by such Director.
 - (5) Each Federal laboratory or agency shall transfer technology directly to users or representatives of users, and shall not transfer technology directly to the Consortium. Each Federal laboratory shall conduct and transfer technology

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only in accordance with the practices and policies of the Federal agency which owns, leases, or otherwise uses such Federal laboratory.

(6) Not later than one year after October 20, 1986, and every year thereafter, the Chairman of the Consortium shall submit a report to the President, to the appropriate authorization and appropriation committees of both Houses of the Congress, and to each agency with respect to which a transfer of funding is made (for the fiscal year or years involved) under paragraph (7), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made. Such report shall include an annual independent audit of the financial statements of the Consortium, conducted in accordance with generally accepted accounting principles.

(7)(A) Subject to subparagraph (B), an amount equal to 0.008 percent of the budget of each Federal agency from any Federal source, including related overhead, that is to be utilized by or on behalf of the laboratories of such agency for a fiscal year referred to in subparagraph (B)(ii) shall be transferred by such agency to the National Institute of Standards and Technology at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Institute to the Consortium for the purpose of carrying out activities of the Consortium under this subsection.

(B) A transfer shall be made by any Federal agency under subparagraph (A), for any fiscal year, only if the amount so transferred by that agency (as determined under such subparagraph) would exceed \$10,000.

(C) The heads of Federal agencies and their designees, and the directors of Federal laboratories, may provide such additional support for operations of the Consortium as they deem appropriate.

(f) Agency reports on utilization

(1) In general

Each Federal agency which operates or directs one or more Federal laboratories or which conducts activities under sections 207 and 209 of title 35 shall report annually to the Office of Management and Budget, as part of the agency's annual budget submission, on the activities performed by that agency and its Federal laboratories under the provisions of this section and of sections 207 and 209 of title 35.

(2) Contents

The report shall include—

(A) an explanation of the agency's technology transfer program for the preceding fiscal year and the agency's plans for conducting its technology transfer function, including its plans for securing intellectual property rights in laboratory innovations with commercial promise and plans for managing its intellectual property so as to advance the agency's mission and benefit the competitiveness of United States industry; and

(B) information on technology transfer activities for the preceding fiscal year, including—

(i) the number of patent applications filed;

(ii) the number of patents received;

- (iii) the number of fully-executed licenses which received royalty income in the preceding fiscal year, categorized by whether they are exclusive, partially-exclusive, or non-exclusive, and the time elapsed from the date on which the license was requested by the licensee in writing to the date the license was executed;
- (iv) the total earned royalty income including such statistical information as the total earned royalty income, of the top 1 percent, 5 percent, and 20 percent of the licenses, the range of royalty income, and the median, except where disclosure of such information would reveal the amount of royalty income associated with an individual license or licensee;
- (v) what disposition was made of the income described in clause (iv);
- (vi) the number of licenses terminated for cause; and
- (vii) any other parameters or discussion that the agency deems relevant or unique to its practice of technology transfer.

(3) Copy to Secretary; Attorney General; Congress

The agency shall transmit a copy of the report to the Secretary of Commerce and the Attorney General for inclusion in the annual report to Congress and the President required by subsection (g)(2).

(4) Public availability

Each Federal agency reporting under this subsection is also strongly encouraged to make the information contained in such report available to the public through Internet sites or other electronic means.

(g) Functions of Secretary

(1) The Secretary, in consultation with other Federal agencies, may—

- (A) make available to interested agencies the expertise of the Department of Commerce regarding the commercial potential of inventions and methods and options for commercialization which are available to the Federal laboratories, including research and development limited partnerships;
- (B) develop and disseminate to appropriate agency and laboratory personnel model provisions for use on a voluntary basis in cooperative research and development arrangements; and
- (C) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development programs and projects.

(2) Reports.—

- (A) Annual report required.—The Secretary, in consultation with the Attorney General and the Commissioner of Patents and Trademarks, shall submit each fiscal year, beginning 1 year after November 1, 2000, a summary report to the President, the United States Trade Representative, and the Congress on the use by Federal agencies and the Secretary of the technology transfer authorities specified in this chapter and in sections

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207 and 209 of title 35.

(B) Content.—The report shall—

- (i) draw upon the reports prepared by the agencies under subsection (f);
- (ii) discuss technology transfer best practices and effective approaches in the licensing and transfer of technology in the context of the agencies' missions; and
- (iii) discuss the progress made toward development of additional useful measures of the outcomes of technology transfer programs of Federal agencies.

(C) Public availability.—The Secretary shall make the report available to the public through Internet sites or other electronic means.

(3) Not later than one year after October 20, 1986, the Secretary shall submit to the President and the Congress a report regarding—

- (A) any copyright provisions or other types of barriers which tend to restrict or limit the transfer of federally funded computer software to the private sector and to State and local governments, and agencies of such State and local governments; and
- (B) the feasibility and cost of compiling and maintaining a current and comprehensive inventory of all federally funded training software.

(h) Duplication of reporting

The reporting obligations imposed by this section—

- (1) are not intended to impose requirements that duplicate requirements imposed by the Government Performance and Results Act of 1993 (31 U.S.C. 1101 note);
- (2) are to be implemented in coordination with the implementation of that Act; and
- (3) are satisfied if an agency provided the information concerning technology transfer activities described in this section in its annual submission under the Government Performance and Results Act of 1993 (31 U.S.C. 1101 note).

(i) Research equipment

The Director of a laboratory, or the head of any Federal agency or department, may loan, lease, or give research equipment that is excess to the needs of the laboratory, agency, or department to an educational institution or nonprofit organization for the conduct of technical and scientific education and research activities. Title of ownership shall transfer with a gift under this section.

(Pub. L. 96–480, §11, Oct. 21, 1980, 94 Stat. 2318; renumbered §10 and amended Pub. L. 99–502, §§3–5, 9(e)(1), Oct. 20, 1986, 100 Stat. 1787, 1789, 1791, 1797; renumbered §11 and amended Pub. L. 100–418, title V, §§5115(b)(2), 5122(a)(1), 5162(b), 5163(c)(1), (3), Aug. 23, 1988, 102 Stat. 1433, 1438, 1450, 1451; Pub. L. 100–519, title II, §§201(d)(3), 212(a)(4), Oct. 24, 1988, 102 Stat. 2594, 2595; Pub. L. 101–189, div. C, title XXXI, §3133(e), Nov. 29, 1989, 103 Stat. 1679; Pub. L. 102–245, title III, §§301, 303, Feb. 14, 1992, 106 Stat. 19, 20; Pub. L. 104–66, title III, §3001(f), Dec. 21, 1995, 109 Stat. 734; Pub. L. 104–113, §§3,

9, Mar. 7, 1996, 110 Stat. 775, 779; Pub. L. 105–394, title II, §212(d), Nov. 13, 1998, 112 Stat. 3655; Pub. L. 106–404, §§7(5), (6), 10(a), Nov. 1, 2000, 114 Stat. 1745–1747; Pub. L. 110–69, title III, §3002(c)(4), Aug. 9, 2007, 121 Stat. 586.)

§3710a. Cooperative research and development agreements

(a) General authority

Each Federal agency may permit the director of any of its Government-operated Federal laboratories, and, to the extent provided in an agency-approved joint work statement or, if permitted by the agency, in an agency-approved annual strategic plan, the director of any of its Government-owned, contractor-operated laboratories—

- (1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations (including corporations, partnerships, and limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or other persons (including licensees of inventions owned by the Federal agency); and
- (2) to negotiate licensing agreements under section 207 of title 35, or under other authorities (in the case of a Government-owned, contractor-operated laboratory, subject to subsection (c) of this section) for inventions made or other intellectual property developed at the laboratory and other inventions or other intellectual property that may be voluntarily assigned to the Government.

(b) Enumerated authority

(1) Under an agreement entered into pursuant to subsection (a)(1), the laboratory may grant, or agree to grant in advance, to a collaborating party patent licenses or assignments, or options thereto, in any invention made in whole or in part by a laboratory employee under the agreement, or, subject to section 209 of title 35, may grant a license to an invention which is federally owned, for which a patent application was filed before the signing of the agreement, and directly within the scope of the work under the agreement, for reasonable compensation when appropriate. The laboratory shall ensure, through such agreement, that the collaborating party has the option to choose an exclusive license for a pre-negotiated field of use for any such invention under the agreement or, if there is more than one collaborating party, that the collaborating parties are offered the option to hold licensing rights that collectively encompass the rights that would be held under such an exclusive license by one party. In consideration for the Government's contribution under the agreement, grants under this paragraph shall be subject to the following explicit conditions:

- (A) A nonexclusive, nontransferable, irrevocable, paid-up license from the collaborating party to the laboratory to practice the invention or have the invention practiced throughout the world by or on behalf of the

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Government. In the exercise of such license, the Government shall not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of section 552(b)(4) of title 5 or which would be considered as such if it had been obtained from a non-Federal party.

- (B) If a laboratory assigns title or grants an exclusive license to such an invention, the Government shall retain the right—
 - (i) to require the collaborating party to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive license to use the invention in the applicant's licensed field of use, on terms that are reasonable under the circumstances; or
 - (ii) if the collaborating party fails to grant such a license, to grant the license itself.
- (C) The Government may exercise its right retained under subparagraph (B) only in exceptional circumstances and only if the Government determines that—
 - (i) the action is necessary to meet health or safety needs that are not reasonably satisfied by the collaborating party;
 - (ii) the action is necessary to meet requirements for public use specified by Federal regulations, and such requirements are not reasonably satisfied by the collaborating party; or
 - (iii) the collaborating party has failed to comply with an agreement containing provisions described in subsection (c)(4)(B).

This determination is subject to administrative appeal and judicial review under section 203(2) of title 35.

- (2) Under agreements entered into pursuant to subsection (a)(1), the laboratory shall ensure that a collaborating party may retain title to any invention made solely by its employee in exchange for normally granting the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government for research or other Government purposes.
- (3) Under an agreement entered into pursuant to subsection (a)(1), a laboratory may—
 - (A) accept, retain, and use funds, personnel, services, and property from a collaborating party and provide personnel, services, and property to a collaborating party;
 - (B) use funds received from a collaborating party in accordance with subparagraph (A) to hire personnel to carry out the agreement who will not be subject to full-time-equivalent restrictions of the agency;
 - (C) to the extent consistent with any applicable agency requirements or standards of conduct, permit an employee or former employee of the laboratory to participate in an effort to commercialize an invention made by the employee or former employee while in the employment or service of the Government; and
 - (D) waive, subject to reservation by the Government of a nonexclusive, irrevocable, paid-up license to practice the invention or have the invention

practiced throughout the world by or on behalf of the Government, in advance, in whole or in part, any right of ownership which the Federal Government may have to any subject invention made under the agreement by a collaborating party or employee of a collaborating party.

- (4) A collaborating party in an exclusive license in any invention made under an agreement entered into pursuant to subsection (a)(1) shall have the right of enforcement under chapter 29 of title 35.
 - (5) A Government-owned, contractor-operated laboratory that enters into a cooperative research and development agreement pursuant to subsection (a) (1) may use or obligate royalties or other income accruing to the laboratory under such agreement with respect to any invention only—
 - (A) for payments to inventors;
 - (B) for purposes described in clauses (i), (ii), (iii), and (iv) of section 3710c(a) (1)(B) of this title; and
 - (C) for scientific research and development consistent with the research and development missions and objectives of the laboratory.
 - (6)(A) In the case of a laboratory that is part of the National Nuclear Security Administration, a designated official of that Administration may waive any license retained by the Government under paragraph (1)(A), (2), or (3)(D), in whole or in part and according to negotiated terms and conditions, if the designated official finds that the retention of the license by the Government would substantially inhibit the commercialization of an invention that would otherwise serve an important national security mission.
 - (B) The authority to grant a waiver under subparagraph (A) shall expire on the date that is five years after October 30, 2000. The expiration under the preceding sentence of authority to grant a waiver under subparagraph (A) shall not affect any waiver granted under that subparagraph before the expiration of such authority.
 - (C) Not later than February 15 of each year, the Administrator for Nuclear Security shall submit to Congress a report on any waivers granted under this paragraph during the preceding year.
- (c) Contract considerations
- (1) A Federal agency may issue regulations on suitable procedures for implementing the provisions of this section; however, implementation of this section shall not be delayed until issuance of such regulations.
 - (2) The agency in permitting a Federal laboratory to enter into agreements under this section shall be guided by the purposes of this chapter.
 - (3)(A) Any agency using the authority given it under subsection (a) shall review standards of conduct for its employees for resolving potential conflicts of interest to make sure they adequately establish guidelines for situations likely to arise through the use of this authority, including but not limited to cases where present or former employees or their partners negotiate licenses or assignments of titles to inventions or negotiate cooperative research and

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development agreements with Federal agencies (including the agency with which the employee involved is or was formerly employed).

- (B) If, in implementing subparagraph (A), an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.
- (4) The laboratory director in deciding what cooperative research and development agreements to enter into shall—
- (A) give special consideration to small business firms, and consortia involving small business firms; and
 - (B) give preference to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement or produced through the use of such inventions will be manufactured substantially in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, as appropriate, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements.
- (5)(A) If the head of the agency or his designee desires an opportunity to disapprove or require the modification of any such agreement presented by the director of a Government-operated laboratory, the agreement shall provide a 30-day period within which such action must be taken beginning on the date the agreement is presented to him or her by the head of the laboratory concerned.
- (B) In any case in which the head of an agency or his designee disapproves or requires the modification of an agreement presented by the director of a Government-operated laboratory under this section, the head of the agency or such designee shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.
- (C)
- (i) Any non-Federal entity that operates a laboratory pursuant to a contract with a Federal agency shall submit to the agency any cooperative research and development agreement that the entity proposes to enter into and the joint work statement if required with respect to that agreement.
 - (ii) A Federal agency that receives a proposed agreement and joint work statement under clause (i) shall review and approve, request specific modifications to, or disapprove the proposed agreement and joint work statement within 30 days after such submission. No agreement may be entered into by a Government-owned, contractor-operated laboratory under this section before both approval of the agreement and approval of a joint work statement under this clause.
 - (iii) In any case in which an agency which has contracted with an entity referred to in clause (i) disapproves or requests the modification of a cooperative research and development agreement or joint work statement submitted under that clause, the agency shall transmit a

written explanation of such disapproval or modification to the head of the laboratory concerned.

(iv) Any agency that has contracted with a non-Federal entity to operate a laboratory may develop and provide to such laboratory one or more model cooperative research and development agreements for purposes of standardizing practices and procedures, resolving common legal issues, and enabling review of cooperative research and development agreements to be carried out in a routine and prompt manner.

(v) A Federal agency may waive the requirements of clause (i) or (ii) under such circumstances as the agency considers appropriate.

(6) Each agency shall maintain a record of all agreements entered into under this section.

(7)(A) No trade secrets or commercial or financial information that is privileged or confidential, under the meaning of section 552(b)(4) of title 5, which is obtained in the conduct of research or as a result of activities under this chapter from a non-Federal party participating in a cooperative research and development agreement shall be disclosed.

(B) The director, or in the case of a contractor-operated laboratory, the agency, for a period of up to 5 years after development of information that results from research and development activities conducted under this chapter and that would be a trade secret or commercial or financial information that is privileged or confidential if the information had been obtained from a non-Federal party participating in a cooperative research and development agreement, may provide appropriate protections against the dissemination of such information, including exemption from subchapter II of chapter 5 of title 5.

(d) Definitions

As used in this section—

(1) the term “cooperative research and development agreement” means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government, through its laboratories, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the laboratory; except that such term does not include a procurement contract or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31;

(2) the term “laboratory” means—

(A) a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the performance of research, development, or engineering by employees of the Federal Government;

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(B) a group of Government-owned, contractor-operated facilities (including a weapon production facility of the Department of Energy) under a common contract, when a substantial purpose of the contract is the performance of research and development, or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components, for the Federal Government; and

(C) a Government-owned, contractor-operated facility (including a weapon production facility of the Department of Energy) that is not under a common contract described in subparagraph (B), and the primary purpose of which is the performance of research and development, or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components, for the Federal Government, but such term does not include any facility covered by Executive Order No. 12344, dated February 1, 1982, pertaining to the naval nuclear propulsion program;

(3) the term “joint work statement” means a proposal prepared for a Federal agency by the director of a Government-owned, contractor-operated laboratory describing the purpose and scope of a proposed cooperative research and development agreement, and assigning rights and responsibilities among the agency, the laboratory, and any other party or parties to the proposed agreement; and

(4) the term “weapon production facility of the Department of Energy” means a facility under the control or jurisdiction of the Secretary of Energy that is operated for national security purposes and is engaged in the production, maintenance, testing, or dismantlement of a nuclear weapon or its components.

(e) Determination of laboratory missions

For purposes of this section, an agency shall make separate determinations of the mission or missions of each of its laboratories.

(f) Relationship to other laws

Nothing in this section is intended to limit or diminish existing authorities of any agency.

(g) Principles

In implementing this section, each agency which has contracted with a non-Federal entity to operate a laboratory shall be guided by the following principles:

(1) The implementation shall advance program missions at the laboratory, including any national security mission.

(2) Classified information and unclassified sensitive information protected by law, regulation, or Executive order shall be appropriately safeguarded.

(Pub. L. 96–480, §12, as added and renumbered §11, Pub. L. 99–502, §§2, 9(e)(1), Oct. 20, 1986, 100 Stat. 1785, 1797; renumbered §12, Pub. L. 100–418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; amended Pub. L. 100–519, title III, §301, Oct. 24, 1988, 102 Stat. 2597; Pub. L. 101–189, div. C, title XXXI, §3133(a), (b), Nov. 29, 1989, 103 Stat. 1675, 1677; Pub. L. 102–25, title VII, §705(g), Apr. 6, 1991, 105 Stat. 121; Pub. L. 102–245, title III, §302(a), Feb. 14, 1992, 106 Stat. 20; Pub. L. 102–484, div. C, title XXXI, §3135(a), Oct. 23, 1992, 106 Stat. 2640; Pub. L. 103–160, div. C, title XXXI, §3160, Nov. 30, 1993, 107 Stat. 1957; Pub. L. 104–113, §4, Mar. 7, 1996, 110 Stat. 775; Pub. L. 106–398, §1 [div. C, title XXXI, §3196], Oct. 30, 2000, 114 Stat. 1654, 1654A–481; Pub. L. 106–404, §3, Nov. 1, 2000, 114 Stat. 1742.)

§3710b. Rewards for scientific, engineering, and technical personnel of Federal agencies

The head of each Federal agency that is making expenditures at a rate of more than \$50,000,000 per fiscal year for research and development in its Government-operated laboratories shall use the appropriate statutory authority to develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for—

- (1) inventions, innovations, computer software, or other outstanding scientific or technological contributions of value to the United States due to commercial application or due to contributions to missions of the Federal agency or the Federal government, or
- (2) exemplary activities that promote the domestic transfer of science and technology development within the Federal Government and result in utilization of such science and technology by American industry or business, universities, State or local governments, or other non-Federal parties.

(Pub. L. 96–480, §13, as added and renumbered §12, Pub. L. 99–502, §§6, 9(e)(1), Oct. 20, 1986, 100 Stat. 1792, 1797; renumbered §13, Pub. L. 100–418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; amended Pub. L. 100–519, title III, §302, Oct. 24, 1988, 102 Stat. 2597.)

AMENDMENTS

1988—Par. (1). Pub. L. 100–519 inserted “computer software,” after “inventions, innovations,”.

§3710c. Distribution of royalties received by Federal agencies

(a) In general

- (1) Except as provided in paragraphs (2) and (4), any royalties or other payments received by a Federal agency from the licensing and assignment of inventions under agreements entered into by Federal laboratories under section 3710a of this title, and from the licensing of inventions of Federal laboratories under section 207 of title 35 or under any other provision of law, shall be retained by the laboratory which produced the invention and shall be disposed of as follows:
 - (i) The head of the agency or laboratory, or such individual’s designee, shall pay each year the first \$2,000, and thereafter at least 15 percent, of the royalties or other payments, other than payments of patent costs as delineated by a license or assignment agreement, to the inventor or coinventors, if the inventor’s or coinventor’s rights are assigned to the United States.
 - (ii) An agency or laboratory may provide appropriate incentives, from royalties, or other payments, to laboratory employees who are not

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- an inventor of such inventions but who substantially increased the technical value of such inventions.
- (iii) The agency or laboratory shall retain the royalties and other payments received from an invention until the agency or laboratory makes payments to employees of a laboratory under clause (i) or (ii).
- (B) The balance of the royalties or other payments shall be transferred by the agency to its laboratories, with the majority share of the royalties or other payments from any invention going to the laboratory where the invention occurred. The royalties or other payments so transferred to any laboratory may be used or obligated by that laboratory during the fiscal year in which they are received or during the 2 succeeding fiscal years—
- (i) to reward scientific, engineering, and technical employees of the laboratory, including developers of sensitive or classified technology, regardless of whether the technology has commercial applications;
 - (ii) to further scientific exchange among the laboratories of the agency;
 - (iii) for education and training of employees consistent with the research and development missions and objectives of the agency or laboratory, and for other activities that increase the potential for transfer of the technology of the laboratories of the agency;
 - (iv) for payment of expenses incidental to the administration and licensing of intellectual property by the agency or laboratory with respect to inventions made at that laboratory, including the fees or other costs for the services of other agencies, persons, or organizations for intellectual property management and licensing services; or
 - (v) for scientific research and development consistent with the research and development missions and objectives of the laboratory.
- (C) All royalties or other payments retained by the agency or laboratory after payments have been made pursuant to subparagraphs (A) and (B) that is unobligated and unexpended at the end of the second fiscal year succeeding the fiscal year in which the royalties and other payments were received shall be paid into the Treasury.
- (2) If, after payments to inventors under paragraph (1), the royalties or other payments received by an agency in any fiscal year exceed 5 percent of the budget of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated under paragraph (1)(B). Any funds not so used or obligated shall be paid into the Treasury of the United States.
 - (3) Any payment made to an employee under this section shall be in addition to the regular pay of the employee and to any other awards made to the employee, and shall not affect the entitlement of the employee to any regular pay, annuity, or award to which he is otherwise entitled or for which he is otherwise eligible or limit the amount thereof. Any payment made to an inventor as such shall continue after the inventor leaves the laboratory or agency. Payments made under this section shall not exceed \$150,000 per year to any one person, unless the President approves a larger award (with the excess over \$150,000 being treated as a Presidential award under section 4504 of title 5).
 - (4) A Federal agency receiving royalties or other payments as a result of invention management services performed for another Federal agency or laboratory

under section 207 of title 35, may retain such royalties or payments to the extent required to offset payments to inventors under clause (i) of paragraph (1)(A), costs and expenses incurred under clause (iv) of paragraph (1)(B), and the cost of foreign patenting and maintenance for any invention of the other agency. All royalties and other payments remaining after offsetting the payments to inventors, costs, and expenses described in the preceding sentence shall be transferred to the agency for which the services were performed, for distribution in accordance with paragraph (1)(B).

(b) Certain assignments

If the invention involved was one assigned to the Federal agency—

- (1) by a contractor, grantee, or participant, or an employee of a contractor, grantee, or participant, in an agreement or other arrangement with the agency, or
- (2) by an employee of the agency who was not working in the laboratory at the time the invention was made, the agency unit that was involved in such assignment shall be considered to be a laboratory for purposes of this section.

(c) Reports

The Comptroller General shall transmit a report to the appropriate committees of the Senate and House of Representatives on the effectiveness of Federal technology transfer programs, including findings, conclusions, and recommendations for improvements in such programs. The report shall be integrated with, and submitted at the same time as, the report required by section 202(b)(3) of title 35.

(Pub. L. 96–480, §14, as added, renumbered §13, and amended Pub. L. 99–502, §§7, 9(e) (1), (3), Oct. 20, 1986, 100 Stat. 1792, 1797; renumbered §14 and amended Pub. L. 100–418, title V, §§5122(a)(1), 5162(a), Aug. 23, 1988, 102 Stat. 1438, 1450; Pub. L. 100–519, title III, §303(a), Oct. 24, 1988, 102 Stat. 2597; Pub. L. 101–189, div. C, title XXXI, §3133(c), Nov. 29, 1989, 103 Stat. 1677; Pub. L. 104–113, §5, Mar. 7, 1996, 110 Stat. 777; Pub. L. 106–404, §§7(7), 10(b), Nov. 1, 2000, 114 Stat. 1746, 1749.)

§3710d. Employee activities

(a) In general

If a Federal agency which has ownership of or the right of ownership to an invention made by a Federal employee does not intend to file for a patent application or otherwise to promote commercialization of such invention, the agency shall allow the inventor, if the inventor is a Government employee or former employee who made the invention during the course of employment with the Government, to obtain or retain title to the invention (subject to reservation by the Government of a nonexclusive, nontransferable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government). In addition, the agency may condition the inventor's right to title on the timely filing of a patent application in cases when the Government determines that it has or may have a need to practice the invention.

(b) “Special Government employees” defined

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For the latest federal regulations, the reader should refer to www.ecfr.gov.

For purposes of this section, Federal employees include “special Government employees” as defined in section 202 of title 18.

(c) Relationship to other laws

Nothing in this section is intended to limit or diminish existing authorities of any agency.

(Pub. L. 96–480, §15, as added and renumbered §14, Pub. L. 99–502, §§8, 9(e)(1), Oct. 20, 1986, 100 Stat. 1794, 1797; renumbered §15, Pub. L. 100–418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; amended Pub. L. 104–113, §6, Mar. 7, 1996, 110 Stat. 779.)

§3711. National Technology and Innovation Medal

(a) Establishment

There is hereby established a National Technology and Innovation Medal, which shall be of such design and materials and bear such inscriptions as the President, on the basis of recommendations submitted by the Office of Science and Technology Policy, may prescribe.

(b) Award

The President shall periodically award the medal, on the basis of recommendations received from the Secretary or on the basis of such other information and evidence as he deems appropriate, to individuals or companies, which in his judgment are deserving of special recognition by reason of their outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social well-being of the United States.

(c) Presentation

The presentation of the award shall be made by the President with such ceremonies as he may deem proper.

(Pub. L. 96–480, §16, formerly §12, Oct. 21, 1980, 94 Stat. 2319; renumbered §16, Pub. L. 99–502, §2, Oct. 20, 1986, 100 Stat. 1785; renumbered §15, Pub. L. 99–502, §9(e)(1), Oct. 20, 1986, 100 Stat. 1797; renumbered §16, Pub. L. 100–418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; Pub. L. 110–69, title I, §1003, Aug. 9, 2007, 121 Stat. 576.)

§3712. Personnel exchanges

The Secretary, the Secretary of Energy, and the Director of the National Science Foundation, jointly, shall establish a program to foster the exchange of scientific and technical personnel among academia, industry, and Federal laboratories. Such program shall include both (1) federally supported exchanges and (2) efforts to stimulate exchanges without Federal funding.

(Pub. L. 96–480, §20, formerly §13, Oct. 21, 1980, 94 Stat. 2320; renumbered §17, Pub. L. 99–502, §2, Oct. 20, 1986, 100 Stat. 1785; renumbered §16, Pub. L. 99–502, §9(e)(1), Oct. 20, 1986, 100 Stat. 1797 ; renumbered §17, Pub. L. 100–107, §3(a), Aug. 20, 1987, 101 Stat. 725; renumbered §18, Pub. L. 100–418, title V, §5122(a)(1), Aug. 23, 1988, 102 Stat. 1438; renumbered §20, Pub. L. 102–240, title VI, §6019, Dec. 18, 1991, 105 Stat. 2183 ; Pub. L. 109–58, title X, §1009(c), Aug. 8, 2005, 119 Stat. 936.)

§3715. Use of partnership intermediaries

(a) Authority

Subject to the approval of the Secretary or head of the affected department or agency, the Director of a Federal laboratory, or in the case of a federally funded research and development center that is not a laboratory (as defined in section 3710a(d)(2) of this title), the Federal employee who is the contract officer, may—

- (1) enter into a contract or memorandum of understanding with a partnership intermediary that provides for the partnership intermediary to perform services for the Federal laboratory that increase the likelihood of success in the conduct of cooperative or joint activities of such Federal laboratory with small business firms, institutions of higher education as defined in section 1141(a) of title 20, or educational institutions within the meaning of section 2194 of title 10; and
- (2) pay the Federal costs of such contract or memorandum of understanding out of funds available for the support of the technology transfer function pursuant to section 3710(b) of this title.

(b) Omitted

(c) “Partnership intermediary” defined

For purposes of this section, the term “partnership intermediary” means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms, institutions of higher education as defined in section 1141(a) of title 20, or educational institutions within the meaning of section 2194 of title 10, that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory, including State programs receiving funds under cooperative agreements entered into under section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 2781 note).

(Pub. L. 96–480, §23, formerly §21, as added Pub. L. 101–510, div. A, title VIII, §827(a), Nov. 5, 1990, 104 Stat. 1606; amended Pub. L. 102–190, div. A, title VIII, §836, Dec. 5, 1991, 105 Stat. 1448; renumbered §23, Pub. L. 102–240, title VI, §6019, Dec. 18, 1991, 105 Stat. 2183; Pub. L. 106–404, §9, Nov. 1, 2000, 114 Stat. 1747.)

§3719. Prize competitions

(a) Definitions

In this section:

(1) Agency

The term “agency” means a Federal agency.

(2) Director

The term “Director” means the Director of the Office of Science and Technology Policy.

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(3) Federal agency

The term “Federal agency” has the meaning given under section 3703 of this title, except that term shall not include any agency of the legislative branch of the Federal Government.

(4) Head of an agency

The term “head of an agency” means the head of a Federal agency.

(b) In general

Each head of an agency, or the heads of multiple agencies in cooperation, may carry out a program to award prizes competitively to stimulate innovation that has the potential to advance the mission of the respective agency.

(c) Prize competitions

For purposes of this section, a prize competition may be 1 or more of the following types of activities:

- (1) A point solution prize that rewards and spurs the development of solutions for a particular, well-defined problem.
- (2) An exposition prize competition that helps identify and promote a broad range of ideas and practices that may not otherwise attract attention, facilitating further development of the idea or practice by third parties.
- (3) Participation prize competitions that create value during and after the competition by encouraging contestants to change their behavior or develop new skills that may have beneficial effects during and after the competition.
- (4) Such other types of prize competitions as each head of an agency considers appropriate to stimulate innovation that has the potential to advance the mission of the respective agency.

(d) Topics

In selecting topics for prize competitions, the head of an agency shall consult widely both within and outside the Federal Government, and may empanel advisory committees.

(e) Advertising

The head of an agency shall widely advertise each prize competition to encourage broad participation.

(f) Requirements and registration

For each prize competition, the head of an agency shall publish a notice on a publicly accessible Government website, such as www.challenge.gov, announcing-

- (1) the subject of the prize competition;
- (2) the rules for being eligible to participate in the prize competition;
- (3) the process for participants to register for the prize competition;
- (4) the amount of the cash prize purse or non-cash prize award; and
- (5) the basis on which a winner will be selected.

(g) Eligibility

To be eligible to win a cash prize purse under this section, an individual or entity-

- (1) shall have registered to participate in the prize competition under any rules

promulgated by the head of an agency under subsection (f);

- (2) shall have complied with all the requirements under this section;
- (3) in the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States; and
- (4) may not be a Federal entity or Federal employee acting within the scope of their employment.

(h) Consultation with Federal employees

An individual or entity shall not be deemed ineligible under subsection (g) because the individual or entity used Federal facilities or consulted with Federal employees during a prize competition if the facilities and employees are made available to all individuals and entities participating in the prize competition on an equitable basis.

(i) Liability

(1) In general

(A) Definition

In this paragraph, the term “related entity” means a contractor or subcontractor at any tier, and a supplier, user, customer, cooperating party, grantee, investigator, or detailee.

(B) Liability

Registered participants shall be required to agree to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in a prize competition, whether the injury, death, damage, or loss arises through negligence or otherwise.

(2) Insurance

Participants shall be required to obtain liability insurance or demonstrate financial responsibility, in amounts determined by the head of an agency, for claims by-

- (A) a third party for death, bodily injury, or property damage, or loss resulting from an activity carried out in connection with participation in a prize competition, with the Federal Government named as an additional insured under the registered participant’s insurance policy and registered participants agreeing to indemnify the Federal Government against third party claims for damages arising from or related to prize competition activities; and
- (B) the Federal Government for damage or loss to Government property resulting from such an activity.

(3) Waivers

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(A) In general

An agency may waive the requirement under paragraph (2).

(B) List

The Director shall include a list of all of the waivers granted under this paragraph during the preceding fiscal year, including a detailed explanation of the reason for granting the waiver.

(4) Exception

The head of an agency may not require a participant to waive claims against the administering entity arising out of the unauthorized use or disclosure by the agency of the intellectual property, trade secrets, or confidential business information of the participant.

(j) Intellectual property

(1) Prohibition on the government acquiring intellectual property rights

The Federal Government may not gain an interest in intellectual property developed by a participant in a prize competition without the written consent of the participant.

(2) Licenses

As appropriate and to further the goals of a prize competition, the Federal Government may negotiate a license for the use of intellectual property developed by a registered participant in a prize competition.

(k) Judges

(1) In general

For each prize competition, the head of an agency, either directly or through an agreement under subsection (l), shall appoint one or more qualified judges to select the winner or winners of the prize competition on the basis described under subsection (f). Judges for each prize competition may include individuals from outside the agency, including from the private sector.

(2) Restrictions

A judge may not-

(A) have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in a prize competition;

or

(B) have a familial or financial relationship with an individual who is a registered participant.

(3) Guidelines

The heads of agencies who carry out prize competitions under this section shall develop guidelines to ensure that the judges appointed for such prize competitions are fairly balanced and operate in a transparent manner.

(4) Exemption from FACA

The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to any committee, board, commission, panel, task force, or similar entity, created solely for the purpose of judging prize competitions under this section.

(l) Administering the competition

The head of an agency may enter into a grant, contract, cooperative agreement, or other agreement with a private sector for-profit or nonprofit entity or State or local

government agency to administer the prize competition, subject to the provisions of this section.

(m) Funding

(1) In general

Support for a prize competition under this section, including financial support for the design and administration of a prize competition or funds for a cash prize purse, may consist of Federal appropriated funds and funds provided by private sector for-profit and nonprofit entities. The head of an agency may request and accept funds from other Federal agencies, State, United States territory, local, or tribal government agencies, private sector for-profit entities, and nonprofit entities, to be available to the extent provided by appropriations Acts, to support such prize competitions. The head of an agency may not give any special consideration to any agency or entity in return for a donation.

(2) Availability of funds

Notwithstanding any other provision of law, funds appropriated for cash prize purses or non-cash prize awards under this section shall remain available until expended. No provision in this section permits obligation or payment of funds in violation of section 1341 of title 31.

(3) Amount of prize

(A) Announcement

No prize competition may be announced under subsection (f) until all the funds needed to pay out the announced amount of the cash prize purse have been appropriated or committed in writing by a private or State, United States territory, local, or tribal government source.

(B) Increase in amount

The head of an agency may increase the amount of a cash prize purse or non-cash prize award after an initial announcement is made under subsection (f) only if-

- (i) notice of the increase is provided in the same manner as the initial notice of the prize competition; and
- (ii) the funds needed to pay out the announced amount of the increase have been appropriated or committed in writing by a private or State, United States territory, local, or tribal government source.

(4) Limitation on amount

(A) Notice to Congress

No prize competition under this section may offer a cash prize purse or a non-cash prize award in an amount greater than \$50,000,000 unless 30 days have elapsed after written notice has been transmitted to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(B) Approval of head of agency

No prize competition under this section may result in the award of more

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than \$1,000,000 in cash prize purses or non-cash prize awards without the approval of the head of an agency.

(n) General Services Administration assistance

Not later than 180 days after January 6, 2017, the General Services Administration shall provide government wide services to share best practices and assist agencies in developing guidelines for issuing prize competitions. The General Services Administration shall develop a contract vehicle for both for-profit and nonprofit entities and State, United States territory, local, and tribal government entities, to provide agencies access to relevant products and services, including technical assistance in structuring and conducting prize competitions to take maximum benefit of the marketplace as they identify and pursue prize competitions to further the policy objectives of the Federal Government.

(o) Compliance with existing law

(1) In general

The Federal Government shall not, by virtue of offering a prize competition or providing a cash prize purse or non-cash prize award under this section, be responsible for compliance by registered participants in a prize competition with Federal law, including licensing, export control, and nonproliferation laws, and related regulations.

(2) Other prize authority

Nothing in this section affects the prize authority authorized by any other provision of law.

(p) Biennial report

(1) In general

Not later than March 1 of every other year, the Director 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 on the activities carried out during the preceding 2 fiscal years under the authority in subsection (b).

(2) Information included

A report under this subsection shall include, for each prize competition under subsection (b), the following:

(A) Proposed goals

A description of the proposed goals of each prize competition.

(B) Preferable method

An analysis of why the utilization of the authority in subsection (b) was the preferable method of achieving the goals described in subparagraph (A) as opposed to other authorities available to the agency, such as contracts, grants, and cooperative agreements.

(C) Amount of cash prize purses or non-cash prize awards

The total amount of cash prize purses or non-cash prize awards awarded for each prize competition, including a description of amount of private funds contributed to the program, the sources of such funds, and the

manner in which the amounts of cash prize purses or non-cash prize awards awarded and claimed were allocated among the accounts of the agency for recording as obligations and expenditures.

(D) Solicitations and evaluation of submissions

The methods used for the solicitation and evaluation of submissions under each prize competition, together with an assessment of the effectiveness of such methods and lessons learned for future prize competitions.

(E) Resources

A description of the resources, including personnel and funding, used in the execution of each prize competition together with a detailed description of the activities for which such resources were used and an accounting of how funding for execution was allocated among the accounts of the agency for recording as obligations and expenditures.

(F) Results

A description of how each prize competition advanced the mission of the agency concerned.

(G) Plan

A description of crosscutting topical areas and agency-specific mission needs that may be the strongest opportunities for prize competitions during the upcoming 2 fiscal years.

(Pub. L. 96–480, §24, as added Pub. L. 111–358, title I, §105(a), Jan. 4, 2011, 124 Stat. 3989; amended Pub. L. 114–329, title IV, §401(b), Jan. 6, 2017, 130 Stat. 3016.)

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TITLE 35 — PATENTS

CHAPTER 18 — PATENT RIGHTS IN INVENTIONS MADE WITH FEDERAL ASSISTANCE

§200. Policy and objective

It is the policy and objective of the Congress to use the patent system to promote the utilization of inventions arising from federally supported research or development; to encourage maximum participation of small business firms in federally supported research and development efforts; to promote collaboration between commercial concerns and nonprofit organizations, including universities; to ensure that inventions made by nonprofit organizations and small business firms are used in a manner to promote free competition and enterprise without unduly encumbering future research and discovery; to promote the commercialization and public availability of inventions made in the United States by United States industry and labor; to ensure that the Government obtains sufficient rights in federally supported inventions to meet the needs of the Government and protect the public against nonuse or unreasonable use of inventions; and to minimize the costs of administering policies in this area.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3018; amended Pub. L. 106–404, §5, Nov. 1, 2000, 114 Stat. 1745.)

§201. Definitions

As used in this chapter—

- (a) The term “Federal agency” means any executive agency as defined in section 105 of title 5, and the military departments as defined by section 102 of title 5.
- (b) The term “funding agreement” means any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government. Such term includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as herein defined.
- (c) The term “contractor” means any person, small business firm, or nonprofit organization that is a party to a funding agreement.
- (d) The term “invention” means any invention or discovery which is or may be patentable or otherwise protectable under this title or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (e) The term “subject invention” means any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement: Provided, That in the case of a variety of plant, the date of determination (as defined in section 41(d) 1 of the Plant Variety Protection Act (7 U.S.C. 2401(d))) must also occur during the period of contract performance.

- (f) The term “practical application” means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.
- (g) The term “made” when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (h) The term “small business firm” means a small business concern as defined at section 2 of Public Law 85–536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration.
- (i) The term “nonprofit organization” means universities and other institutions of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1986 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3019; amended Pub. L. 98–620, title V, §501(1), (2), Nov. 8, 1984, 98 Stat. 3364; Pub. L. 99–514, §2, Oct. 22, 1986, 100 Stat. 2095; Pub. L. 107–273, div. C, title III, §13206(a)(12), Nov. 2, 2002, 116 Stat. 1904.)

§202. Disposition of rights

- (a) Each nonprofit organization or small business firm may, within a reasonable time after disclosure as required by paragraph (c)(1) of this section, elect to retain title to any subject invention: Provided, however, That a funding agreement may provide otherwise (i) when the contractor is not located in the United States or does not have a place of business located in the United States or is subject to the control of a foreign government, (ii) in exceptional circumstances when it is determined by the agency that restriction or elimination of the right to retain title to any subject invention will better promote the policy and objectives of this chapter (iii) when it is determined by a Government authority which is authorized by statute or Executive order to conduct foreign intelligence or counter-intelligence activities that the restriction or elimination of the right to retain title to any subject invention is necessary to protect the security of such activities or, (iv) when the funding agreement includes the operation of a Government-owned, contractor-operated facility of the Department of Energy primarily dedicated to that Department’s naval nuclear propulsion or weapons related programs and all funding agreement limitations under this subparagraph on the contractor’s right to elect title to a subject invention are limited to inventions occurring under the above two programs of the Department of Energy. The rights of the nonprofit organization or small business firm shall be subject to the provisions of paragraph (c) of this section and the other provisions of this chapter.
- (b)(1) The rights of the Government under subsection (a) shall not be exercised by a Federal agency unless it first determines that at least one of the conditions identified in clauses (i) through (iv) of subsection (a) exists. Except in the case of

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subsection (a)(iii), the agency shall file with the Secretary of Commerce, within thirty days after the award of the applicable funding agreement, a copy of such determination. In the case of a determination under subsection (a)(ii), the statement shall include an analysis justifying the determination. In the case of determinations applicable to funding agreements with small business firms, copies shall also be sent to the Chief Counsel for Advocacy of the Small Business Administration. If the Secretary of Commerce believes that any individual determination or pattern of determinations is contrary to the policies and objectives of this chapter or otherwise not in conformance with this chapter, the Secretary shall so advise the head of the agency concerned and the Administrator of the Office of Federal Procurement Policy, and recommend corrective actions.

- (2) Whenever the Administrator of the Office of Federal Procurement Policy has determined that one or more Federal agencies are utilizing the authority of clause (i) or (ii) of subsection (a) of this section in a manner that is contrary to the policies and objectives of this chapter, the Administrator is authorized to issue regulations describing classes of situations in which agencies may not exercise the authorities of those clauses.
 - (3) If the contractor believes that a determination is contrary to the policies and objectives of this chapter or constitutes an abuse of discretion by the agency, the determination shall be subject to section 203(b).
- (c) Each funding agreement with a small business firm or nonprofit organization shall contain appropriate provisions to effectuate the following:
- (1) That the contractor disclose each subject invention to the Federal agency within a reasonable time after it becomes known to contractor personnel responsible for the administration of patent matters, and that the Federal Government may receive title to any subject invention not disclosed to it within such time.
 - (2) That the contractor make a written election within two years after disclosure to the Federal agency (or such additional time as may be approved by the Federal agency) whether the contractor will retain title to a subject invention: Provided, That in any case where the 1-year period referred to in section 102(b) would end before the end of that 2-year period, the period for election may be shortened by the Federal agency to a date that is not more than sixty days before the end of that 1-year period: And provided further, That the Federal Government may receive title to any subject invention in which the contractor does not elect to retain rights or fails to elect rights within such times.
 - (3) That a contractor electing rights in a subject invention agrees to file a patent application prior to the expiration of the 1-year period referred to in section 102(b), and shall thereafter file corresponding patent applications in other countries in which it wishes to retain title within reasonable times, and that the Federal Government may receive title to any subject inventions in the United States or other countries in which the contractor has not filed patent applications on the subject invention within such times.
 - (4) With respect to any invention in which the contractor elects rights, the Federal agency shall have a nonexclusive, nontransferrable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world: Provided, That the funding agreement

may provide for such additional rights, including the right to assign or have assigned foreign patent rights in the subject invention, as are determined by the agency as necessary for meeting the obligations of the United States under any treaty, international agreement, arrangement of cooperation, memorandum of understanding, or similar arrangement, including military agreement relating to weapons development and production.

- (5) The right of the Federal agency to require periodic reporting on the utilization or efforts at obtaining utilization that are being made by the contractor or his licensees or assignees: Provided, That any such information as well as any information on utilization or efforts at obtaining utilization obtained as part of a proceeding under section 203 of this chapter shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5.
- (6) An obligation on the part of the contractor, in the event a United States patent application is filed by or on its behalf or by any assignee of the contractor, to include within the specification of such application and any patent issuing thereon, a statement specifying that the invention was made with Government support and that the Government has certain rights in the invention.
- (7) In the case of a nonprofit organization, (A) a prohibition upon the assignment of rights to a subject invention in the United States without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions (provided that such assignee shall be subject to the same provisions as the contractor); (B) a requirement that the contractor share royalties with the inventor; (C) except with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, a requirement that the balance of any royalties or income earned by the contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, be utilized for the support of scientific research or education; (D) a requirement that, except where it is determined to be infeasible following a reasonable inquiry, a preference in the licensing of subject inventions shall be given to small business firms; and (E) with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, requirements (i) that after payment of patenting costs, licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, 100 percent of the balance of any royalties or income earned and retained by the contractor during any fiscal year up to an amount equal to 5 percent of the annual budget of the facility, shall be used by the contractor for scientific research, development, and education consistent with the research and development mission and objectives of the facility, including activities that increase the licensing potential of other

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inventions of the facility; provided that if said balance exceeds 5 percent of the annual budget of the facility, that 15 percent of such excess shall be paid to the Treasury of the United States and the remaining 85 percent shall be used for the same purposes described above in this clause; and (ii) that, to the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by contractor employees on location at the facility.(8) The requirements of sections 203 and 204 of this chapter.

(8) The requirements of sections 203 and 204 of this chapter.

- (d) If a contractor does not elect to retain title to a subject invention in cases subject to this section, the Federal agency may consider and after consultation with the contractor grant requests for retention of rights by the inventor subject to the provisions of this Act and regulations promulgated hereunder.
- (e) In any case when a Federal employee is a coinventor of any invention made with a nonprofit organization, a small business firm, or a non-Federal inventor, the Federal agency employing such coinventor may, for the purpose of consolidating rights in the invention and if it finds that it would expedite the development of the invention—
- (1) license or assign whatever rights it may acquire in the subject invention to the nonprofit organization, small business firm, or non-Federal inventor in accordance with the provisions of this chapter; or
 - (2) acquire any rights in the subject invention from the nonprofit organization, small business firm, or non-Federal inventor, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction and no other transaction under this chapter is conditioned on such acquisition.
- (f)(1) No funding agreement with a small business firm or nonprofit organization shall contain a provision allowing a Federal agency to require the licensing to third parties of inventions owned by the contractor that are not subject inventions unless such provision has been approved by the head of the agency and a written justification has been signed by the head of the agency. Any such provision shall clearly state whether the licensing may be required in connection with the practice of a subject invention, a specifically identified work object, or both. The head of the agency may not delegate the authority to approve provisions or sign justifications required by this paragraph.
- (2) A Federal agency shall not require the licensing of third parties under any such provision unless the head of the agency determines that the use of the invention by others is necessary for the practice of a subject invention or for the use of a work object of the funding agreement and that such action is necessary to achieve the practical application of the subject invention or work object. Any such determination shall be on the record after an opportunity for an agency hearing. Any action commenced for judicial review of such determination shall be brought within sixty days after notification of such determination.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3020; amended Pub. L. 98–620, title V, §501(3)–(8), Nov. 8, 1984, 98 Stat. 3364–3366; Pub. L. 102–204, §10, Dec. 10, 1991, 105 Stat. 1641; Pub. L. 106–113, div. B, §1000(a)(9) [title IV, §4732(a)(12)], Nov. 29, 1999, 113 Stat. 1536, 1501A–583; Pub. L. 106–404, §6(1), Nov. 1, 2000, 114 Stat. 1745; Pub. L. 107–273, div. C, title III, §13206(a)(13), Nov. 2, 2002, 116 Stat. 1905; Pub. L. 111–8, div.

G, title I, §1301(h), Mar. 11, 2009, 123 Stat. 829; Pub. L. 112–29, §§3(g)(7), 13(a), 20(i)(2), Sept. 16, 2011, 125 Stat. 288, 327, 334.)

§203. March-in rights

- (a) With respect to any subject invention in which a small business firm or nonprofit organization has acquired title under this chapter, the Federal agency under whose funding agreement the subject invention was made shall have the right, in accordance with such procedures as are provided in regulations promulgated hereunder to require the contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the contractor, assignee, or exclusive licensee refuses such request, to grant such a license itself, if the Federal agency determines that such—
- (1) action is necessary because the contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
 - (2) action is necessary to alleviate health or safety needs which are not reasonably satisfied by the contractor, assignee, or their licensees;
 - (3) action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the contractor, assignee, or licensees; or
 - (4) action is necessary because the agreement required by section 204 has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of its agreement obtained pursuant to section 204.
- (b) A determination pursuant to this section or section 202(b)(4) shall not be subject to chapter 71 of title 41. An administrative appeals procedure shall be established by regulations promulgated in accordance with section 206. Additionally, any contractor, inventor, assignee, or exclusive licensee adversely affected by a determination under this section may, at any time within sixty days after the determination is issued, file a petition in the United States Court of Federal Claims, which shall have jurisdiction to determine the appeal on the record and to affirm, reverse, remand or modify, as appropriate, the determination of the Federal agency. In cases described in paragraphs (1) and (3) of subsection (a), the agency's determination shall be held in abeyance pending the exhaustion of appeals or petitions filed under the preceding sentence.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3022; amended Pub. L. 98–620, title V, §501(9), Nov. 8, 1984, 98 Stat. 3367; Pub. L. 102–572, title IX, §902(b)(1), Oct. 29, 1992, 106 Stat. 4516; Pub. L. 107–273, div. C, title III, §13206(a)(14), Nov. 2, 2002, 116 Stat. 1905; Pub. L. 111–350, §5(i)(2), Jan. 4, 2011, 124 Stat. 3850.)

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§204. Preference for United States industry

Notwithstanding any other provision of this chapter, no small business firm or non-profit organization which receives title to any subject invention and no assignee of any such small business firm or nonprofit organization shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the Federal agency under whose funding agreement the invention was made upon a showing by the small business firm, nonprofit organization, or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3023.)

§205. Confidentiality

Federal agencies are authorized to withhold from disclosure to the public information disclosing any invention in which the Federal Government owns or may own a right, title, or interest (including a nonexclusive license) for a reasonable time in order for a patent application to be filed. Furthermore, Federal agencies shall not be required to release copies of any document which is part of an application for patent filed with the United States Patent and Trademark Office or with any foreign patent office.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3023.)

§207. Domestic and foreign protection of federally owned inventions

(a) Each Federal agency is authorized to—

- (1) apply for, obtain, and maintain patents or other forms of protection in the United States and in foreign countries on inventions in which the Federal Government owns a right, title, or interest;
- (2) grant nonexclusive, exclusive, or partially exclusive licenses under federally owned inventions, royalty-free or for royalties or other consideration, and on such terms and conditions, including the grant to the licensee of the right of enforcement pursuant to the provisions of chapter 29 as determined appropriate in the public interest;
- (3) undertake all other suitable and necessary steps to protect and administer rights to federally owned inventions on behalf of the Federal Government either directly or through contract, including acquiring rights for and administering royalties to the Federal Government in any invention, but only to the extent the party from whom the rights are acquired voluntarily enters into the transaction, to facilitate the licensing of a federally owned invention; and

- (4) transfer custody and administration, in whole or in part, to another Federal agency, of the right, title, or interest in any federally owned invention.
- (b) For the purpose of assuring the effective management of Government-owned inventions, the Secretary of Commerce is authorized to—
 - (1) assist Federal agency efforts to promote the licensing and utilization of Government-owned inventions;
 - (2) assist Federal agencies in seeking protection and maintaining inventions in foreign countries, including the payment of fees and costs connected therewith; and
 - (3) consult with and advise Federal agencies as to areas of science and technology research and development with potential for commercial utilization.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3023; amended Pub. L. 98–620, title V, §501(11), Nov. 8, 1984, 98 Stat. 3367; Pub. L. 106–404, §6(2), Nov. 1, 2000, 114 Stat. 1745; Pub. L. 112–29, §20(j), Sept. 16, 2011, 125 Stat. 335.)

§209. Licensing federally owned inventions

- (a) Authority.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—
 - (1) granting the license is a reasonable and necessary incentive to—
 - (A) call forth the investment capital and expenditures needed to bring the invention to practical application; or
 - (B) otherwise promote the invention’s utilization by the public;
 - (2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant’s intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention’s utilization by the public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application, as proposed by the applicant, or otherwise to promote the invention’s utilization by the public;
 - (3) the applicant makes a commitment to achieve practical application of the invention within a reasonable time, which time may be extended by the agency upon the applicant’s request and the applicant’s demonstration that the refusal of such extension would be unreasonable;
 - (4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and
 - (5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.
- (b) Manufacture in United States.—A Federal agency shall normally grant a license under section 207(a)(2) to use or sell any federally owned invention in the United States only to a licensee who agrees that any products embodying the invention

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or produced through the use of the invention will be manufactured substantially in the United States.

- (c) **Small Business.**—First preference for the granting of any exclusive or partially exclusive licenses under section 207(a)(2) shall be given to small business firms having equal or greater likelihood as other applicants to bring the invention to practical application within a reasonable time.
- (d) **Terms and Conditions.**—Any licenses granted under section 207(a)(2) shall contain such terms and conditions as the granting agency considers appropriate, and shall include provisions—
 - (1) retaining a nontransferrable, irrevocable, paid-up license for any Federal agency to practice the invention or have the invention practiced throughout the world by or on behalf of the Government of the United States;
 - (2) requiring periodic reporting on utilization of the invention, and utilization efforts, by the licensee, but only to the extent necessary to enable the Federal agency to determine whether the terms of the license are being complied with, except that any such report shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5; and
 - (3) empowering the Federal agency to terminate the license in whole or in part if the agency determines that—
 - (A) the licensee is not executing its commitment to achieve practical application of the invention, including commitments contained in any plan submitted in support of its request for a license, and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken, or can be expected to take within a reasonable time, effective steps to achieve practical application of the invention;
 - (B) the licensee is in breach of an agreement described in subsection (b);
 - (C) termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license, and such requirements are not reasonably satisfied by the licensee; or
 - (D) the licensee has been found by a court of competent jurisdiction to have violated the Federal antitrust laws in connection with its performance under the license agreement.
- (e) **Public Notice.**—No exclusive or partially exclusive license may be granted under section 207(a)(2) unless public notice of the intention to grant an exclusive or partially exclusive license on a federally owned invention has been provided in an appropriate manner at least 15 days before the license is granted, and the Federal agency has considered all comments received before the end of the comment period in response to that public notice. This subsection shall not apply to the licensing of inventions made under a cooperative research and development agreement entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).
- (f) **Plan.**—No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan for development or marketing of the invention, except that any such plan shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and

confidential and not subject to disclosure under section 552 of title 5.

(Added Pub. L. 96–517, §6(a), Dec. 12, 1980, 94 Stat. 3024; amended Pub. L. 106–404, §4(a), Nov. 1, 2000, 114 Stat. 1743; Pub. L. 107–273, div. C, title III, §13206(a)(15), Nov. 2, 2002, 116 Stat. 1905; Pub. L. 112–29, §20(i)(3), Sept. 16, 2011, 125 Stat. 335.)

§212. Disposition of rights in educational awards

No scholarship, fellowship, training grant, or other funding agreement made by a Federal agency primarily to an awardee for educational purposes will contain any provision giving the Federal agency any rights to inventions made by the awardee.

(Added Pub. L. 98–620, title V, §501(14), Nov. 8, 1984, 98 Stat. 3368.)

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SECTION 2

Federal Regulations Relating to Technology Transfer

TITLE 37— PATENTS, TRADEMARKS, AND COPYRIGHTS

PART 401 — RIGHTS TO INVENTIONS MADE BY NONPROFIT ORGANIZATIONS AND SMALL BUSINESS FIRMS UNDER GOVERNMENT GRANTS, CONTRACTS, AND COOPERATIVE AGREEMENTS

Authority: 35 U.S.C. 206; DOO 30-2A.

Source: 52 FR 8554, Mar. 18, 1987, unless otherwise noted.

§401.1. Scope

- (a) Traditionally there have been no conditions imposed by the government on research performers while using private facilities which would preclude them from accepting research funding from other sources to expand, to aid in completing or to conduct separate investigations closely related to research activities sponsored by the government. Notwithstanding the right of research organizations to accept supplemental funding from other sources for the purpose of expediting or more comprehensively accomplishing the research objectives of the government sponsored project, it is clear that the ownership provisions of these regulations would remain applicable in any invention “conceived or first actually reduced to practice in performance” of the project. Separate accounting for the two funds used to support the project in this case is not a determining factor.
- (1) To the extent that a non-government sponsor established a project which, although closely related, falls outside the planned and committed activities of a government-funded project and does not diminish or distract from the performance of such activities, inventions made in performance of the non-government sponsored project would not be subject to the conditions of these regulations. An example of such related but separate projects would be a government sponsored project having research objectives to expand scientific understanding in a field and a closely related industry sponsored project having as its objectives the application of such new knowledge to develop usable new technology. The time relationship in conducting the two projects and the use of new fundamental knowledge from one in the performance of the other are not important determinants since most inventions rest on a knowledge base built up by numerous independent research efforts extending over many years. Should such an invention be claimed by the performing organization to be the product of non-government sponsored research and be challenged by the sponsoring agency as being reportable to the government as a “subject invention”, the challenge is appealable as described in §401.11(d).
- (2) An invention which is made outside of the research activities of a government-funded project is not viewed as a “subject invention” since it cannot be shown to have been “conceived or first actually reduced to practice” in performance of the project. An obvious example of this is a situation where an instrument purchased with government funds is later used, without interference with or

cost to the government-funded project, in making an invention all expenses of which involve only non-government funds.

- (b) This part implements 35 U.S.C. 202 through 204 and is applicable to all Federal agencies. It applies to all funding agreements with business firms regardless of size (consistent with section 1, paragraph (b)(4) of Executive Order 12591, as amended by Executive Order 12618) and to nonprofit organizations, except for a funding agreement made primarily for educational purposes. Certain sections also provide guidance for the administration of funding agreements which predate the effective date of this part. In accordance with 35 U.S.C. 212, no scholarship, fellowship, training grant, or other funding agreement made by a Federal agency primarily to an awardee for educational purposes will contain any provision giving the Federal agency any rights to inventions made by the awardee.
- (c) The march-in and appeals procedures in §§401.6 and 401.11 shall apply to any march-in or appeal proceeding under a funding agreement subject to Chapter 18 of Title 35, U.S.C., initiated after the effective date of this part even if the funding agreement was executed prior to that date.
- (d) At the request of the contractor, a funding agreement for the operation of a government-owned facility which is in effect on the effective date of this part shall be promptly amended to include the provisions required by §§401.3(a) unless the agency determines that one of the exceptions at 35 U.S.C. 202(a)(i) through (iv) §401.3(a)(8) through (iv) of this part) is applicable and will be applied. If the exception at §401.3(a)(iv) is determined to be applicable, the funding agreement will be promptly amended to include the provisions required by §401.3(c).
- (e) This regulation supersedes OMB Circular A-124 and shall take precedence over any regulations dealing with ownership of inventions made by small businesses and nonprofit organizations which are inconsistent with it. This regulation will be followed by all agencies pending amendment of agency regulations to conform to this part and amended Chapter 18 of Title 35. Only deviations requested by a contractor and not inconsistent with Chapter 18 of Title 35, United States Code, may be made without approval of the Secretary. Modifications or tailoring of clauses as authorized by §401.5 or §401.3, when alternate provisions are used under §401.3(a)(1) through (6), are not considered deviations requiring the Secretary's approval. Three copies of proposed and final agency regulations supplementing this part shall be submitted to the Secretary at the office set out in §401.17 for approval for consistency with this part before they are submitted to the Office of Management and Budget (OMB) for review under Executive Order 12866 or, if no submission is required to be made to OMB, before their submission to the Federal Register for publication.
- (f) In the event an agency has outstanding prime funding agreements that do not contain patent flow-down provisions consistent with this part or earlier Office of Federal Procurement Policy regulations (OMB Circular A-124 or OMB Bulletin 81-22), the agency shall take appropriate action to ensure that small business firms or nonprofit organizations that are subcontractors under any such agreements and

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that received their subcontracts after July 1, 1981, receive rights in their subject inventions that are consistent with Chapter 18 and this part.

- (g) This part is not intended to apply to arrangements under which nonprofit organizations, small business firms, or others are allowed to use government-owned research facilities and normal technical assistance provided to users of those facilities, whether on a reimbursable or nonreimbursable basis. This part is also not intended to apply to arrangements under which sponsors reimburse the government or facility contractor for the contractor employee's time in performing work for the sponsor. Such arrangements are not considered "funding agreements" as defined at 35 U.S.C. 201(b) and §401.2(a) of this part.

[52 FR 8554, Mar. 18, 1987, as amended at 83 FR 15958, Apr. 13, 2018]

§401.2. Definitions

As used in this part—

- (a) The term *funding agreement* means any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.
- (b) The term *contractor* means any person, small business firm or nonprofit organization, or, as set forth in section 1, paragraph (b)(4) of Executive Order 12591, as amended, any business firm regardless of size, which is a party to a funding agreement.
- (c) The term *invention* means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (d) The term *subject invention* means any invention of a contractor conceived or first actually reduced to practice in the performance of work under a funding agreement; provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.
- (e) The term *practical application* means to manufacture in the case of a composition of product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or government regulations, available to the public on reasonable terms.
- (f) The term *made* when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (g) The term *small business firm* means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this part, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR 121.5 will be used.

- (h) The term *nonprofit organization* means universities and other institutions of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- (i) The term *Chapter 18* means Chapter 18 of Title 35 of the United States Code.
- (j) The term *Secretary* means the Director of the National Institute of Standards and Technology.
- (k) The term *electronically filed* means any submission of information transmitted by an electronic or optical-electronic system.
- (l) The term *electronic or optical-electronic system* means a software-based system approved by the agency for the transmission of information.
- (m) The term *patent application* or “application for patent” includes a provisional or nonprovisional U.S. national application for patent as defined in 37 CFR 1.9 (a) (2) and (a)(3), respectively, or an application for patent in a foreign country or in an international patent office.
- (n) The term *initial patent application* means, as to a given subject invention, the first provisional or non-provisional U.S. national application for patent as defined in 37 CFR 1.9(a)(2) and (3), respectively, the first international application filed under the Patent Cooperation Treaty as defined in 37 CFR 1.9(b) which designates the United States, or the first application for a Plant Variety Protection certificate, as applicable.
- (o) The term *statutory period* means the one-year period before the effective filing date of a claimed invention during which exceptions to prior art exist per 35 U.S.C. 102(b) as amended by the Leahy-Smith America Invents Act, Public Law 112-29.

[52 FR 8554, Mar. 18, 1987, as amended at 60 FR 41812, Aug. 14, 1995; 78 FR 4766, Jan. 23, 2013; 83 FR 15958, Apr. 13, 2018]

§401.3. Use of the standard clauses at §401.14

- (a) Each funding agreement awarded to a contractor (except those subject to 35 U.S.C. 212) shall contain the clause found in §401.14 with such modifications and tailoring as authorized or required elsewhere in this part. However, a funding agreement may contain alternative provisions—
 - (1) When the contractor is not located in the United States or does not have a place of business located in the United States or is subject to the control of a foreign government; or
 - (2) In exceptional circumstances when it is determined by the agency that restriction or elimination of the right to retain title to any subject invention will better promote the policy and objectives of Chapter 18 of Title 35 of the United States Code; or

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- (3) When it is determined by a government authority which is authorized by statute or executive order to conduct foreign intelligence or counterintelligence activities that the restriction or elimination of the right to retain title to any subject invention is necessary to protect the security to such activities; or
 - (4) When the funding agreement includes the operation of the government-owned, contractor-operated facility of the Department of Energy primarily dedicated to that Department's naval nuclear propulsion or weapons related programs and all funding agreement limitations under this subparagraph on the contractor's right to elect title to a subject invention are limited to inventions occurring under the above two programs; or
 - (5) If any part of the contract may require the contractor to perform work on behalf of the Government at a Government laboratory under a Cooperative Research and Development Agreement (CRADA) pursuant to the statutory authority of 15 U.S.C. 3710a; or
 - (6) If the contract provides for services and the contractor is not a nonprofit organization and does not promote the commercialization and public availability of subject inventions pursuant to 35 U.S.C. 200.
- (b) When an agency exercises the exceptions at paragraph (a)(2), (3), (5), or (6) of this section, it shall use the standard clause at §401.14 with only such modifications as are necessary to address the exceptional circumstances or concerns which led to the use of the exception. For example, if the justification relates to a particular field of use or market, the clause might be modified along lines similar to those described in paragraph (c) of this section. In any event, the clause should provide the contractor with an opportunity to receive greater rights in accordance with the procedures at §401.15. When an agency justifies and exercises the exception at paragraph (a)(2) of this section and uses an alternative provision in the funding agreement on the basis of national security, the provision shall provide the contractor with the right to elect ownership to any invention made under such funding agreement as provided by the Standard Patent Rights Clause found at ;§401.14 if the invention is not classified by the agency within six months of the date it is reported to the agency, or within the same time period the Department of Energy does not, as authorized by regulation, law or Executive order or implementing regulations thereto, prohibit unauthorized dissemination of the invention. Contracts in support of DOE's naval nuclear propulsion program are exempted from this paragraph (b).
- (c) When the Department of Energy (DOE) determines to use alternative provisions under paragraph (a)(4) of this section, the standard clause at §401.14 shall be used with the following modifications, or substitute thereto with such modification and tailoring as authorized or required elsewhere in this part:
- (1) The title of the clause shall be changed to read as follows: Patent Rights to Nonprofit DOE Facility Operators.
 - (2) Add an "(A)" after "(1)" in paragraph (c)(1) of the clause in §401.14 and add paragraphs (B) and (C) to paragraph (c)(1) of the clause in §401.14 as follows:
 - (B) If the subject invention occurred under activities funded by the naval nuclear propulsion or weapons related programs of DOE, then the provisions of this paragraph (c)(1)(B) will apply in lieu of paragraphs (c)(2) and (3) of this clause. In such cases the contractor agrees to assign the government the entire right, title, and interest thereto throughout the world in and to

the subject invention except to the extent that rights are retained by the contractor through a greater rights determination or under paragraph (e) of this clause. The contractor, or an employee-inventor, with authorization of the contractor, may submit a request for greater rights at the time the invention is disclosed or within a reasonable time thereafter. DOE will process such a request in accordance with procedures at 37 CFR 401.15. Each determination of greater rights will be subject to paragraphs (h) through (k) of this clause and such additional conditions, if any, deemed to be appropriate by the Department of Energy.

(C) At the time an invention is disclosed in accordance with paragraph (c)(1)(A) of this clause, or within 90 days thereafter, the contractor will submit a written statement as to whether or not the invention occurred under a naval nuclear propulsion or weapons-related program of the Department of Energy. If this statement is not filed within this time, paragraph (c)(1)(B) of this clause will apply in lieu of paragraphs (c)(2) and (3) of this clause. The contractor statement will be deemed conclusive unless, within 60 days thereafter, the Contracting Officer disagrees in writing, in which case the determination of the Contracting Officer will be deemed conclusive unless the contractor files a claim under the Contract Disputes Act within 60 days after the Contracting Officer's determination. Pending resolution of the matter, the invention will be subject to paragraph (c)(1)(B) of this clause.

(3) Paragraph (k)(3) of the clause in §401.14 will be modified as prescribed at §401.5(g).

(d) When a funding agreement involves a series of separate task orders, an agency may apply the exceptions at paragraph (a)(2) or (3) of this section to individual task orders, and it may structure the contract so that modified patent rights provisions will apply to the task order even though either the standard clause at §401.14 or the modified clause as described in paragraph (c) of this section is applicable to the remainder of the work. Agencies are authorized to negotiate such modified provisions with respect to task orders added to a funding agreement after its initial award.

(e) Before utilizing any of the exceptions in §401.3(a) of this section, the agency shall prepare a written determination, including a statement of facts supporting the determination, that the conditions identified in the exception exist. A separate statement of facts shall be prepared for each exceptional circumstances determination, except that in appropriate cases a single determination may apply to both a funding agreement and any subcontracts issued under it or to any funding agreement to which such an exception is applicable. In cases when §401.3(a)(2) is used, the determination shall also include an analysis justifying the determination. This analysis should address with specificity how the alternate provisions will better achieve the objectives set forth in 35 U.S.C. 200. A copy of each determination, statement of facts, and, if applicable, analysis shall be promptly provided to the contractor or prospective contractor along with a notification to the contractor or prospective contractor of its rights to appeal the

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determination of the exception under 35 U.S.C. 202(b)(4) and §401.4 of this part.

- (f) Except for determinations under §401.3(a)(3), the agency shall also provide copies of each determination, statement of fact, and analysis to the Secretary. These shall be sent within 30 days after the award of the funding agreement to which they pertain. Copies shall also be sent to the Chief Counsel for Advocacy of the Small Business Administration if the funding agreement is with a small business firm. If the Secretary of Commerce believes that any individual determination or pattern of determinations is contrary to the policies and objectives of this chapter or otherwise not in conformance with this chapter, the Secretary shall so advise the head of the agency concerned and the Administrator of the Office of Federal Procurement Policy and recommend corrective actions.
- (g) To assist the Comptroller General of the United States to accomplish his or her responsibilities under 35 U.S.C. 202, each Federal agency that enters into any funding agreements with nonprofit organizations or small business firms shall accumulate and, at the request of the Comptroller General, provide the Comptroller General or his or her duly authorized representative the total number of prime agreements entered into with small business firms or nonprofit organizations that contain the patent rights clause in this part or under OMB Circular A-124 for each fiscal year beginning with October 1, 1982.
- (h) A prospective contractor may be required by an agency to certify that it is either a small business firm or a nonprofit organization. If the agency has reason to question the status of the prospective contractor, it may require the prospective contractor to furnish evidence to establish its status.
- (i) When an agency exercises the exception at paragraph (a)(5) of this section, replace paragraph (b) of the basic clause in §401.14 with the following paragraphs (b)(1) and (2):
 - (b) Allocation of principal rights. (1) The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause, including paragraph (b)(2) of this clause, and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.
 - (2) If the Contractor performs services at a Government owned and operated laboratory or at a Government owned and contractor operated laboratory directed by the Government to fulfill the Government's obligations under a Cooperative Research and Development Agreement (CRADA) authorized by 15 U.S.C. 3710a, the Government may require the Contractor to negotiate an agreement with the CRADA collaborating party or parties regarding the allocation of rights to any subject invention the Contractor makes, solely or jointly, under the CRADA. The agreement shall be negotiated prior to the Contractor undertaking the CRADA work or, with the permission of the Government, upon the identification of a subject invention. In the absence of such an agreement, the Contractor agrees to grant the collaborating party or parties an option for a license in its inventions of the same scope and terms set forth in the CRADA for inventions made by the Government.

[52 FR 8554, Mar. 18, 1987, as amended at 69 FR 17301, Apr. 2, 2004; 83 FR 15959, Apr. 13, 2018]

§401.4. Contractor appeals of exceptions

- (a) In accordance with 35 U.S.C. 202(b)(4) a contractor has the right to an administrative review of a determination to use one of the exceptions at §401.3(a) (1) through (6) if the contractor believes that a determination is either contrary to the policies and objectives of this chapter or constitutes an abuse of discretion by the agency. Paragraph (b) of this section specifies the procedures to be followed by contractors and agencies in such cases. The assertion of such a claim by the contractor shall not be used as a basis for withholding or delaying the award of a funding agreement or for suspending performance under an award. Pending final resolution of the claim the contract may be issued with the patent rights provision proposed by the agency; however, should the final decision be in favor of the contractor, the funding agreement will be amended accordingly and the amendment made retroactive to the effective date of the funding agreement.
- (b)(1) A contractor may appeal a determination by providing written notice to the agency within 30 working days from the time it receives a copy of the agency's determination, or within such longer time as an agency may specify in its regulations. The contractor's notice should specifically identify the basis for the appeal.
- (2) The appeal shall be decided by the head of the agency or by his/her designee who is at a level above the person who made the determination. If the notice raises a genuine dispute over the material facts, the head of the agency or the designee shall undertake, or refer the matter for, fact-finding.
- (3) Fact-finding shall be conducted in accordance with procedures established by the agency. Such procedures shall be as informal as practicable and be consistent with principles of fundamental fairness. The procedures should afford the contractor the opportunity to appear with counsel, submit documentary evidence, present witnesses and confront such persons as the agency may rely upon. A transcribed record shall be made and shall be available at cost to the contractor upon request. The requirement for a transcribed record may be waived by mutual agreement of the contractor and the agency.
- (4) The official conducting the fact-finding shall prepare or adopt written findings of fact and transmit them to the head of the agency or designee promptly after the conclusion of the fact-finding proceeding along with a recommended decision. A copy of the findings of fact and recommended decision shall be sent to the contractor by registered or certified mail.
- (5) Fact-finding should be completed within 45 working days from the date the agency receives the contractor's written notice.
- (6) When fact-finding has been conducted, the head of the agency or designee shall base his or her decision on the facts found, together with any argument submitted by the contractor, agency officials or any other information in the administrative record. In cases referred for fact-finding, the agency head or the designee may reject only those facts that have been found to be clearly erroneous, but must explicitly state the rejection and indicate the basis for the

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contrary finding. The agency head or the designee may hear oral arguments after fact-finding provided that the contractor or contractor’s attorney or representative is present and given an opportunity to make arguments and rebuttal. The decision of the agency head or the designee shall be in writing and, if it is unfavorable to the contractor shall include an explanation of the basis of the decision. The decision of the agency or designee shall be made within 30 working days after fact-finding or, if there was no fact-finding, within 45 working days from the date the agency received the contractor’s written notice. A contractor adversely affected by a determination under this section may, at any time within sixty days after the determination is issued, file a petition in the United States Claims Court, which shall have jurisdiction to determine the appeal on the record and to affirm, reverse, remand, or modify as appropriate, the determination of the Federal agency.

[52 FR 8554, Mar. 18, 1987, as amended at 83 FR 15960, Apr. 13, 2018]

§401.5. Modification and tailoring of clauses

- (a) Agencies should complete the blank in paragraph (g)(2) of the clauses at §401.14 in accordance with their own or applicable government-wide regulations such as the Federal Acquisition Regulation. In funding agreements, agencies wishing to apply the same clause to all subcontractors as is applied to the contractor may delete paragraph (g)(2) of the clause in §401.14 and delete the words “to be performed by a small business firm or domestic nonprofit organization” from paragraph (g)(1). Also, if the funding agreement is a grant or cooperative agreement, paragraph (g)(3) of the clause may be deleted. When either paragraph (g)(2) of the clause in §401.14 or paragraphs (g)(2) and (3) of the clause in §401.14 are deleted, the remaining paragraph or paragraphs should be renumbered appropriately.
- (b) Agencies should complete paragraph (l), “Communications”, at the end of the clauses at §401.14 by designating a central point of contact for communications on matters relating to the clause. Additional instructions on communications may also be included in paragraph (l) of the clause in §401.14.
- (c) Agencies may replace the italicized words and phrases in the clause at §401.14 with those appropriate to the particular funding agreement. For example, “contractor” could be replaced by “grantee.” Depending on its use, “agency” or “Federal agency” can be replaced either by the identification of the agency or by the specification of the particular office or official within the agency.
- (d)(1) When the agency head or duly authorized designee determines at the time of contracting that it would be in the national interest to acquire the right to sublicense foreign governments, their nationals, or international organizations in accordance with any existing treaty or international agreement, a sentence may be added at the end of paragraph (b) of the clause at §401.14 as follows:

This license will include the right of the government to sublicense foreign governments, their nationals, and international organizations, in accordance with the following treaties or international agreements:

_____.

- (2) The blank in the added text in paragraph (d)(1) of this section should be completed with the names of applicable existing treaties or international

agreements, including agreements of cooperation, and military agreements relating to weapons development and production. The added language is not intended to encompass treaties or other agreements that are in effect on the date of the award but which are not listed. Alternatively, agencies may use substantially similar language relating the government's rights to specific treaties or other agreements identified elsewhere in the funding agreement. The language may also be modified to make clear that the rights granted to the foreign government, and its nationals or an international organization may be for additional rights beyond a license or sublicense if so required by the applicable treaty or other international agreement. For example, in some cases exclusive licenses or even the assignment of title to the foreign country involved might be required. Agencies may also modify the added language to provide for the direct licensing by the contractor of the foreign government or international organization.

- (e) If the funding agreement involves performance over an extended period of time, such as the typical funding agreement for the operation of a government-owned facility, the following language may also be added:

The agency reserves the right to unilaterally amend this funding agreement to identify specific treaties or international agreements entered into or to be entered into by the government after the effective date of this funding agreement and effectuate those license or other rights which are necessary for the government to meet its obligations to foreign governments, and international organizations under such treaties or international agreements with respect to subject inventions made after the date of the amendment.

- (f) Agencies may add additional paragraphs to paragraph (f) of the clauses at §401.14 to require the contractor to do one or more of the following:

- (1) Provide a report prior to the close-out of a funding agreement listing all subject inventions or stating that there were none.
- (2) Provide, upon request, the filing date, patent application number and title; a copy of the patent application; and patent number and issue date for any subject invention in any country in which the contractor has applied for a patent.
- (3) Provide periodic (but no more frequently than annual) listings of all subject inventions which were disclosed to the agency during the period covered by the report.

- (g) If the contract is with a nonprofit organization and is for the operation of a government-owned, contractor-operated facility, the following will be substituted for the text of paragraph (k)(3) of the clause at §401.14:

After payment of patenting costs, licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, the balance of any royalties or income earned and retained by the contractor during any fiscal year on subject inventions under this or any successor contract containing the same requirement, up to any amount equal to five percent of the budget of the facility for that fiscal year, shall be used by the contractor for scientific research,

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development, and education consistent with the research and development mission and objectives of the facility, including activities that increase the licensing potential of other inventions of the facility. If the balance exceeds five percent, 15 percent of the excess above five percent shall be paid by the contractor to the Treasury of the United States and the remaining 85 percent shall be used by the contractor only for the same purposes as described in the preceding sentence. To the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by contractor employees on location at the facility.

- (h) If the contract is for the operation of a government-owned facility, agencies may add paragraph (f)(5) to the clause at §401.14 with the following text:

The contractor shall establish and maintain active and effective procedures to ensure that subject inventions are promptly identified and timely disclosed and shall submit a description of the procedures to the contracting officer so that the contracting officer may evaluate and determine their effectiveness.

[83 FR 15960, Apr. 13, 2018]

§401.6. Exercise of march-in rights

- (a) The following procedures shall govern the exercise of the march-in rights of the agencies set forth in 35 U.S.C. 203 and paragraph (j) of the clause at §401.14.
- (b) Whenever an agency receives information that it believes might warrant the exercise of march-in rights, before initiating any march-in proceeding, it shall notify the contractor in writing of the information and request informal written or oral comments from the contractor as well as information relevant to the matter. In the absence of any comments from the contractor within 30 days, the agency may, at its discretion, proceed with the procedures below. If a comment is received within 30 days, or later if the agency has not initiated the procedures below, then the agency shall, within 60 days after it receives the comment, either initiate the procedures below or notify the contractor, in writing, that it will not pursue march-in rights on the basis of the available information.
- (c) A march-in proceeding shall be initiated by the issuance of a written notice by the agency to the contractor and its assignee or exclusive licensee, as applicable and if known to the agency, stating that the agency is considering the exercise of march-in rights. The notice shall state the reasons for the proposed march-in in terms sufficient to put the contractor on notice of the facts upon which the action would be based and shall specify the field or fields of use in which the agency is considering requiring licensing. The notice shall advise the contractor (assignee or exclusive licensee) of its rights, as set forth in this section and in any supplemental agency regulations. The determination to exercise march-in rights shall be made by the head of the agency or his or her designee.
- (d) Within 30 days after the receipt of the written notice of march-in, the contractor (assignee or exclusive licensee) may submit in person, in writing, or through a representative, information or argument in opposition to the proposed march-in, including any additional specific information which raises a genuine dispute over the material facts upon which the march-in is based. If the information presented raises a genuine dispute over the material facts, the head of the agency or designee shall undertake or refer the matter to another official for fact-finding.
- (e) Fact-finding shall be conducted in accordance with the procedures established

by the agency. Such procedures shall be as informal as practicable and be consistent with principles of fundamental fairness. The procedures should afford the contractor the opportunity to appear with counsel, submit documentary evidence, present witnesses and confront such persons as the agency may present. A transcribed record shall be made and shall be available at cost to the contractor upon request. The requirement for a transcribed record may be waived by mutual agreement of the contractor and the agency. Any portion of the march-in proceeding, including a fact-finding hearing that involves testimony or evidence relating to the utilization or efforts at obtaining utilization that are being made by the contractor, its assignee, or licensees shall be closed to the public, including potential licensees. In accordance with 35 U.S.C. 202(c)(5), agencies shall not disclose any such information obtained during a march-in proceeding to persons outside the government except when such release is authorized by the contractor (assignee or licensee).

- (f) The official conducting the fact-finding shall prepare or adopt written findings of fact and transmit them to the head of the agency or designee promptly after the conclusion of the fact-finding proceeding along with a recommended determination. A copy of the findings of fact shall be sent to the contractor (assignee or exclusive licensee) by registered or certified mail. The contractor (assignee or exclusive licensee) and agency representatives will be given 30 days to submit written arguments to the head of the agency or designee; and, upon request by the contractor oral arguments will be held before the agency head or designee that will make the final determination.
- (g) In cases in which fact-finding has been conducted, the head of the agency or designee shall base his or her determination on the facts found, together with any other information and written or oral arguments submitted by the contractor (assignee or exclusive licensee) and agency representatives, and any other information in the administrative record. The consistency of the exercise of march-in rights with the policy and objectives of 35 U.S.C. 200 shall also be considered. In cases referred for fact-finding, the head of the agency or designee may reject only those facts that have been found to be clearly erroneous, but must explicitly state the rejection and indicate the basis for the contrary finding. Written notice of the determination whether march-in rights will be exercised shall be made by the head of the agency or designee and sent to the contractor (assignee or exclusive licensee) by certified or registered mail within 90 days after the completion of fact-finding or 90 days after oral arguments, whichever is later, or the proceedings will be deemed to have been terminated and thereafter no march-in based on the facts and reasons upon which the proceeding was initiated may be exercised.
- (h) An agency may, at any time, terminate a march-in proceeding if it is satisfied that it does not wish to exercise march-in rights.
- (i) The procedures of this part shall also apply to the exercise of march-in rights against inventors receiving title to subject inventions under 35 U.S.C. 202(d) and, for that purpose, the term “contractor” as used in this section shall be deemed to include the inventor.

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- (j) An agency determination unfavorable to the contractor (assignee or exclusive licensee) shall be held in abeyance pending the exhaustion of appeals or petitions filed under 35 U.S.C. 203(2).
- (k) For purposes of this section the term exclusive licensee includes a partially exclusive licensee.
- (l) Agencies are authorized to issue supplemental procedures not inconsistent with this part for the conduct of march-in proceedings.

§401.7. Small business preference

- (a) Paragraph (k)(4) of the clauses at §401.14 Implements the small business preference requirement of 35 U.S.C. 202(c)(7)(D). Contractors are expected to use efforts that are reasonable under the circumstances to attract small business licensees. They are also expected to give small business firms that meet the standard outlined in the clause a preference over other applicants for licenses. What constitutes reasonable efforts to attract small business licensees will vary with the circumstances and the nature, duration, and expense of efforts needed to bring the invention to the market. Paragraph (k)(4) is not intended, for example, to prevent nonprofit organizations from providing larger firms with a right of first refusal or other options in inventions that relate to research being supported under long-term or other arrangements with larger companies. Under such circumstances it would not be reasonable to seek and to give a preference to small business licensees.
- (b) Small business firms that believe a nonprofit organization is not meeting its obligations under the clause may report their concerns to the funding agency identified at §401.14(l), and following receipt of the funding agency's initial response to their concerns or, if no initial funding agency response is received within 90 days from the date their concerns were reported to the funding agency, may thereafter report their concerns, together with any response from the funding agency, to the Secretary. To the extent deemed appropriate, the Secretary, in consultation with the funding agency, will undertake informal investigation of the concern, and, if appropriate, enter into discussions or negotiations with the nonprofit organization to the end of improving its efforts in meeting its obligations under the clause. However, in no event will the Secretary intervene in ongoing negotiations or contractor decisions concerning the licensing of a specific subject invention. All investigations, discussions, and negotiations of the Secretary described in this paragraph (b) will be in coordination with other interested agencies, including the funding agency and the Small Business Administration. In the case of a contract for the operation of a government-owned, contractor operated research or production facility, the Secretary will coordinate with the agency responsible for the facility prior to any discussions or negotiations with the contractor.

[52 FR 8554, Mar. 18, 1987, as amended at 83 FR 15960, Apr. 13, 2018]

§401.8. Reporting on utilization of subject inventions

- (a) Paragraph (h) of the clauses at §401.14 and its counterpart in the clause at Attachment A to OMB Circular A-124 provides that agencies have the right to receive periodic reports from the contractor on utilization of inventions. Agencies exercising this right should accept such information, to the extent feasible, in

the format that the contractor normally prepares it for its own internal purposes. The prescription of forms should be avoided. However, any forms or standard questionnaires that are adopted by an agency for this purpose must comply with the requirements of the Paperwork Reduction Act. Copies shall be sent to the Secretary.

- (b) In accordance with 35 U.S.C. 202(c)(5) and the terms of the clauses at §401.14, agencies shall not disclose such information to persons outside the government. Contractors will continue to provide confidential markings to help prevent inadvertent release outside the agency.

§401.9. Retention of rights by contractor employee inventor

Agencies which allow an employee/inventor of the contractor to retain rights to a subject invention made under a funding agreement with a small business firm or nonprofit organization contractor, as authorized by 35 U.S.C. 202(d), will impose upon the inventor at least those conditions that would apply to a small business firm contractor under paragraphs (d)(1) and (3); (f)(4); (h); (i); and (j) of the clause at §401.14.

[52 FR 8554, Mar. 18, 1987, as amended at 83 FR 15960, Apr. 13, 2018]

§401.10. Government assignment to contractor of rights in invention of government employee

- (a) In any case when a Federal employee is a co-inventor of any invention made under a funding agreement with a contractor:
- (1) If the Federal agency employing such co-inventor transfers or reassigns to the contractor the right it has acquired in the subject invention from its employee as authorized by 35 U.S.C. 202(e), the assignment will be made subject to the patent rights clause of the contractor's funding agreement.
 - (2) The Federal agency employing such co-inventor, in consultation with the contractor, may submit an initial patent application, provided that the contractor retains the right to elect to retain title pursuant to 35 U.S.C. 202(a).
 - (3) When a Federal employee is a co-inventor of a subject invention developed with contractor-employed co-inventors under a funding agreement from another agency:
 - (i) The funding agency will notify the agency employing a Federal co-inventor of any report of invention and whether the contractor elects to retain title.
 - (ii) If the contractor does not elect to retain title to the subject invention, the funding agency must promptly provide notice to the agency employing a Federal co-inventor, and to the extent practicable, at least 60 days before any statutory bar date.

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- (iii) Upon notification by the funding agency of a subject invention in which the contractor has not elected to retain title, the agency employing a Federal co-inventor must determine if there is a government interest in patenting the invention and will notify the funding agency of its determination.
 - (iv) If the agency employing a Federal co-inventor determines there is a government interest in patenting the subject invention in which the contractor has not elected to retain title, the funding agency must provide administrative assistance (but is not required to provide financial assistance) to the agency employing a Federal co-inventor in acquiring rights from the contractor in order to file an initial patent application.
 - (v) The agency employing a Federal co-inventor has priority for patenting over funding agencies that do not have a Federal co-inventor when the contractor has not elected to retain title.
 - (vi) When the contractor has not elected to retain title, the funding agency and the agency employing a Federal co-inventor shall consult in order to ensure that the intent of the programmatic objectives conducted under the funding agreement is represented in any patenting decisions. The agency employing a Federal co-inventor may transfer patent management responsibilities to the funding agency.
- (4) Federal agencies employing such co-inventors may enter into an agreement with a contractor when an agency determines it is a suitable and necessary step to protect and administer rights on behalf of the Federal Government, pursuant to 35 U.S.C. 202(e).
 - (5) Federal agencies employing such co-inventors will retain all ownership rights to which they are otherwise entitled if the contractor elects to retain title to the subject invention.
- (b) Agencies may add additional conditions as long as they are consistent with 35 U.S.C. 201-206.
 - (c) Nothing in this section shall supersede any existing inter-institutional agreements between a contractor and a Federal agency for the management of jointly-owned subject inventions.

[83 FR 15961, Apr. 13, 2018]

§401.11. Appeals

- (a) As used in this section, the term standard clause means the clause at §401.14 of this part and the clauses previously prescribed by either OMB Circular A-124 or OMB Bulletin 81-22.
- (b) The agency official initially authorized to take any of the following actions shall provide the contractor with a written statement of the basis for his or her action at the time the action is taken, including any relevant facts that were relied upon in taking the action.
 - (1) A refusal to grant an extension under paragraph (c)(4) of the standard clauses.
 - (2) A request for a conveyance of title under paragraph (d) of the standard clauses.
 - (3) A refusal to grant a waiver under paragraph (i) of the standard clauses.

- (4) A refusal to approve an assignment under paragraph (k)(1) of the standard clauses.
- (5) A refusal to grant an extension of the exclusive license period under paragraph (k)(2) of the clauses prescribed by either OMB Circular A-124 or OMB Bulletin 81-22.
- (c) Each agency shall establish and publish procedures under which any of the agency actions listed in paragraph (b) of this section may be appealed to the head of the agency or designee. Review at this level shall consider both the factual and legal basis for the actions and its consistency with the policy and objectives of 35 U.S.C. 200-206.
- (d) Appeals procedures established under paragraph (c) of this section shall include administrative due process procedures and standards for fact-finding at least comparable to those set forth in §401.6 (e) through (g) whenever there is a dispute as to the factual basis for an agency request for a conveyance of title under paragraph (d) of the standard clause, including any dispute as to whether or not an invention is a subject invention.
- (e) To the extent that any of the actions described in paragraph (b) of this section are subject to appeal under the Contract Dispute Act, the procedures under the Act will satisfy the requirements of paragraphs (c) and (d) of this section.

§401.12. Licensing of background patent rights to third parties

- (a) A funding agreement with a small business firm or a domestic nonprofit organization will not contain a provision allowing a Federal agency to require the licensing to third parties of inventions owned by the contractor that are not subject inventions unless such provision has been approved by the agency head and a written justification has been signed by the agency head. Any such provision will clearly state whether the licensing may be required in connection with the practice of a subject invention, a specifically identified work object, or both. The agency head may not delegate the authority to approve such provisions or to sign the justification required for such provisions.
- (b) A Federal agency will not require the licensing of third parties under any such provision unless the agency head determines that the use of the invention by others is necessary for the practice of a subject invention or for the use of a work object of the funding agreement and that such action is necessary to achieve practical application of the subject invention or work object. Any such determination will be on the record after an opportunity for an agency hearing. The contractor shall be given prompt notification of the determination by certified or registered mail. Any action commenced for judicial review of such determination shall be brought within sixty days after notification of such determination.

§401.13. Administration of patent rights clauses

- (a) In the event a subject invention is made under funding agreements of more than

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one agency, at the request of the contractor or on their own initiative the agencies shall designate one agency as responsible for administration of the rights of the government in the invention.

- (b) Agencies shall promptly grant, unless there is a significant reason not to, a request by a nonprofit organization under paragraph (k)(2) of the clauses prescribed by either OMB Circular A-124 or OMB Bulletin 81-22 inasmuch as 35 U.S.C. 202(c)(7) has since been amended to eliminate the limitation on the duration of exclusive licenses. Similarly, unless there is a significant reason not to, agencies shall promptly approve an assignment by a nonprofit organization to an organization which has as one of its primary functions the management of inventions when a request for approval has been necessitated under paragraph (k)(1) of the clauses prescribed by either OMB Circular A-124 or OMB Bulletin 81-22 because the patent management organization is engaged in or holds a substantial interest in other organizations engaged in the manufacture or sale of products or the use of processes that might utilize the invention or be in competition with embodiments of the invention. As amended, 35 U.S.C. 202(c)(7) no longer contains this limitation. The policy of this subsection should also be followed in connection with similar approvals that may be required under Institutional Patent Agreements, other patent rights clauses, or waivers that predate Chapter 18 of Title 35, United States Code.
- (c) The President's Patent Policy Memorandum of February 18, 1983, states that agencies should protect the confidentiality of invention disclosure, patent applications, and utilization reports required in performance or in consequence of awards to the extent permitted by 35 U.S.C. 205 or other applicable laws. The following requirements should be followed for funding agreements covered by and predating this part 401.
- (1) To the extent authorized by 35 U.S.C. 205, agencies shall not disclose to third parties pursuant to requests under the Freedom of Information Act (FOIA) any information disclosing a subject invention for a reasonable time in order for a patent application to be filed. With respect to subject inventions of contractors that are small business firms or nonprofit organizations, a reasonable time shall be the time during which an initial patent application may be filed under paragraph (c) of the standard clause found at §401.14 or such other clause may be used in the funding agreement. However, an agency may disclose such subject inventions under the FOIA, at its discretion, after a contractor has elected not to retain title or after the time in which the contractor is required to make an election if the contractor has not made an election within that time. Similarly, an agency may honor a FOIA request at its discretion if it finds that the same information has previously been published by the inventor, contractor, or otherwise. If the agency plans to file itself when the contractor has not elected title, it may, of course, continue to avail itself of the authority of 35 U.S.C. 205.
- (2) In accordance with 35 U.S.C. 205, agencies shall not disclose or release, pursuant to requests under the Freedom of Information Act or otherwise, copies of any document which the agency obtained under the clause in §401.14 which is part of an application for patent with the U.S. Patent and Trademark Office or any foreign patent office filed by the contractor (or its assignees, licensees, or employees) on a subject invention to which the contractor has elected to retain title. This prohibition does not extend to disclosure to other government agencies or contractors of government agencies under an obligation to maintain

such information in confidence. This prohibition does not apply to documents published by the U.S. Patent and Trademark Office or any foreign patent office.

- (3) A number of agencies have policies to encourage public dissemination of the results of work supported by the agency through publication in government or other publications of technical reports of contractors or others. In recognition of the fact that such publication, if it included descriptions of a subject invention could create bars to obtaining patent protection, it is the policy of the executive branch that agencies will not include in such publication programs copies of disclosures of inventions submitted by small business firms or nonprofit organizations, pursuant to paragraph (c) of the standard clause found at §401.14, except under the same circumstances under which agencies are authorized to release such information pursuant to FOIA requests under paragraph (c)(1) of this section agencies may publish such disclosures.
- (4) Nothing in this paragraph is intended to preclude agencies from including in the publication activities described in the first sentence of paragraph (c) (3), the publication of materials describing a subject invention to the extent such materials were provided as part of a technical report or other submission of the contractor which were submitted independently of the requirements of the patent rights provisions of the contract. However, if a small business firm or nonprofit organization notifies the agency that a particular report or other submission contains a disclosure of a subject invention to which it has elected title or may elect title, the agency shall use reasonable efforts to restrict its publication of the material for six months from date of its receipt of the report or submission or, if earlier, until the contractor has filed an initial patent application. Agencies, of course, retain the discretion to delay publication for additional periods of time.
- (5) Nothing in this paragraph is intended to limit the authority of agencies provided in 35 U.S.C. 205 in circumstances not specifically described in this paragraph.

[52 FR 8554, Mar. 18, 1987, as amended at 60 FR 41812, Aug. 14, 1995; 83 FR 15961, Apr. 13, 2018]

§401.14. Standard patent rights clauses

The following is the standard patent rights clause to be used as specified in §401.3(a):

Standard Patent Rights

(a) Definitions

- (1) *Invention* means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (2) *Subject invention* means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as

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defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.

- (3) *Practical Application* means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or government regulations, available to the public on reasonable terms.
- (4) *Made* when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (5) *Small Business Firm* means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.
- (6) *Nonprofit Organization* means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c) and exempt from taxation under section 501(a) of the Internal Revenue Code (25 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- (7) The term *statutory period* means the one-year period before the effective filing date of a claimed invention during which exceptions to prior art exist per 35 U.S.C. 102(b) as amended by the Leahy-Smith America Invents Act, Public Law 112-29.
- (8) The term *contractor* means any person, small business firm or nonprofit organization, or, as set forth in section 1, paragraph (b)(4) of Executive Order 12591, as amended, any business firm regardless of size, which is a party to a funding agreement.

(b) Allocation of Principal Rights

The *Contractor* may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the *Contractor* retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(c) Invention Disclosure, Election of Title and Filing of Patent Application by *Contractor*

- (1) The *contractor* will disclose each subject invention to the *Federal Agency* within two months after the inventor discloses it in writing to *contractor* personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the *contract* under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall

also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the *agency*, the *Contractor* will promptly notify the *agency* of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the *contractor*.

- (2) The *contractor* will elect in writing whether or not to retain title to any such invention by notifying the *Federal agency* within two years of disclosure to the *Federal agency*. However, in any case where a patent, a printed publication, public use, sale, or other availability to the public has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.
- (3) The *contractor* will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. If the *contractor* files a provisional application as its initial patent application, it shall file a non-provisional application within 10 months of the filing of the provisional application. The *contractor* will file patent applications in additional countries or international patent offices within either ten months of the first filed patent application or six months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
- (4) For any subject invention with Federal agency and contractor co-inventors, where the Federal agency employing such co-inventor determines that it would be in the interest of the government, pursuant to 35 U.S.C. 207(a) (3), to file an initial patent application on the subject invention, the Federal agency employing such co-inventor, at its discretion and in consultation with the contractor, may file such application at its own expense, provided that the contractor retains the ability to elect title pursuant to 35 U.S.C. 202(a).
- (5) Requests for extension of the time for disclosure, election, and filing under paragraphs (1), (2), and (3) of this clause may, at the discretion of the Federal agency, be granted. When a contractor has requested an extension for filing a non-provisional application after filing a provisional application, a one-year extension will be granted unless the Federal agency notifies the contractor within 60 days of receiving the request.

(d) Conditions When the Government May Obtain Title

The *contractor* will convey to the *Federal agency*, upon written request, title to any subject invention—

- (1) If the *contractor* fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title.
- (2) In those countries in which the *contractor* fails to file patent applications

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within the times specified in paragraph (c) of this clause; provided, however, that if the *contractor* has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the *Federal agency*, the *contractor* shall continue to retain title in that country.

- (3) In any country in which the *contractor* decides not to continue the prosecution of any non-provisional patent application for, to pay a maintenance, annuity or renewal fee on, or to defend in a reexamination or opposition proceeding on, a patent on a subject invention.

(e) Minimum Rights to *Contractor* and Protection of the *Contractor* Right to File

(1) The *contractor* will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the *contractor* fails to disclose the invention within the times specified in (c), above. The *contractor's* license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the *contractor* is a party and includes the right to grant sublicenses of the same scope to the extent the *contractor* was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the *Federal agency* except when transferred to the successor of that party of the *contractor's* business to which the invention pertains.

(2) The *contractor's* domestic license may be revoked or modified by the *funding Federal agency* to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and *agency* licensing regulations (if any). This license will not be revoked in that field of use or the geographical areas in which the *contractor* has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the *funding Federal agency* to the extent the *contractor*, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, the *funding Federal agency* will furnish the *contractor* a written notice of its intention to revoke or modify the license, and the *contractor* will be allowed thirty days (or such other time as may be authorized by the *funding Federal agency* for good cause shown by the *contractor*) after the notice to show cause why the license should not be revoked or modified. The *contractor* has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and *agency* regulations (if any) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.

(f) *Contractor* Action to Protect the Government's Interest

(1) The *contractor* agrees to execute or to have executed and promptly deliver to the *Federal agency* all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the *contractor* elects to retain title, and (ii) convey title to the *Federal agency* when requested under paragraph (d) above and to enable the government to obtain patent protection throughout the world in that subject invention.

- (2) The *contractor* agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the *contractor* each subject invention made under *contract* in order that the *contractor* can comply with the disclosure provisions of paragraph (c) of this clause, to assign to the *contractor* the entire right, title and interest in and to each subject invention made under *contract*, and to execute all papers necessary to file patent applications on subject inventions and to establish the government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The *contractor* shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
- (3) For each subject invention, the *contractor* will, no less than 60 days prior to the expiration of the statutory deadline, notify the *Federal agency* of any decision: Not to continue the prosecution of a non-provisional patent application; not to pay a maintenance, annuity or renewal fee; not to defend in a reexamination or opposition proceeding on a patent, in any country; to request, be a party to, or take action in a trial proceeding before the Patent Trial and Appeals Board of the U.S. Patent and Trademark Office, including but not limited to post-grant review, review of a business method patent, *inter partes* review, and derivation proceeding; or to request, be a party to, or take action in a non-trial submission of art or information at the U.S. Patent and Trademark Office, including but not limited to a pre-issuance submission, a post-issuance submission, and supplemental examination.
- (4) The *contractor* agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the *contract*) awarded by (identify the *Federal agency*). The government has certain rights in the invention."

g) Subcontracts

- (1) The *contractor* will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental or research work to be performed by a *subcontractor*. The *subcontractor* will retain all rights provided for the *contractor* in this clause, and the *contractor* will not, as part of the consideration for awarding the subcontract, obtain rights in the *subcontractor*'s subject inventions.
- (2) The *contractor* will include in all other subcontracts, regardless of tier, for experimental developmental or research work the patent rights clause required by (cite section of agency implementing regulations or FAR).
- (3) In the case of subcontracts, at any tier, when the prime award with the *Federal agency* was a contract (but not a grant or cooperative agreement), the *agency*, *subcontractor*, and the *contractor* agree that the mutual obligations of the

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parties created by this clause constitute a contract between the *subcontractor* and the Federal *agency* with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(h) Reporting on Utilization of Subject Inventions

The *Contractor* agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the *contractor* or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the *contractor*, and such other data and information as the *agency* may reasonably specify. The *contractor* also agrees to provide additional reports as may be requested by the *agency* in connection with any march-in proceeding undertaken by the *agency* in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c) (5), the *agency* agrees it will not disclose such information to persons outside the government without permission of the *contractor*.

(i) Preference for United States Industry

Notwithstanding any other provision of this clause, the *contractor* agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject inventions in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the *Federal agency* upon a showing by the *contractor* or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in Rights

The *contractor* agrees that with respect to any subject invention in which it has acquired title, the *Federal agency* has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the *agency* to require the *contractor*, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the *contractor*, assignee, or exclusive licensee refuses such a request the *Federal agency* has the right to grant such a license itself if the *Federal agency* determines that:

- (1) Such action is necessary because the *contractor* or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use.
- (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the *contractor*, assignee or their licensees;
- (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the *contractor*, assignee or licensees; or

(4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Special Provisions for Contracts with Nonprofit Organizations

If the *contractor* is a nonprofit organization, it agrees that:

(1) Rights to a subject invention in the United States may not be assigned without the approval of the *Federal agency*, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the *contractor*;

(2) The *contractor* will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when the *agency* deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) The balance of any royalties or income earned by the *contractor* with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education; and

(4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give a preference to a small business firm when licensing a subject invention if the *contractor* determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the *contractor* is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the *contractor*. However, the *contractor* agrees that the *Federal agency* may review the *contractor's* licensing program and decisions regarding small business applicants, and the *contractor* will negotiate changes to its licensing policies, procedures, or practices with the *Federal agency* when the *Federal agency's* review discloses that the *contractor* could take reasonable steps to implement more effectively the requirements of this paragraph (k) (4). In accordance with 37 CFR 401.7, the *Federal agency* or the *contractor* may request that the Secretary review the *contractor's* licensing program and decisions regarding small business applicants.

(l) Communication

[Complete according to instructions at §401.5(b)]

[52 FR 8554, Mar. 18, 1987, as amended at 69 FR 17301, Apr. 2, 2004; 83 FR 15961, Apr. 13, 2018]

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§401.15. Deferred determinations

- (a) This section applies to requests for greater rights in subject inventions made by contractors when deferred determination provisions were included in the funding agreement because one of the exceptions at §401.3(a) was applied, except that the Department of Energy is authorized to process deferred determinations either in accordance with its waiver regulations or this section. A contractor requesting greater rights should include with its request information on its plans and intentions to bring the invention to practical application. Within 90 days after receiving a request and supporting information, or sooner if a statutory bar to patenting is imminent, the agency should seek to make a determination. In any event, if a bar to patenting is imminent, unless the agency plans to file on its own, it shall authorize the contractor to file a patent application pending a determination by the agency. Such a filing shall normally be at the contractor's own risk and expense. However, if the agency subsequently refuses to allow the contractor to retain title and elects to proceed with the patent application under government ownership, it shall reimburse the contractor for the cost of preparing and filing the patent application.
- (b) If the circumstances of concerns which originally led the agency to invoke an exception under §401.3(a) are not applicable to the actual subject invention or are no longer valid because of subsequent events, the agency should allow the contractor to retain title to the invention on the same conditions as would have applied if the standard clause at §401.14 had been used originally, unless it has been licensed.
- (c) If paragraph (b) is not applicable the agency shall make its determination based on an assessment whether its own plans regarding the invention will better promote the policies and objectives of 35 U.S.C. 200 than will contractor ownership of the invention. Moreover, if the agency is concerned only about specific uses or applications of the invention, it shall consider leaving title in the contractor with additional conditions imposed upon the contractor's use of the invention for such applications or with expanded government license rights in such applications.
- (d) A determination not to allow the contractor to retain title to a subject invention or to restrict or condition its title with conditions differing from those in the clause at §401.14, unless made by the head of the agency, shall be appealable by the contractor to an agency official at a level above the person who made the determination. This appeal shall be subject to the procedures applicable to appeals under §401.11.

[52 FR 8554, Mar. 18, 1987, as amended at 83 FR 15963, Apr. 13, 2018]

§401.16. Electronic filing

Unless otherwise requested or directed by the agency,

- (a) The written report required in (c)(1) of the standard clause in §401.14 shall be electronically filed;
- (b) The written election required in (c)(2) of the standard clause in §401.14 shall be electronically filed; and
- (c) The close-out report in paragraph (f)(1) and the information identified in paragraphs (f)(2) and (3) of §401.5 shall be electronically filed.

- (d) Other written notices required in the clause in §401.14 may be electronically delivered to the agency or the contractor through an electronic database used for reporting subject inventions, patents, and utilization reports to the funding agency.

[60 FR 41812, Aug. 14, 1995, as amended at 83 FR 15963, Apr. 13, 2018]

§401.17. Submissions and inquiries

All submissions or inquiries should be directed to the Chief Counsel for NIST, National Institute of Standards and Technology, 100 Bureau Drive, Mail Stop 1052, Gaithersburg, Maryland 20899-1052; telephone: (301) 975-2803; email: nistcounsel@nist.gov. Information about and procedures for electronic filing under this part are available at the Interagency Edison website and service center, <http://www.iedison.gov>, telephone (301) 435-1986.

[83 FR 15963, Apr. 13, 2018]

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PART 404 — LICENSING OF GOVERNMENT-OWNED INVENTIONS

Authority: 35 U.S.C. 207-209, DOO 30-2A.

Source: 50 FR 9802, Mar. 12, 1985, unless otherwise noted.

§404.1 Scope of part

This part prescribes the terms, conditions, and procedures upon which a federally owned invention, other than an invention in the custody of the Tennessee Valley Authority, may be licensed. This part does not affect licenses which:

- (a) Were in effect prior to April 7, 2006;
- (b) May exist at the time of the Government's acquisition of title to the invention, including those resulting from the allocation of rights to inventions made under Government research and development contracts;
- (c) Are the result of an authorized exchange of rights in the settlement of patent disputes, including interferences; or
- (d) Are otherwise authorized by law or treaty, including 35 U.S.C. 202(e), 35 U.S.C. 207(a)(3) and 15 U.S.C. 3710a, which also may authorize the assignment of inventions. Although licenses on inventions made under a cooperative research and development agreement (CRADA) are not subject to this regulation, agencies are encouraged to apply the same policies and use similar terms when appropriate. Similarly, this should be done for licenses granted under inventions where the agency has acquired rights pursuant to 35 U.S.C. 207(a)(3).

[71 FR 11512, Mar. 8, 2006]

§404.2 Policy and objective

It is the policy and objective of this subpart to use the patent system to promote the utilization of inventions arising from federally supported research or development.

§404.3 Definitions

- (a) *Government owned invention* means an invention, whether or not covered by a patent or patent application, or discovery which is or may be patentable or otherwise protectable under Title 35, the Plant Variety Protection Act (7 U.S.C. 2321 et seq.) or foreign patent law, owned in whole or in part by the United States Government.
- (b) *Federal agency* means an executive department, military department, Government corporation, or independent establishment, except the Tennessee Valley Authority, which has custody of a federally owned invention.
- (c) *Small business firm* means a small business concern as defined in section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration.
- (d) *Practical application* means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of

a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

- (e) *United States* means the United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.

[50 FR 9802, Mar. 12, 1985, as amended at 71 FR 11512, Mar. 8, 2006]

§404.4 Authority to grant licenses

Federally owned inventions shall be made available for licensing as deemed appropriate in the public interest and each agency shall notify the public of these available inventions. The agencies having custody of these inventions may grant nonexclusive, co-exclusive, partially exclusive, or exclusive licenses thereto under this part. Licenses may be royalty-free or for royalties or other consideration. They may be for all or less than all fields of use or in specified geographic areas and may include a release for past infringement. Any license shall not confer on any person immunity from the antitrust laws or from a charge of patent misuse, and the exercise of such rights pursuant to this part shall not be immunized from the operation of state or federal law by reason of the source of the grant.

[71 FR 11512, Mar. 8, 2006]

§404.5 Restrictions and conditions on all licenses granted under this part

(a)

(1) A license may be granted only if the applicant has supplied the Federal agency with a satisfactory plan for development or marketing of the invention, or both, and with information about the applicant's capability to fulfill the plan. The plan for a non-exclusive research license may be limited to describing the research phase of development.

(2) A license granting rights to use or sell under a Government owned invention in the United States shall normally be granted only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States. However, this condition may be waived or modified if reasonable but unsuccessful efforts have been made to grant licenses to potential licensees that would be likely to manufacture substantially in the United States or if domestic manufacture is not commercially feasible.

(b) Licenses shall contain such terms and conditions as the Federal agency determines are appropriate for the protection of the interests of the Federal Government and the public and are not in conflict with law or this part. The following terms and conditions apply to any license:

(1) The duration of the license shall be for a period specified in the license agreement, unless sooner terminated in accordance with this part.

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- (2) Any patent license may grant the licensee the right of enforcement of the licensed patent without joining the Federal agency as a party as determined appropriate in the public interest.
- (3) The license may extend to subsidiaries of the licensee or other parties if provided for in the license but shall be nonassignable without approval of the Federal agency, except to the successor of that part of the licensee's business to which the invention pertains.
- (4) The license may provide the licensee the right to grant sublicenses under the license, subject to the approval of the Federal agency. Each sublicense shall make reference to the license, including the rights retained by the Government, and a copy of such sublicense with any modifications thereto, shall be promptly furnished to the Federal agency.
- (5) The license shall require the licensee to carry out the plan for development or marketing of the invention, or both, to bring the invention to practical application within a reasonable time as specified in the license, and continue to make the benefits of the invention reasonably accessible to the public.
- (6) The license shall require the licensee to report periodically on the utilization or efforts at obtaining utilization that are being made by the licensee, with particular reference to the plan submitted but only to the extent necessary to enable the agency to determine compliance with the terms of the license.
- (7) Where an agreement is obtained pursuant to §404.5(a)(2) that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States, the license shall recite such an agreement.
- (8) The license shall provide for the right of the Federal agency to terminate the license, in whole or in part, if the agency determines that:
 - (i) The licensee is not executing its commitment to achieve practical application of the invention, including commitments contained in any plan submitted in support of its request for a license and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken, or can be expected to take within a reasonable time, effective steps to achieve practical application of the invention;
 - (ii) Termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license and such requirements are not reasonably satisfied by the licensee;
 - (iii) The licensee has willfully made a false statement of or willfully omitted a material fact in the license application or in any report required by the license agreement;
 - (iv) The licensee commits a substantial breach of a covenant or provision contained in the license agreement, including the requirement in §404.5(a)(2); or
 - (v) The licensee has been found by a court of competent jurisdiction to have violated the Federal antitrust laws in connection with its performance under the license agreement.
- (9) The license may be modified or terminated, consistent with this part, upon mutual agreement of the Federal agency and the licensee.

- (10) The license may be modified or terminated, consistent with this part, upon mutual agreement of the Federal agency and the licensee.
- (11) Nothing relating to the grant of a license, nor the grant itself, shall be construed to confer upon any person any immunity from or defenses under the antitrust laws or from a charge of patent misuse, and the acquisition and use of rights pursuant to this part shall not be immunized from the operation of state or Federal law by reason of the source of the grant.

[50 FR 9802, Mar. 12, 1985, as amended at 71 FR 11512, Mar. 8, 2006]

§404.6 Nonexclusive licenses

Nonexclusive licenses may be granted under Government owned inventions without a public notice of a prospective license.

[71 FR 11513, Mar. 8, 2006]

§404.7 Exclusive, co-exclusive and partially exclusive licenses

(a)

- (1) Exclusive, co-exclusive or partially exclusive domestic licenses may be granted on Government owned inventions, only if;
 - (i) Notice of a prospective license, identifying the invention and the prospective licensee, has been published in the Federal Register or other appropriate manner, providing opportunity for filing written objections within at least a 15-day period;
 - (ii) After expiration of the period in §404.7(a)(1)(i) and consideration of any written objections received during the period, the Federal agency has determined that;
 - (A) The public will be served by the granting of the license, in view of the applicant's intentions, plans and ability to bring the invention to the point of practical application or otherwise promote the invention's utilization by the public.
 - (B) Exclusive, co-exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the investment capital and expenditures needed to bring the invention to practical application or otherwise promote the invention's utilization by the public; and
 - (C) The proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;
 - (iii) The Federal agency has not determined that the grant of such a license will tend substantially to lessen competition or create or maintain a violation of the Federal antitrust laws; and

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- (iv) The Federal agency has given first preference to any small business firms submitting plans that are determined by the agency to be within the capability of the firms and as having equal or greater likelihood as those from other applicants to bring the invention to practical application within a reasonable time.
- (2) In addition to the provisions of §404.5, the following terms and conditions apply to domestic exclusive, co-exclusive and partially exclusive licenses:
- (i) The license shall be subject to the irrevocable, royalty-free right of the Government of the United States to practice or have practiced the invention on behalf of the United States and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.
 - (ii) The license shall reserve to the Federal agency the right to require the licensee to grant sublicenses to responsible applicants, on reasonable terms, when necessary to fulfill health or safety needs.
 - (iii) The license shall be subject to any licenses in force at the time of the grant of the exclusive, co-exclusive or partially exclusive license.
- (b)
- (1) Exclusive, co-exclusive or partially exclusive foreign licenses may be granted on a Government owned invention provided that:
- (i) Notice of a prospective license, identifying the invention and the prospective licensee, has been published in the Federal Register or other appropriate manner, providing opportunity for filing written objections within at least a 15-day period and following consideration of such objections received during the period;
 - (ii) The agency has considered whether the interests of the Federal Government or United States industry in foreign commerce will be enhanced; and
 - (iii) The Federal agency has not determined that the grant of such a license will tend substantially to lessen competition or create or maintain a violation of the Federal antitrust laws.
- (2) In addition to the provisions of §404.5, the following terms and conditions apply to foreign exclusive, co-exclusive and partially exclusive licenses:
- (i) The license shall be subject to the irrevocable, royalty-free right of the Government of the United States to practice and have practiced the invention on behalf of the United States and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.
 - (ii) The license shall be subject to any licenses in force at the time of the grant of the exclusive, co-exclusive or partially exclusive license.
 - (iii) The license may grant the licensee the right to take any suitable and necessary actions to protect the licensed property, on behalf of the Federal Government.
- (c) Federal agencies shall maintain a record of determinations to grant exclusive, co-exclusive or partially exclusive licenses.

§404.8 Application for a license

- (a) An application for a license should be addressed to the Federal agency having custody of the invention and shall normally include:
- (1) Identification of the invention for which the license is desired including the patent application serial number or patent number, title, and date, if known;
 - (2) Identification of the type of license for which the application is submitted;
 - (3) Name and address of the person, company, or organization applying for the license and the citizenship or place of incorporation of the applicant;
 - (4) Name, address, and telephone number of the representative of the applicant to whom correspondence should be sent;
 - (5) Nature and type of applicant's business, identifying products or services which the applicant has successfully commercialized, and approximate number of applicant's employees;
 - (6) Source of information concerning the availability of a license on the invention;
 - (7) A statement indicating whether the applicant is a small business firm as defined in §404.3(c);
 - (8) A detailed description of applicant's plan for development or marketing of the invention, or both, which should include:
 - (i) A statement of the time, nature and amount of anticipated investment of capital and other resources which applicant believes will be required to bring the invention to practical application;
 - (ii) A statement as to applicant's capability and intention to fulfill the plan, including information regarding manufacturing, marketing, financial, and technical resources;
 - (iii) A statement of the fields of use for which applicant intends to practice the invention; and
 - (iv) A statement of the geographic areas in which applicant intends to manufacture any products embodying the invention and geographic areas where applicant intends to use or sell the invention, or both;
 - (9) Identification of licenses previously granted to applicant under federally owned inventions;
 - (10) A statement containing applicant's best knowledge of the extent to which the invention is being practiced by private industry or Government, or both, or is otherwise available commercially; and
 - (11) Any other information which applicant believes will support a determination to grant the license to applicant.
- (b) An executed CRADA which provides for the use for research and development purposes by the CRADA collaborator under that CRADA of a Federally-owned invention in the Federal laboratory's custody (pursuant to 35 U.S.C. 209 and 15

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U.S.C. 3710a(b)(1)), and which addresses the information in paragraph (a) of this section, may be treated by the Federal laboratory as an application for a license.

[83 FR 15963, Apr. 13, 2018]

§404.9 [Reserved]

§404.10 Modification and termination of licenses.

Before modifying or terminating a license, other than by mutual agreement, the Federal agency shall furnish the licensee and any sublicensee of record a written notice of intention to modify or terminate the license, and the licensee shall be allowed 30 days after such notice to remedy any breach of the license or show cause why the license shall not be modified or terminated.

[71 FR 11514, Mar. 8, 2006]

§404.11 Appeals

(a) In accordance with procedures prescribed by the Federal agency, the following parties may appeal to the agency head or designee any decision or determination concerning the grant, denial, modification, or termination of a license:

(1) A person whose application for a license has been denied;

(2) A licensee whose license has been modified or terminated, in whole or in part;
or

(3) A person who timely filed a written objection in response to the notice required by §404.7(a)(1)(i) or §404.7(b)(1)(i) and who can demonstrate to the satisfaction of the Federal agency that such person may be damaged by the agency action.

(b) An appeal by a licensee under paragraph (a)(2) of this section may include a hearing, upon the request of the licensee, to address a dispute over any relevant fact. The parties may agree to Alternate Dispute Resolution in lieu of an appeal.

[71 FR 11514, Mar. 8, 2006]

§404.12 Protection and administration of inventions

A Federal agency may take any suitable and necessary steps to protect and administer rights to Government owned inventions, either directly or through contract.

[71 FR 11514, Mar. 8, 2006]

§404.13 Transfer of custody

A Federal agency having custody of a federally owned invention may transfer custody and administration, in whole or in part, to another Federal agency, of the right, title, or interest in such invention.

§404.14 Confidentiality of information

Title 35, United States Code, section 209, requires that any plan submitted pursuant to §404.8(h) and any report required by §404.5(b)(6) shall be treated as commercial or financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of Title 5 of the United States Code.

[71 FR 11514, Mar. 8, 2006]

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PART 501 — UNIFORM PATENT POLICY FOR RIGHTS IN INVENTIONS MADE BY GOVERNMENT EMPLOYEES

Authority: Sec. 4, E.O. 10096, 3 CFR, 1949-1953 Comp., p. 292, as amended by E.O. 10930, 3 CFR, 1959-1963 Comp., p. 456 and by E.O. 10695, 3 CFR, 1954-1958 Comp., p. 355, DOO 30-2A.

Source: 53 FR 39735, Oct. 11, 1988, unless otherwise noted.

Editorial Note: At 78 FR 4766, Jan. 23, 2013, parts 500-599 were transferred from Title 37, Chapter V, to Title 37, Chapter IV. Chapter V was removed and reserved.

§501.1 Purpose

The purpose of this part is to provide for the administration of a uniform patent policy for the Government with respect to the rights in inventions made by Government employees and to prescribe rules and regulations for implementing and effectuating such policy.

[61 FR 40999, Aug. 7, 1996]

§501.2 Scope

This part applies to any invention made by a Government employee and to any action taken with respect thereto.

§501.3 Definitions

- (a) The term *Secretary*, as used in this part, means the Director of the National Institute of Standards and Technology.
- (b) The term *Government agency*, as used in this part, means any Executive department or independent establishment of the Executive branch of the Government (including any independent regulatory commission or board, any corporation wholly owned by the United States, and the Smithsonian Institution), but does not include the Department of Energy for inventions made under the provisions of 42 U.S.C. 2182, the Tennessee Valley Authority, or the Postal Service.
- (c) The term *Government employee*, as used in this part, means any officer or employee, civilian or military, of any Government agency, including any special Government employee as defined in 18 U.S.C. 202 or an individual working for a Federal agency pursuant to the Intergovernmental Personnel Act (IPA), 5 U.S.C. 1304 and 3371-3376, or a part-time consultant or part-time employee as defined in 29 U.S.C. 2101(a)(8) except as may otherwise be provided by agency regulation approved by the Secretary.
- (d) The term *invention*, as used in this part, means any art or process, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States.

- (e) The term *made as* used in this part in relation to any invention, means the conception or first actual reduction to practice of such invention as stated in In re King, 3 USPQ2d (BNA) 1747 (Comm'r Pat. 1987).

[61 FR 40999, Aug. 7, 1996, as amended at 78 FR 4766, Jan. 23, 2013]

§501.4 Determination of inventions and rights

Each Government agency has the approval of the Secretary to determine whether the results of research, development, or other activity in the agency constitute an invention within the purview of Executive Order 10096, as amended by Executive Order 10930 and Executive Order 10695, and to determine the rights in and to the invention in accordance with the provisions of §§501.6 and 501.7.

[61 FR 40999, Aug. 7, 1996]

§501.5 Agency liaison officer

Each Government agency shall designate a liaison officer to represent the agency before the Secretary; Provided, however, that the Departments of the Army, the Navy, and the Air Force may each designate a liaison officer.

§501.6 Criteria for the determination of rights in and to inventions

- (a) The following rules shall be applied in determining the respective rights of the Government and of the inventor in and to any invention that is subject to the provisions of this part:
- (1) The Government shall obtain, except as herein otherwise provided, the entire right, title and interest in and to any invention made by any Government employee:
 - (i) During working hours, or
 - (ii) With a contribution by the Government of facilities, equipment, materials, funds or information, or of time or services of other Government employees on official duty, or
 - (iii) Which bears a direct relation to or is made in consequence of the official duties of the inventor.
 - (2) In any case where the contribution of the Government, as measured by any one or more of the criteria set forth in paragraph (a)(1) of this section, to the invention is insufficient equitably to justify a requirement of assignment to the Government of the entire right, title and interest in and to such invention, or in any case where the Government has insufficient interest in an invention to obtain the entire right, title and interest therein (although the Government could obtain same under paragraph (a)(1) of this section), the Government agency concerned shall leave title to such invention in the employee, subject however,

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to the reservation to the Government of a nonexclusive, irrevocable, royalty-free license in the invention with power to grant licenses for all governmental purposes. The terms of such reservation will appear, where practicable, in any patent, domestic or foreign, which may issue on such invention. Reference is made to section 15 of the Federal Technology Transfer Act of 1986 (15 U.S.C. 3710d) which requires a Government agency to allow the inventor to retain title to any covered invention when the agency does not intend to file a patent application or otherwise promote commercialization.

- (3) In applying the provisions of paragraphs (a)(1) and (2) of this section to the facts and circumstances relating to the making of a particular invention, it shall be presumed that an invention made by an employee who is employed or assigned:
- (i) To invent or improve or perfect any art or process, machine, design, manufacture, or composition of matter;
 - (ii) To conduct or perform research, development work, or both,
 - (iii) To supervise, direct, coordinate, or review Government financed or conducted research, development work, or both, or
 - (iv) To act in a liaison capacity among governmental or non-governmental agencies or individuals engaged in such research or development work,

falls within the provisions of paragraph (a)(1) of this section, and it shall be presumed that any invention made by any other employee falls within the provisions of paragraph (a)(2) of this section. Either presumption may be rebutted by a showing of the facts and circumstances in the case and shall not preclude a determination that these facts and circumstances justify leaving the entire right, title and interest in and to the invention in the Government employee, subject to law.

- (4) In any case wherein the Government neither:
- (i) Obtains the entire right, title and interest in and to an invention pursuant to the provisions of paragraph (a)(1) of this section nor
 - (ii) Reserves a nonexclusive, irrevocable, royalty-free license in the invention, with power to grant licenses for all governmental purposes, pursuant to the provisions of paragraph (a)(2) of this section,

the Government shall leave the entire right, title and interest in and to the invention in the Government employee, subject to law.

[53 FR 39735, Oct. 11, 1988, as amended at 61 FR 40999, Aug. 7, 1996]

§501.7 Agency determination

- (a) If the agency determines that the Government is entitled to obtain title pursuant to §501.6(a)(1) and the employee does not appeal, no further review is required.
- (b) In the event that a Government agency determines, pursuant to paragraph (a) (2) or (a)(4) of §501.6, that title to an invention will be left with the employee, the agency shall notify the employee of this determination. In cases pursuant to §501.6(a)(2) where the Government's insufficient interest in the invention is

evidenced by its decision not to file a patent application, the agency may impose on the employee any one or all of the following conditions or any other conditions that may be necessary in a particular case:

- (1) That a patent application be filed in the United States and/or abroad, if the Government has determined that it has or may need to practice the invention;
 - (2) That the invention not be assigned to any foreign-owned or controlled corporation without the written permission of the agency; and
 - (3) That any assignment or license of rights to use or sell the invention in the United States shall contain a requirement that any products embodying the invention or produced through the use of the invention be substantially manufactured in the United States. The agency shall notify the employee of any conditions imposed.
- (c) In the case of a determination under either paragraph (a) or (b) of this section, the agency shall promptly provide the employee with:
- (1) A signed and dated statement of its determination and reasons therefor; and
 - (2) A copy of 37 CFR part 501.

[53 FR 39735, Oct. 11, 1988, as amended at 61 FR 40999, Aug. 7, 1996]

§501.8 Appeals by employees

- (a) Any Government employee who is aggrieved by a Government agency determination pursuant to §§501.6(a)(1) or (a)(2), may obtain a review of any agency determination by filing, within 30 days (or such longer period as the Secretary may, for good cause shown in writing, fix in any case) after receiving notice of such determination, two copies of an appeal with the Secretary. The Secretary then shall forward one copy of the appeal to the liaison officer of the Government agency.
- (b) On receipt of a copy of an appeal filed pursuant to paragraph (a) of this section, the agency liaison officer shall, subject to considerations of national security, or public health, safety or welfare, promptly furnish both the Secretary and the inventor with a copy of a report containing the following information about the invention involved in the appeal:
- (1) A copy of the agency's statement specified in §501.7(c);
 - (2) A description of the invention in sufficient detail to identify the invention and show its relationship to the employee's duties and work assignments;
 - (3) The name of the employee and employment status, including a detailed statement of official duties and responsibilities at the time the invention was made; and
 - (4) A detailed statement of the points of dispute or controversy, together with copies of any statements or written arguments filed with the agency, and of any other relevant evidence that the agency considered in making its determination of Government interest.

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- (c) Within 25 days (or such longer period as the Secretary may, for good cause shown, fix in any case) after the transmission of a copy of the agency report to the employee, the employee may file a reply with the Secretary and file one copy with the agency liaison officer.
- (d) After the time for the inventor's reply to the Government agency's report has expired and if the inventor has so requested in his or her appeal, a date will be set for hearing of oral arguments before the Secretary, by the employee (or by an attorney whom he or she designates by written power of attorney filed before, or at the hearing) and a representative of the Government agency involved. Unless it shall be otherwise ordered before the hearing begins, oral arguments will be limited to thirty minutes for each side. The employee need not retain an attorney or request an oral hearing to secure full consideration of the facts and his or her arguments. The employee may expedite such consideration by notifying the Secretary when he or she does not intend to file a reply to the agency report.
- (e) After a hearing on the appeal, if a hearing was requested, or after expiration of the period for the inventor's reply to the agency report if no hearing is set, the Secretary shall issue a decision on the matter within 120 days, which decision shall be final after a thirty day period for requesting reconsideration expires or on the date that a decision on a petition for reconsideration is finally disposed of. Any request for reconsideration or modification of the decision must be filed within 30 days from the date of the original decision (or within such an extension thereof as may be set by the Secretary before the original period expires). The decision of the Secretary shall be made after consideration of the statements of fact in the employee's appeal, the agency's report, and the employee's reply, but the Secretary at his or her discretion and with due respect to the rights and convenience of the inventor and the Government agency, may call for further statements on specific questions of fact or may request additional evidence in the form of affidavits or depositions on specific facts in dispute.

[53 FR 39735, Oct. 11, 1988, as amended at 61 FR 41000, Aug. 7, 1996]

§501.9 Patent protection

- (a) A Government agency, upon determining that an invention coming within the scope of §§501.6(a)(1) or (a)(2) has been made, shall promptly determine whether patent protection will be sought in the United States by or on behalf of the agency for such invention. A controversy over the respective rights of the Government and of the employee shall not unnecessarily delay the filing of a patent application by the agency to avoid the loss of patent rights. In cases coming within the scope of §501.6(a)(2), the filing of a patent application shall be contingent upon the consent of the employee.
- (b) Where there is an appealed dispute as to whether §§501.6 (a)(1) or (a)(2) applies in determining the respective rights of the Government and of an employee in and to any invention, the agency may determine whether patent protection will be sought in the United States pending the Secretary's decision on the dispute. If the agency decides that an application for patent should be filed, the agency will take such rights as are specified in §501.6(a)(2), but this shall be without prejudice to acquiring the rights specified in paragraph (a)(1) of that section should the Secretary so decide.

- (c) Where an agency has determined to leave title to an invention with an employee under §501.6(a)(2), the agency will, upon the filing of an application for patent, take the rights specified in that paragraph without prejudice to the subsequent acquisition by the Government of the rights specified in paragraph (a)(1) of that section should the Secretary so decide.
- (d) Where an agency has filed a patent application in the United States, the agency will, within 8 months from the filing date of the U.S. application, determine if any foreign patent applications should also be filed. If the agency chooses not to file an application in any foreign country, the employee may request rights in that country subject to the conditions stated in §501.7(b) that may be imposed by the agency. Alternatively, the agency may permit the employee to retain foreign rights by including in any assignment to the Government of an unclassified U.S. patent application on the invention an option for the Government to acquire title in any foreign country within 8 months from the filing date of the U.S. application.

[61 FR 41000, Aug. 7, 1996]

§501.10 Dissemination of this part and of implementing regulations

Each Government agency shall disseminate to its employees the provisions of this part, and any appropriate implementing agency regulations and delegations. Copies of any such regulations shall be sent to the Secretary. If the Secretary identifies an inconsistency between this part and the agency regulations or delegations, the agency, upon being informed by the Secretary of the inconsistency, shall take prompt action to correct it.

§501.11 Submissions and inquiries

All submissions or inquiries should be directed to the Chief Counsel for NIST, National Institute of Standards and Technology, 100 Bureau Drive, Mail Stop 1052, Gaithersburg, MD 20899-1052; telephone: (301) 975-2803; email: nistcounsel@nist.gov.

[78 FR 4766, Jan. 23, 2013]

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SECTION 3

Special Legislative Provisions Applicable to Specific Agencies

TITLE 10 — ARMED FORCES

CHAPTER 111 — SUPPORT OF SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION

§2193. Improvement of education in technical fields: grants for higher education in science and mathematics

- (a)(1) The Secretary of Defense may, in accordance with the provisions of this subsection, carry out a program for awarding grants to students who have been accepted for enrollment in, or who are enrolled in, an institution of higher education as undergraduate or graduate students in scientific and engineering disciplines critical to the national security functions of the Department of Defense.
- (2) Grant proceeds shall be disbursed on behalf of students awarded grants under this subsection to the institutions of higher education at which the students are enrolled. No grant proceeds shall be disbursed on behalf of a student until the student is enrolled at an institution of higher education.
- (3) The amount of a grant awarded a student under this subsection may not exceed the student's cost of attendance.
- (4) The amount of a grant awarded a student under this subsection shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.
- (5) The Secretary shall give priority to awarding grants under this subsection in a manner likely to stimulate the interest of women and members of minority groups in pursuing scientific and engineering careers. The Secretary may consider the financial need of applicants in making awards in accordance with such priority.
- (b) In this section:
- (1) The term "institution of higher education" has the meaning given such term in section 101 of the Higher Education Act of 1965.
- (2) The term "cost of attendance" has the meaning given such term in section 472 of the Higher Education Act of 1965 (20 U.S.C. 10871l).

(Added Pub. L. 101-510, div. A, title II, §247(a)(1), Nov. 5, 1990, 104 Stat. 1521; amended Pub. L. 105-244, title I, §102(a)(2)(A), Oct. 7, 1998, 112 Stat. 1617; Pub. L. 106-65, div. A, title V, §580(c)(2), (3), (d)(2), Oct. 5, 1999, 113 Stat. 633.)

§2194. Education partnerships

- (a) The Secretary of Defense shall authorize the director of each defense laboratory to enter into one or more education partnership agreements with educational institutions in the United States for the purpose of encouraging and enhancing study in scientific disciplines at all levels of education. The educational institutions referred to in the preceding sentence are local educational agency, colleges, universities, and any other nonprofit institutions that are dedicated to improving science, mathematics, business, law, technology transfer or transition

and engineering education.

- (b) Under a partnership agreement entered into with an educational institution under this section, the director of a defense laboratory may provide, and is encouraged to provide, assistance to the educational institution by—
- (1) loaning defense laboratory equipment to the institution for any purpose and duration in support of such agreement that the director considers appropriate;
 - (2) notwithstanding the provisions of subtitle I of title 40 and division C (except sections 3302, 3501(b), 3509, 3906, 4710, and 4711) of subtitle I of title 41 or any provision of law or regulation relating to transfers of surplus property, transferring to the institution any computer equipment, or other scientific equipment, that is—
 - (A) commonly used by educational institutions;
 - (B) surplus to the needs of the defense laboratory; and
 - (C) determined by the director to be appropriate for support of such agreement;
 - (3) making laboratory personnel available to teach science courses or to assist in the development of science courses and materials for the institution;
 - (4) providing in the defense laboratory sabbatical opportunities for faculty and internship opportunities for students;
 - (5) involving faculty and students of the institution in defense laboratory projects, including research and technology transfer or transition projects;
 - (6) cooperating with the institution in developing a program under which students may be given academic credit for work on defense laboratory projects, including research and technology transfer or transition projects; and
 - (7) providing academic and career advice and assistance to students of the institution.
- (c) The Secretary of Defense shall ensure that the director of each defense laboratory shall give a priority under this section to entering into an education partnership agreement with one or more historically Black colleges and universities and other minority institutions referred to in paragraphs (3), (4), and (5) of section 312(b) 1 of the Higher Education Act of 1965 (20 U.S.C. 1058(b)).
- (d) The Secretary of Defense shall ensure that, in entering into education partnership agreements under this section, the director of a defense laboratory gives a priority to providing assistance to educational institutions serving women, members of minority groups, and other groups of individuals who traditionally are involved in the engineering and science professions in disproportionately low numbers.
- (e) The Secretary of Defense may permit the director of a defense laboratory to enter into a cooperative agreement with an appropriate entity to act as an intermediary and assist the director in carrying out activities under this section.

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(f) In this section:

- (1) The term “defense laboratory” means any laboratory, product center, test center, depot, training and educational organization, or operational command under the jurisdiction of the Department of Defense.
- (2) The term “local educational agency” has the meaning given such term in section 8101 of the Elementary and Secondary Education Act of 1965.
- (3) The term “United States” includes the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.

(Added Pub. L. 101–510, div. A, title II, §247(a)(1), Nov. 5, 1990, 104 Stat. 1522; amended Pub. L. 103–382, title III, §391(b)(4), Oct. 20, 1994, 108 Stat. 4021; Pub. L. 104–106, div. A, title XV, §1503(a)(19), Feb. 10, 1996, 110 Stat. 512; Pub. L. 106–398, §1 [[div. A], title II, §253], Oct. 30, 2000, 114 Stat. 1654, 1654A–49; Pub. L. 107–110, title X, §1076(e), Jan. 8, 2002, 115 Stat. 2091; Pub. L. 108–178, §4(b)(1), Dec. 15, 2003, 117 Stat. 2640; Pub. L. 111–350, §5(b)(3), Jan. 4, 2011, 124 Stat. 3842; Pub. L. 111–383, div. A, title II, §211(b), Jan. 7, 2011, 124 Stat. 4163; Pub. L. 112–239, div. A, title II, §251, Jan. 2, 2013, 126 Stat. 1688; Pub. L. 114–92, div. A, title II, §213, Nov. 25, 2015, 129 Stat. 767; Pub. L. 114–95, title IX, §9215(uuu)(4), Dec. 10, 2015, 129 Stat. 2190.)

§2195. Department of Defense cooperative education programs

- (a) The Secretary of Defense shall ensure that the director of each defense laboratory establishes, in association with one or more public or private colleges or universities in the United States or one or more consortia of colleges or universities in the United States, cooperative work-education programs for undergraduate and graduate students.
- (b) Under a cooperative work-education program established under subsection (a), a director referred to in that subsection may, without regard to any applicable non-statutory limitation on the number of authorized personnel or on the aggregate amount of any personnel cost—
 - (1) make an offer for participation in the cooperative work-education program directly to a student and appoint such student to an entry-level position of employment in the laboratory of such director;
 - (2) pay such person a rate of basic pay, not to exceed the maximum rate of pay provided for grade GS–9 under the General Schedule under section 5332 of title 5, that is competitive with compensation levels provided for entry-level positions in similar industry-sponsored cooperative work-education programs;
 - (3) pay all travel expenses between the college or university in which the student is enrolled and the laboratory concerned for not more than six round trips per year; and
 - (4) pay all or part of such fees, charges, and costs related to the participation of such student in the cooperative work-education program as tuition, matriculation fees, charges for library and laboratory services, materials, and supplies, and the purchase or rental price of books.

(c) A director of a defense laboratory may—

- (1) require a student, as a condition for receiving payments referred to in subsection (b)(4), to enter into a written agreement to continue employment in such defense laboratory for a period of service specified in the agreement; or
- (2) make such payments without requiring such an agreement.

(d)(1) The Director of the National Security Agency may provide a qualifying employee of a defense laboratory of that Agency with living quarters at no charge, or at a rate or charge prescribed by the Director by regulation, without regard to section 5911(c) of title 5.

(2) In this subsection, the term “qualifying employee” means a student who is employed at the National Security Agency under—

- (A) a Student Educational Employment Program of the Agency conducted under this section or any other provision of law; or
- (B) a similar cooperative or summer education program of the Agency that meets the criteria for Federal cooperative or summer education programs prescribed by the Office of Personnel Management.

(Added Pub. L. 101–510, div. A, title II, §247(a)(1), Nov. 5, 1990, 104 Stat. 1522; amended Pub. L. 108–136, div. A, title IX, §926, Nov. 24, 2003, 117 Stat. 1579.)

§2260. Licensing of intellectual property: retention of fees

- (a) Authority.—Under regulations prescribed by the Secretary of Defense or the Secretary of Homeland Security, the Secretary concerned may license trademarks, service marks, certification marks, and collective marks owned or controlled by the Secretary concerned and may retain and expend fees received from such licensing in accordance with this section.
- (b) Designated Marks.—The Secretary concerned shall designate the trademarks, service marks, certification marks, and collective marks regarding which the Secretary will exercise the authority to retain licensing fees under this section.
- (c) Licenses for Qualifying Companies.—(1) The Secretary concerned may license trademarks, service marks, certification marks, and collective marks owned or controlled by the Secretary relating to military designations and likenesses of military weapons systems to any qualifying company upon receipt of a request from the company.
 - (2) For purposes of paragraph (1), a qualifying company is any United States company that—
 - (A) is a toy or hobby manufacturer; and
 - (B) is determined by the Secretary concerned to be qualified in accordance with such criteria as determined appropriate by the Secretary of Defense.

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- (3) The fee for a license under this subsection shall not exceed by more than a nominal amount the amount needed to recover all costs of the Department of Defense in processing the request for the license and supplying the license.
- (4) A license to a qualifying company under this subsection shall provide that the license may not be transferred, sold, or relicensed by the qualifying company.
- (5) A license under this subsection shall not be an exclusive license.
- (d) Use of Fees.—The Secretary concerned shall use fees retained under this section for the following purposes:
 - (1) For payment of the following costs incurred by the Secretary:
 - (A) Costs of securing trademark registrations.
 - (B) Costs of operating the licensing program under this section.
 - (2) For morale, welfare, and recreation activities under the jurisdiction of the Secretary, to the extent (if any) that the total amount of the licensing fees available under this section for a fiscal year exceed the total amount needed for such fiscal year under paragraph (1).
- (e) Availability.—Fees received in a fiscal year and retained under this section shall be available for obligation in such fiscal year and the following two fiscal years.
- (f) Definitions.—In this section:
 - (1) The terms “trademark”, “service mark”, “certification mark”, and “collective mark” have the meanings given such terms in section 45 of the Act of July 5, 1946 (commonly referred to as the Trademark Act of 1946; 15 U.S.C. 1127).
 - (2) The term “Secretary concerned” has the meaning provided in section 101(a) (9) of this title and also includes—
 - (A) the Secretary of Defense, with respect to matters concerning the Defense Agencies and Department of Defense Field Activities; and
 - (B) the Secretary of Homeland Security, with respect to matters concerning the Coast Guard when it is not operating as a service in the Department of the Navy.

(Added Pub. L. 108–375, div. A, title X, §1004(a), Oct. 28, 2004, 118 Stat. 2035; amended Pub. L. 110–181, div. A, title VIII, §882(a), Jan. 28, 2008, 122 Stat. 263; Pub. L. 110–417, [div. A], title VIII, §881, Oct. 14, 2008, 122 Stat. 4559.)

§2319. Encouragement of new competitors

- (a) In this section, the term “qualification requirement” means a requirement for testing or other quality assurance demonstration that must be completed by an offeror before award of a contract.
- (b) Except as provided in subsection (c), the head of the agency shall, before establishing a qualification requirement—
 - (1) prepare a written justification stating the necessity for establishing the qualification requirement and specify why the qualification requirement must be demonstrated before contract award;
 - (2) specify in writing and make available to a potential offeror upon request all requirements which a prospective offeror, or its product, must satisfy in order to become qualified, such requirements to be limited to those least restrictive

- to meet the purposes necessitating the establishment of the qualification requirement;
- (3) specify an estimate of the costs of testing and evaluation likely to be incurred by a potential offeror in order to become qualified;
 - (4) ensure that a potential offeror is provided, upon request and on a reimbursable basis, a prompt opportunity to demonstrate its ability to meet the standards specified for qualification using qualified personnel and facilities of the agency concerned or of another agency obtained through interagency agreement, or under contract, or other methods approved by the agency (including use of approved testing and evaluation services not provided under contract to the agency);
 - (5) if testing and evaluation services are provided under contract to the agency for the purposes of clause (4), provide to the extent possible that such services be provided by a contractor who is not expected to benefit from an absence of additional qualified sources and who shall be required in such contract to adhere to any restriction on technical data asserted by the potential offeror seeking qualification; and
 - (6) ensure that a potential offeror seeking qualification is promptly informed as to whether qualification is attained and, in the event qualification is not attained, is promptly furnished specific information why qualification was not attained.
- (c)(1) Subsection (b) of this section does not apply with respect to a qualification requirement established by statute or administrative action before October 19, 1984, unless such requirement is a qualified products list.
- (2)(A) Except as provided in subparagraph (B), if it is unreasonable to specify the standards for qualification which a prospective offeror or its product must satisfy, a determination to that effect shall be submitted to the advocate for competition of the procuring activity responsible for the purchase of the item subject to the qualification requirement. After considering any comments of the advocate for competition reviewing such determination, the head of the purchasing office may waive the requirements of clauses (2) through (6) of subsection (b) for up to two years with respect to the item subject to the qualification requirement.
- (B) The waiver authority provided in this paragraph does not apply with respect to a qualified products list.
- (3) A potential offeror may not be denied the opportunity to submit and have considered an offer for a contract solely because the potential offeror (A) is not on a qualified bidders list, qualified manufacturers list, or qualified products list, or (B) has not been identified as meeting a qualification requirement established after October 19, 1984, if the potential offeror can demonstrate to the satisfaction of the contracting officer (or, in the case of a contract for the procurement of an aviation critical safety item or ship critical safety item, the head of the design control activity for such item) that the potential offeror or

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its product meets the standards established for qualification or can meet such standards before the date specified for award of the contract.

- (4) Nothing contained in this subsection requires the referral of an offer to the Small Business Administration pursuant to section 8(b)(7) of the Small Business Act (15 U.S.C. 637(b)(7)) if the basis for the referral is a challenge by the offeror to either the validity of the qualification requirement or the offeror's compliance with such requirement.
- (5) The head of an agency need not delay a proposed procurement in order to comply with subsection (b) or in order to provide a potential offeror with an opportunity to demonstrate its ability to meet the standards specified for qualification.
- (6) The requirements of subsection (b) also apply before enforcement of any qualified products list, qualified manufacturers list, or qualified bidders list.
- (d)(1) If the number of qualified sources or qualified products available to compete actively for an anticipated future requirement is fewer than two actual manufacturers or the products of two actual manufacturers, respectively, the head of the agency concerned shall—
 - (A) periodically publish notice in the Commerce Business Daily soliciting additional sources or products to seek qualification, unless the contracting officer determines that such publication would compromise national security; and
 - (B) bear the cost of conducting the specified testing and evaluation (excluding the costs associated with producing the item or establishing the production, quality control, or other system to be tested and evaluated) for a small business concern or a product manufactured by a small business concern which has met the standards specified for qualification and which could reasonably be expected to compete for a contract for that requirement, but such costs may be borne only if the head of the agency determines that such additional qualified sources or products are likely to result in cost savings from increased competition for future requirements sufficient to amortize the costs incurred by the agency within a reasonable period of time considering the duration and dollar value of anticipated future requirements.
- (2) The head of an agency shall require a prospective contractor requesting the United States to bear testing and evaluation costs under paragraph (1)(B) to certify as to its status as a small business concern under section 3 of the Small Business Act (15 U.S.C. 632).
- (e) Within seven years after the establishment of a qualification requirement under subsection (b) or within seven years following an agency's enforcement of a qualified products list, qualified manufacturers list, or qualified bidders list, any such qualification requirement shall be examined and revalidated in accordance with the requirements of subsection (b). The preceding sentence does not apply in the case of a qualification requirement for which a waiver is in effect under subsection (c)(2).
- (f) Except in an emergency as determined by the head of the agency, whenever the head of the agency determines not to enforce a qualification requirement for a solicitation, the agency may not thereafter enforce that qualification requirement unless the agency complies with the requirements of subsection (b).

(g) Definitions.—In this section:

- (1) The term “aviation critical safety item” means a part, an assembly, installation equipment, launch equipment, recovery equipment, or support equipment for an aircraft or aviation weapon system if the part, assembly, or equipment contains a characteristic any failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in the loss of or serious damage to the aircraft or weapon system, an unacceptable risk of personal injury or loss of life, or an uncommanded engine shutdown that jeopardizes safety.
- (2) The term “ship critical safety item” means any ship part, assembly, or support equipment containing a characteristic the failure, malfunction, or absence of which could cause a catastrophic or critical failure resulting in loss of or serious damage to the ship or unacceptable risk of personal injury or loss of life.
- (3) The term “design control activity”, with respect to an aviation critical safety item or ship critical safety item, means the systems command of a military department that is specifically responsible for ensuring the airworthiness of an aviation system or equipment, or the seaworthiness of a ship or ship equipment, in which such item is to be used.

(Added Pub. L. 98–525, title XII, §1216(a), Oct. 19, 1984, 98 Stat. 2593; amended Pub. L. 100–26, §7(d)(5), (i)(4), (k)(3), Apr. 21, 1987, 101 Stat. 281, 282, 284; Pub. L. 108–136, div. A, title VIII, §802(d), Nov. 24, 2003, 117 Stat. 1541; Pub. L. 109–364, div. A, title I, §130(d), Oct. 17, 2006, 120 Stat. 2110.)

§2358. Research and development projects

- (a) Authority.—The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that—
- (1) are necessary to the responsibilities of such Secretary’s department in the field of research and development; and
 - (2) either—
 - (A) relate to weapon systems and other military needs; or
 - (B) are of potential interest to the Department of Defense.
- (b) Authorized Means.—The Secretary of Defense or the Secretary of a military department may perform research and development projects—
- (1) by contract, cooperative agreement, or grant, in accordance with chapter 63 of title 31;
 - (2) through one or more military departments;
 - (3) by using employees and consultants of the Department of Defense;
 - (4) by mutual agreement with the head of any other department or agency of the Federal Government;

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- (5) by transactions (other than contracts, cooperative agreements, and grants) entered into pursuant to section 2371 or 2371b of this title; or
- (6) by purchases through procurement for experimental purposes pursuant to section 2373 of this title.
- (c) Requirement of Potential Department of Defense Interest.—Funds appropriated to the Department of Defense or to a military department may not be used to finance any research project or study unless the project or study is, in the opinion of the Secretary of Defense or the Secretary of that military department, respectively, of potential interest to the Department of Defense or to such military department, respectively.
- (d) Additional Provisions Applicable to Cooperative Agreements.—Additional authorities, conditions, and requirements relating to certain cooperative agreements authorized by this section are provided in sections 2371 and 2371a of this title.

(Added Pub. L. 87–651, title II, §208(a), Sept. 7, 1962, 76 Stat. 523; amended Pub. L. 97–86, title IX, §910, Dec. 1, 1981, 95 Stat. 1120; Pub. L. 100–370, §1(g)(3), July 19, 1988, 102 Stat. 846; Pub. L. 103–160, div. A, title VIII, §827(a), Nov. 30, 1993, 107 Stat. 1712; Pub. L. 103–355, title I, §1301(a), Oct. 13, 1994, 108 Stat. 3284; Pub. L. 104–201, div. A, title II, §267(c)(2), Sept. 23, 1996, 110 Stat. 2468; Pub. L. 115–91, div. A, title VIII, §862, Dec. 12, 2017, 131 Stat. 1494.)

§2371. Research projects: transactions other than contracts and grants

- (a) Additional Forms of Transactions Authorized.—The Secretary of Defense and the Secretary of each military department may enter into transactions (other than contracts, cooperative agreements, and grants) under the authority of this subsection in carrying out basic, applied, and advanced research projects. The authority under this subsection is in addition to the authority provided in section 2358 of this title to use contracts, cooperative agreements, and grants in carrying out such projects.
- (b) Exercise of Authority by Secretary of Defense.—In any exercise of the authority in subsection (a), the Secretary of Defense shall act through the Defense Advanced Research Projects Agency or any other element of the Department of Defense that the Secretary may designate.
- (c) Advance Payments.—The authority provided under subsection (a) may be exercised without regard to section 3324 of title 31.
- (d) Recovery of Funds.—(1) A cooperative agreement for performance of basic, applied, or advanced research authorized by section 2358 of this title and a transaction authorized by subsection (a) may include a clause that requires a person or other entity to make payments to the Department of Defense or any other department or agency of the Federal Government as a condition for receiving support under the agreement or other transaction.
- (2) The amount of any payment received by the Federal Government pursuant to a requirement imposed under paragraph (1) may be credited, to the extent authorized by the Secretary of Defense, to the appropriate account established under subsection (f). Amounts so credited shall be merged with other funds in

the account and shall be available for the same purposes and the same period for which other funds in such account are available.

- (e) Conditions.—(1) The Secretary of Defense shall ensure that—
- (A) to the maximum extent practicable, no cooperative agreement containing a clause under subsection (d) and no transaction entered into under subsection (a) provides for research that duplicates research being conducted under existing programs carried out by the Department of Defense; and
 - (B) to the extent that the Secretary determines practicable, the funds provided by the Government under a cooperative agreement containing a clause under subsection (d) or a transaction authorized by subsection (a) do not exceed the total amount provided by other parties to the cooperative agreement or other transaction.
- (2) A cooperative agreement containing a clause under subsection (d) or a transaction authorized by subsection (a) may be used for a research project when the use of a standard contract, grant, or cooperative agreement for such project is not feasible or appropriate.
- (f) Support Accounts.—There is hereby established on the books of the Treasury separate accounts for each of the military departments and the Defense Advanced Research Projects Agency for support of research projects and development projects provided for in cooperative agreements containing a clause under subsection (d) and research projects provided for in transactions entered into under subsection (a). Funds in those accounts shall be available for the payment of such support.
- (g) Education and Training.—The Secretary of Defense shall—
- (1) ensure that management, technical, and contracting personnel of the Department of Defense involved in the award or administration of transactions under this section or other innovative forms of contracting are afforded opportunities for adequate education and training; and
 - (2) establish minimum levels and requirements for continuous and experiential learning for such personnel, including levels and requirements for acquisition certification programs.
- (h) Regulations.—The Secretary of Defense shall prescribe regulations to carry out this section.
- (i) Protection of Certain Information From Disclosure.—(1) Disclosure of information described in paragraph (2) is not required, and may not be compelled, under section 552 of title 5 for five years after the date on which the information is received by the Department of Defense.
- (2)(A) Paragraph (1) applies to information described in subparagraph (B) that is in the records of the Department of Defense if the information was submitted to the Department in a competitive or noncompetitive process having the potential for resulting in an award, to the party submitting the information, of a cooperative agreement for performance of basic, applied, or advanced research

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authorized by section 2358 of this title or another transaction authorized by subsection (a).

(B) The information referred to in subparagraph (A) is the following:

(i) A proposal, proposal abstract, and supporting documents.

(ii) A business plan submitted on a confidential basis.

(iii) Technical information submitted on a confidential basis.

(Added Pub. L. 101–189, div. A, title II, §251(a)(1), Nov. 29, 1989, 103 Stat. 1403; amended Pub. L. 101–510, div. A, title XIV, §1484(k)(9), Nov. 5, 1990, 104 Stat. 1719; Pub. L. 102–190, div. A, title VIII, §826, Dec. 5, 1991, 105 Stat. 1442; Pub. L. 102–484, div. A, title II, §217, Oct. 23, 1992, 106 Stat. 2352; Pub. L. 103–35, title II, §201(c)(4), May 31, 1993, 107 Stat. 98; Pub. L. 103–160, div. A, title VIII, §827(b), title XI, §1182(a)(6), Nov. 30, 1993, 107 Stat. 1712, 1771; Pub. L. 103–355, title I, §1301(b), Oct. 13, 1994, 108 Stat. 3285; Pub. L. 104–106, div. A, title XV, §1502(a)(1), Feb. 10, 1996, 110 Stat. 502; Pub. L. 104–201, div. A, title II, §267(a)–(c)(1)(A), title X, §1073(e)(1)(B), Sept. 23, 1996, 110 Stat. 2467, 2468, 2658; Pub. L. 105–85, div. A, title VIII, §832, Nov. 18, 1997, 111 Stat. 1842; Pub. L. 105–261, div. A, title VIII, §817, Oct. 17, 1998, 112 Stat. 2089; Pub. L. 106–65, div. A, title X, §1067(1), Oct. 5, 1999, 113 Stat. 774; Pub. L. 108–136, div. A, title X, §1031(a)(19), Nov. 24, 2003, 117 Stat. 1597; Pub. L. 113–291, div. A, title X, §1071(f)(20), Dec. 19, 2014, 128 Stat. 3511; Pub. L. 115–91, div. A, title VIII, §863, Dec. 12, 2017, 131 Stat. 1494.)

§2374a. Prizes for advanced technology achievements

- (a) Authority.-The Secretary of Defense, acting through the Assistant Secretary of Defense for Research and Engineering and the service acquisition executive for each military department, may carry out programs to award cash prizes and other types of prizes that the Secretary determines are appropriate to recognize outstanding achievements in basic, advanced, and applied research, technology development, and prototype development that have the potential for application to the performance of the military missions of the Department of Defense.
- (b) Competition Requirements.-Each program under subsection (a) shall use a competitive process for the selection of recipients of cash prizes. The process shall include the widely-advertised solicitation of submissions of research results, technology developments, and prototypes.
- (c) Limitations.-
- (1) No prize competition may result in the award of a prize with a fair market value of more than \$10,000,000.
 - (2) No prize competition may result in the award of more than \$1,000,000 in cash prizes without the approval of the Under Secretary of Defense for Research and Engineering.
 - (3) No prize competition may result in the award of a solely nonmonetary prize with a fair market value of more than \$10,000 without the approval of the Under Secretary of Defense for Research and Engineering.
- (d) Relationship to Other Authority.-A program under subsection (a) may be carried out in conjunction with or in addition to the exercise of any other authority of an official referred to in that subsection to acquire, support, or stimulate basic, advanced and applied research, technology development, or prototype projects.
- (e) Acceptance of Funds.-In addition to such sums as may be appropriated or otherwise made available to the Secretary to award prizes under this section, the

Secretary may accept funds or nonmonetary items from other departments and agencies of the Federal Government, from State and local governments, and from the private sector, to award prizes under this section. The Secretary may not give any special consideration to any private sector entity in return for a donation.

- (f) Use of Prize Authority.—Use of prize authority under this section shall be considered the use of competitive procedures for the purposes of section 2304 of this title.

(Added Pub. L. 106–65, div. A, title II, §244(a), Oct. 5, 1999, 113 Stat. 552; amended Pub. L. 107–314, div. A, title II, §248(a), Dec. 2, 2002, 116 Stat. 2502; Pub. L. 108–136, div. A, title X, §1031(a)(20), Nov. 24, 2003, 117 Stat. 1598; Pub. L. 109–163, div. A, title II, §257, Jan. 6, 2006, 119 Stat. 3184; Pub. L. 109–364, div. A, title II, §212, Oct. 17, 2006, 120 Stat. 2119; Pub. L. 111–84, div. A, title II, §253, Oct. 28, 2009, 123 Stat. 2243; Pub. L. 111–383, div. A, title IX, §901(j)(4), Jan. 7, 2011, 124 Stat. 4324; Pub. L. 113–66, div. A, title II, §263, Dec. 26, 2013, 127 Stat. 726; Pub. L. 113–291, div. A, title II, §211, Dec. 19, 2014, 128 Stat. 3324; Pub. L. 114–92, div. A, title X, §1079(a), Nov. 25, 2015, 129 Stat. 999; Pub. L. 114–328, div. A, title X, §1081(c)(6), Dec. 23, 2016, 130 Stat. 2420; Pub. L. 115–91, div. A, title II, §213, Dec. 12, 2017, 131 Stat. 1324.)

§2511. Defense dual-use critical technology program

- (a) Establishment of Program.—The Secretary of Defense shall conduct a program to further the national security objectives set forth in section 2501(a) of this title by encouraging and providing for research, development, and application of dual-use critical technologies. The Secretary may make grants, enter into contracts, or enter into cooperative agreements and other transactions pursuant to section 2371 of this title in furtherance of the program. The Secretary shall identify projects to be conducted as part of the program.
- (b) Assistance Authorized.—The Secretary of Defense may provide technical and other assistance to facilitate the achievement of the purposes of projects conducted under the program. In providing such assistance, the Secretary shall make available, as appropriate for the work to be performed, equipment and facilities of Department of Defense laboratories (including the scientists and engineers at those laboratories) for purposes of projects selected by the Secretary.
- (c) Financial Commitment of Non-Federal Government Participants.—(1) The total amount of funds provided by the Federal Government for a project conducted under the program may not exceed 50 percent of the total cost of the project. However, the Secretary of Defense may agree to a project in which the total amount of funds provided by the Federal Government exceeds 50 percent if the Secretary determines the project is particularly meritorious, but the project would not otherwise have sufficient non-Federal funding or in-kind contributions.
- (2) The Secretary may prescribe regulations to provide for consideration of in-kind contributions by non-Federal Government participants in a project conducted under the program for the purpose of calculating the share of the project costs that has been or is being undertaken by such participants. In such regulations, the Secretary may authorize a participant that is a small business concern to use funds received under the Small Business Innovation Research

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Program or the Small Business Technology Transfer Program to help pay the costs of project activities. Any such funds so used may be considered in calculating the amount of the financial commitment undertaken by the non-Federal Government participants unless the Secretary determines that the small business concern has not made a significant equity percentage contribution in the project from non-Federal sources.

- (3) The Secretary shall consider a project proposal submitted by a small business concern without regard to the ability of the small business concern to immediately meet its share of the anticipated project costs. Upon the selection of a project proposal submitted by a small business concern, the small business concern shall have a period of not less than 120 days in which to arrange to meet its financial commitment requirements under the project from sources other than a person of a foreign country. If the Secretary determines upon the expiration of that period that the small business concern will be unable to meet its share of the anticipated project costs, the Secretary shall revoke the selection of the project proposal submitted by the small business concern.
- (d) Selection Process.—Competitive procedures shall be used in the conduct of the program.
- (e) Selection Criteria.—The criteria for the selection of projects under the program shall include the following:
 - (1) The extent to which the proposed project advances and enhances the national security objectives set forth in section 2501(a) of this title.
 - (2) The technical excellence of the proposed project.
 - (3) The qualifications of the personnel proposed to participate in the research activities of the proposed project.
 - (4) An assessment of timely private sector investment in activities to achieve the goals and objectives of the proposed project other than through the project.
 - (5) The potential effectiveness of the project in the further development and application of each technology proposed to be developed by the project for the national technology and industrial base.
 - (6) The extent of the financial commitment of eligible firms to the proposed project.
 - (7) The extent to which the project does not unnecessarily duplicate projects undertaken by other agencies.
- (f) Regulations.—The Secretary of Defense shall prescribe regulations for the purposes of this section.

(Added Pub. L. 102–484, div. D, title XLII, §4221(a), Oct. 23, 1992, 106 Stat. 2677; amended Pub. L. 103–160, div. A, title XIII, §§1315(a), 1317(c), Nov. 30, 1993, 107 Stat. 1787, 1789; Pub. L. 103–337, div. A, title XI, §1115(a), Oct. 5, 1994, 108 Stat. 2868; Pub. L. 104–106, div. A, title X, §1081(c), Feb. 10, 1996, 110 Stat. 452.)

§2514. Encouragement of technology transfer

- (a) Encouragement of Transfer Required.—The Secretary of Defense shall encourage, to the extent consistent with national security objectives, the transfer of technology between laboratories and research centers of the Department of Defense and other Federal agencies, State and local governments, colleges and

universities, and private persons in cases that are likely to result in accomplishing the objectives set forth in section 2501(a) of this title.

(b) Examination and Implementation of Methods To Encourage Transfer.—The Secretary shall examine and implement methods, in addition to the encouragement referred to in subsection (a) and the program described in subsection (c), that are consistent with national security objectives and will enable Department of Defense personnel to promote technology transfer.

(c) Program To Encourage Diversification of Defense Laboratories.—

(1) The Secretary of Defense shall establish and implement a program to be known as the Federal Defense Laboratory Diversification Program (hereinafter in this subsection referred to as the “Program”). The purpose of the Program shall be to encourage greater cooperation in research and production activities carried out by defense laboratories and by private industry of the United States in order to enhance and improve the products of such research and production activities.

(2) Under the Program, the defense laboratories, in coordination with the Office of Technology Transfer in the Office of the Secretary of Defense, shall carry out cooperative activities with private industry in order to promote (by the use or exchange of patents, licenses, cooperative research and development agreements and other cooperative agreements, and the use of symposia, meetings, and other similar mechanisms) the transfer of defense or dual-use technologies from the defense laboratories to private industry, and the development and application of such technologies by the defense laboratories and private industry, for the purpose of the commercial utilization of such technologies by private industry.

(3) The Secretary of Defense shall develop and annually update a plan for each defense laboratory that participates in the Program under which plan the laboratory shall carry out cooperative activities with private industry to promote the transfers described in subsection (b).

(4) In this subsection, the term “defense laboratory” means any laboratory owned or operated by the Department of Defense that carries out research in fiscal year 1993 in an amount in excess of \$50,000,000.

(Added Pub. L. 102–484, div. D, title XLII, §4224(a), Oct. 23, 1992, 106 Stat. 2682; amended Pub. L. 104–201, div. A, title VIII, §829(f), Sept. 23, 1996, 110 Stat. 2614.)

§2515. Office of Technology Transition

(a) Establishment.—The Secretary of Defense shall establish within the Office of the Secretary of Defense an Office of Technology Transition.

(b) Purpose.—The purpose of the office shall be to ensure, to the maximum extent practicable, that technology developed for national security purposes is integrated into the private sector of the United States in order to enhance national technology and industrial base, reinvestment, and conversion activities consistent with the objectives set forth in section 2501(a) of this title.

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(c) Duties.—The head of the office shall ensure that the office—

- (1) monitors all research and development activities that are carried out by or for the military departments and Defense Agencies;
- (2) identifies all such research and development activities that use technologies, or result in technological advancements, having potential nondefense commercial applications;
- (3) serves as a clearinghouse for, coordinates, and otherwise actively facilitates the transition of such technologies and technological advancements from the Department of Defense to the private sector;
- (4) conducts its activities in consultation and coordination with the Department of Energy and the Department of Commerce; and
- (5) provides private firms with assistance to resolve problems associated with security clearances, proprietary rights, and other legal considerations involved in such a transition of technology.

(Added Pub. L. 102–484, div. D, title XLII, §4225(a), Oct. 23, 1992, 106 Stat. 2683; amended Pub. L. 104–106, div. A, title XV, §1502(a)(22), Feb. 10, 1996, 110 Stat. 505; Pub. L. 106–65, div. A, title X, §1067(1), Oct. 5, 1999, 113 Stat. 774; Pub. L. 108–136, div. A, title X, §1031(a)(23), Nov. 24, 2003, 117 Stat. 1598; Pub. L. 108–375, div. A, title X, §1084(b)(3), Oct. 28, 2004, 118 Stat. 2060; Pub. L. 112–81, div. A, title X, §1061(18), Dec. 31, 2011, 125 Stat. 1584.)

§2539b. Availability of samples, drawings, information, equipment, materials, and certain services

(a) Authority.—The Secretary of Defense and the Secretaries of the military departments, under regulations prescribed by the Secretary of Defense and when determined by the Secretary of Defense or the Secretary concerned to be in the interest of national defense, may each—

- (1) sell, rent, lend, or give samples, drawings, and manufacturing or other information (subject to the rights of third parties) to any person or entity;
- (2) sell, rent, or lend government equipment or materials to any person or entity—
 - (A) for use in independent research and development programs, subject to the condition that the equipment or material be used exclusively for such research and development; or
 - (B) for use in demonstrations to a friendly foreign government;
- (3) make available to any person or entity, at an appropriate fee, the services of any government laboratory, center, range, or other testing facility for the testing of materials, equipment, models, computer software, and other items; and
- (4) make available to any person or entity, through leases, contracts, or other appropriate arrangements, facilities, services, and equipment of any government laboratory, research center, or range, if the facilities, services, and equipment provided will not be in direct competition with the domestic private sector.

(b) Confidentiality of Test Results.—The results of tests performed with services made available under subsection (a)(3) are confidential and may not be disclosed outside the Federal Government without the consent of the persons for whom the

tests are performed.

- (c) Fees.—Fees made available under subsections (a)(3) and (a)(4) shall be established in the regulations prescribed pursuant to subsection (a). Such fees may not exceed the amount necessary to recoup the direct and indirect costs involved, such as direct costs of utilities, contractor support, and salaries of personnel that are incurred by the United States to provide for the testing.
- (d) Use of Fees.—Fees received under subsections (a)(3) and (a)(4) may be credited to the appropriations or other funds of the activity making such services available.

(Added Pub. L. 103–160, div. A, title VIII, §822(b)(1), Nov. 30, 1993, 107 Stat. 1705, §2541; renumbered §2539b, Pub. L. 103–337, div. A, title X, §1070(a)(13)(A), Oct. 5, 1994, 108 Stat. 2856; amended Pub. L. 103–355, title III, §3022, Oct. 13, 1994, 108 Stat. 3333; Pub. L. 104–106, div. A, title VIII, §804, div. D, title XLIII, §4321(a)(8), Feb. 10, 1996, 110 Stat. 390, 671; Pub. L. 106–65, div. A, title X, §1066(a)(23), Oct. 5, 1999, 113 Stat. 771; Pub. L. 110–181, div. A, title II, §232, Jan. 28, 2008, 122 Stat. 46.)

§2563. Articles and services of industrial facilities: sale to persons outside the Department of Defense

(a) Authority To Sell Outside DOD.—

- (1) The Secretary of Defense may sell in accordance with this section to a person outside the Department of Defense articles and services referred to in paragraph (2) that are not available from any United States commercial source.
- (2)(A) Except as provided in subparagraph (B), articles and services referred to in paragraph (1) are articles and services that are manufactured or performed by any working-capital funded industrial facility of the armed forces.
- (B) The authority in this section does not apply to sales of articles and services by a working-capital funded Army industrial facility (including a Department of the Army arsenal) that manufactures large caliber cannons, gun mounts, recoil mechanisms, ammunition, munitions, or components thereof, which are governed by regulations required by section 4543 of this title.

(b) Designation of Participating Industrial Facilities.—The Secretary may designate facilities referred to in subsection (a) as the facilities from which articles and services manufactured or performed by such facilities may be sold under this section.

(c) Conditions for Sales.—

- (1) A sale of articles or services may be made under this section only if—
 - (A) the Secretary of Defense determines that the articles or services are not available from a commercial source in the United States;

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- (B) the purchaser agrees to hold harmless and indemnify the United States, except as provided in paragraph (3), from any claim for damages or injury to any person or property arising out of the articles or services;
 - (C) the articles or services can be substantially manufactured or performed by the industrial facility concerned with only incidental subcontracting;
 - (D) it is in the public interest to manufacture the articles or perform the services;
 - (E) the Secretary determines that the sale of the articles or services will not interfere with the military mission of the industrial facility concerned; and
 - (F) the sale of the goods and services is made on the basis that it will not interfere with performance of work by the industrial facility concerned for the Department of Defense.
- (2) The Secretary of Defense may waive the condition in paragraph (1)(A) and subsection (a)(1) that an article or service must be not available from a United States commercial source in the case of a particular sale if the Secretary determines that the waiver is necessary for reasons of national security and notifies Congress regarding the reasons for the waiver.
- (3) Paragraph (1)(B) does not apply in any case of willful misconduct or gross negligence or in the case of a claim by a purchaser of articles or services under this section that damages or injury arose from the failure of the Government to comply with quality, schedule, or cost performance requirements in the contract to provide the articles or services.
- (d) Methods of Sale.—
- (1) The Secretary shall permit a purchaser of articles or services under this section to use advance incremental funding to pay for the articles or services.
 - (2) In the sale of articles and services under this section, the Secretary shall—
 - (A) charge the purchaser, at a minimum, the variable costs, capital improvement costs, and equipment depreciation costs that are associated with the articles or services sold;
 - (B) enter into a firm, fixed-price contract or, if agreed by the purchaser, a cost reimbursement contract for the sale; and
 - (C) develop and maintain (from sources other than appropriated funds) working capital to be available for paying design costs, planning costs, procurement costs, and other costs associated with the articles or services sold.
- (e) Deposit of Proceeds.—Proceeds from sales of articles and services under this section shall be credited to the funds, including working capital funds and operation and maintenance funds, incurring the costs of manufacture or performance.
- (f) Relationship to Arms Export Control Act.—Nothing in this section shall be construed to affect the application of the export controls provided for in section 38 of the Arms Export Control Act (22 U.S.C. 2778) to items which incorporate or are produced through the use of an article sold under this section.
- (g) Definitions.—In this section:
- (1) The term “advance incremental funding”, with respect to a sale of articles or services, means a series of partial payments for the articles or services that includes—

- (A) one or more partial payments before the commencement of work or the incurring of costs in connection with the manufacture of the articles or the performance of the services, as the case may be; and
 - (B) subsequent progress payments that result in full payment being completed as the required work is being completed.
- (2) The term “not available”, with respect to an article or service proposed to be sold under this section, means that the article or service is unavailable from a commercial source in the required quantity and quality or within the time required.
- (3) The term “variable costs”, with respect to sales of articles or services, means the costs that are expected to fluctuate directly with the volume of sales and—
- (A) in the case of articles, the volume of production necessary to satisfy the sales orders; or
 - (B) in the case of services, the extent of the services sold.

(Added Pub. L. 103–337, div. A, title III, §339(a)(1), Oct. 5, 1994, 108 Stat. 2718, §2553; amended Pub. L. 106–65, div. A, title III, §331(a)(2), (b), Oct. 5, 1999, 113 Stat. 566, 567; renumbered §2563, Pub. L. 106–398, §1 [[div. A], title X, §1033(b)(1)], Oct. 30, 2000, 114 Stat. 1654, 1654A–260; Pub. L. 107–107, div. A, title III, §343(a), Dec. 28, 2001, 115 Stat. 1061.)

§2681. Use of test and evaluation installations by commercial entities

- (a) **Contract Authority.**—The Secretary of Defense may enter into contracts with commercial entities that desire to conduct commercial test and evaluation activities at a Major Range and Test Facility Installation.
- (b) **Termination or Limitation of Contract Under Certain Circumstances.**—A contract entered into under subsection (a) shall contain a provision that the Secretary of Defense may terminate, prohibit, or suspend immediately any commercial test or evaluation activity to be conducted at the Major Range and Test Facility Installation under the contract if the Secretary of Defense certifies in writing that the test or evaluation activity is or would be detrimental—
- (1) to the public health and safety;
 - (2) to property (either public or private); or
 - (3) to any national security interest or foreign policy interest of the United States.
- (c) **Contract Price.**—A contract entered into under subsection (a) shall include a provision that requires a commercial entity using a Major Range and Test Facility Installation under the contract to reimburse the Department of Defense for all direct costs to the United States that are associated with the test and evaluation activities conducted by the commercial entity under the contract. In addition, the contract may include a provision that requires the commercial entity to reimburse the Department of Defense for such indirect costs related to the use of the

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installation as the Secretary of Defense considers to be appropriate. The Secretary may delegate to the commander of the Major Range and Test Facility Installation the authority to determine the appropriateness of the amount of indirect costs included in such a contract provision.

- (d) Retention of Funds Collected From Commercial Users.—Amounts collected under subsection (c) from a commercial entity conducting test and evaluation activities at a Major Range and Test Facility Installation shall be credited to the appropriation accounts under which the costs associated with the test and evaluation activities of the commercial entity were incurred.
- (e) Regulations and Limitations.—The Secretary of Defense shall prescribe regulations to carry out this section.
- (f) Definitions.—In this section:
 - (1) The term “Major Range and Test Facility Installation” means a test and evaluation installation under the jurisdiction of the Department of Defense and designated as a Major Range and Test Facility Installation by the Secretary.
 - (2) The term “direct costs” includes the cost of—
 - (A) labor, material, facilities, utilities, equipment, supplies, and any other resources damaged or consumed during test or evaluation activities or maintained for a particular commercial entity; and
 - (B) construction specifically performed for a commercial entity to conduct test and evaluation activities.

(Added Pub. L. 103–160, div. A, title VIII, §846(a), Nov. 30, 1993, 107 Stat. 1722; amended Pub. L. 105–85, div. A, title VIII, §842, Nov. 18, 1997, 111 Stat. 1844; Pub. L. 105–261, div. A, title VIII, §820, Oct. 17, 1998, 112 Stat. 2090.)

§4543. Army industrial facilities: sales of manufactured articles or services outside Department of Defense

- (a) Authority To Sell Outside DOD.—Regulations under section 2208(h) of this title shall authorize a working-capital funded Army industrial facility (including a Department of the Army arsenal) that manufactures large caliber cannons, gun mounts, recoil mechanisms, ammunition, munitions, or components thereof to sell manufactured articles or services to a person outside the Department of Defense if—
 - (1) in the case of an article, the article is sold to a United States manufacturer, assembler, developer, or other concern—
 - (A) for use in developing new products;
 - (B) for incorporation into items to be sold to, or to be used in a contract with, an agency of the United States;
 - (C) for incorporation into items to be sold to, or to be used in a contract with, or to be used for purposes of soliciting a contract with, a friendly foreign government; or
 - (D) for use in commercial products;

- (2) in the case of an article, the purchaser is determined by the Department of Defense to be qualified to carry out the proposed work involving the article to be purchased;
 - (3) the sale is to be made on a basis that does not interfere with performance of work by the facility for the Department of Defense or for a contractor of the Department of Defense;
 - (4) in the case of services, the services are related to an article authorized to be sold under this section and are to be performed in the United States for the purchaser;
 - (5) the Secretary of the Army determines that the articles or services are not available from a commercial source located in the United States;
 - (6) the purchaser of an article or service agrees to hold harmless and indemnify the United States, except in a case of willful misconduct or gross negligence, from any claim for damages or injury to any person or property arising out of the article or service;
 - (7) the article to be sold can be manufactured, or the service to be sold can be substantially performed, by the industrial facility with only incidental subcontracting;
 - (8) it is in the public interest to manufacture such article or perform such service; and
 - (9) the sale will not interfere with performance of the military mission of the industrial facility.
- (b) Additional Requirements.—The regulations shall also—
- (1) require that the authority to sell articles or services under the regulations be exercised at the level of the commander of the major subordinate command of the Army with responsibility over the facility concerned;
 - (2) authorize a purchaser of articles or services to use advance incremental funding to pay for the articles or services; and
 - (3) in the case of a sale of commercial articles or commercial services in accordance with subsection (a) by a facility that manufactures large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, authorize such facility—
 - (A) to charge the buyer, at a minimum, the variable costs that are associated with the commercial articles or commercial services sold;
 - (B) to enter into a firm, fixed-price contract or, if agreed by the buyer, a cost reimbursement contract for the sale; and
 - (C) to develop and maintain (from sources other than appropriated funds) working capital to be available for paying design costs, planning costs, procurement costs, and other costs associated with the commercial articles or commercial services sold.

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(c) Relationship to Arms Export Control Act.—Nothing in this section shall be construed to affect the application of the export controls provided for in section 38 of the Arms Export Control Act (22 U.S.C. 2778) to items which incorporate or are produced through the use of an article sold under this section.

(d) Definitions.—In this section:

(1) The term “commercial article” means an article that is usable for a nondefense purpose.

(2) The term “commercial service” means a service that is usable for a nondefense purpose.

(3) The term “advance incremental funding”, with respect to a sale of articles or services, means a series of partial payments for the articles or services that includes—

(A) one or more partial payments before the commencement of work or the incurring of costs in connection with the production of the articles or the performance of the services, as the case may be; and

(B) subsequent progress payments that result in full payment being completed as the required work is being completed.

(4) The term “variable costs”, with respect to sales of articles or services, means the costs that are expected to fluctuate directly with the volume of sales and—

(A) in the case of articles, the volume of production necessary to satisfy the sales orders; or

(B) in the case of services, the extent of the services sold.

(Added Pub. L. 103–160, div. A, title I, §158(a)(1), Nov. 30, 1993, 107 Stat. 1581; amended Pub. L. 103–337, div. A, title I, §141, Oct. 5, 1994, 108 Stat. 2688.)

TITLE 16 — CONSERVATION

CHAPTER 36—FOREST AND RANGELAND RENEWABLE RESOURCES PLANNING

§1650. Hardwood technology transfer and applied research

(a) Authority of Secretary

The Secretary of Agriculture (hereinafter the “Secretary”) is hereby and hereafter authorized to conduct technology transfer and development, training, dissemination of information and applied research in the management, processing and utilization of the hardwood forest resource. This authority is in addition to any other authorities which may be available to the Secretary including, but not limited to, the Cooperative Forestry Assistance Act of 1978, as amended (16 U.S.C. 2101 et seq.), and the Forest and Rangeland Renewable Resources Act of 1978, as amended (16 U.S.C. 1600–1614).

(b) Grants, contracts, and cooperative agreements; gifts and donations

In carrying out this authority, the Secretary may enter into grants, contracts, and cooperative agreements with public and private agencies, organizations,

corporations, institutions and individuals. The Secretary may accept gifts and donations pursuant to section 2269 of title 7 including gifts and donations from a donor that conducts business with any agency of the Department of Agriculture or is regulated by the Secretary of Agriculture.

- (c) Use of assets of Wood Education and Resource Center; establishment of Institute of Hardwood Technology Transfer and Applied Research

The Secretary is hereby and hereafter authorized to operate and utilize the assets of the Wood Education and Resource Center (previously named the Robert C. Byrd Hardwood Technology Center in West Virginia) as part of a newly formed “Institute of Hardwood Technology Transfer and Applied Research” (hereinafter the “Institute”). The Institute, in addition to the Wood Education and Resource Center, will consist of a Director, technology transfer specialists from State and Private Forestry, the Forestry Sciences Laboratory in Princeton, West Virginia, and any other organizational unit of the Department of Agriculture as the Secretary deems appropriate. The overall management of the Institute will be the responsibility of the Forest Service, State and Private Forestry.

- (d) Generation of revenue; deposit into Hardwood Technology Transfer and Applied Research Fund

The Secretary is hereby and hereafter authorized to generate revenue using the authorities provided herein. Any revenue received as part of the operation of the Institute shall be deposited into a special fund in the Treasury of the United States, known as the “Hardwood Technology Transfer and Applied Research Fund”, which shall be available to the Secretary until expended, without further appropriation, in furtherance of the purposes of this section, including upkeep, management, and operation of the Institute and the payment of salaries and expenses.

- (e) Authorization of appropriations

There are hereby and hereafter authorized to be appropriated such sums as necessary to carry out the provisions of this section.

(Pub. L. 106–113, div. B, §1000(a)(3) [title III, §332], Nov. 29, 1999, 113 Stat. 1535, 1501A–197.)

TITLE 23 — HIGHWAYS

CHAPTER 5 — RESEARCH, TECHNOLOGY, AND EDUCATION

§502. Surface transportation research, development, and technology

- (a) Basic Principles Governing Research and Technology Investments.-

(1) Applicability.-The research, development, and technology provisions of this section shall apply throughout this chapter.

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- (2) Coverage.-Surface transportation research and technology development shall include all activities within the innovation lifecycle leading to technology development and transfer, as well as the introduction of new and innovative ideas, practices, and approaches, through such mechanisms as field applications, education and training, communications, impact analysis, and technical support.
- (3) Federal responsibility.-Funding and conducting surface transportation research and technology transfer activities shall be considered a basic responsibility of the Federal Government when the work-
 - (A) is of national significance;
 - (B) delivers a clear public benefit and occurs where private sector investment is less than optimal;
 - (C) supports a Federal stewardship role in assuring that State and local governments use national resources efficiently;
 - (D) meets and addresses current or emerging needs;
 - (E) addresses current gaps in research;
 - (F) presents the best means to align resources with multiyear plans and priorities;
 - (G) ensures the coordination of highway research and technology transfer activities, including through activities performed by university transportation centers;
 - (H) educates transportation professionals; or
 - (I) presents the best means to support Federal policy goals compared to other policy alternatives.
- (4) Role.-Consistent with these Federal responsibilities, the Secretary shall-
 - (A) conduct research;
 - (B) partner with State highway agencies and other stakeholders as appropriate to facilitate research and technology transfer activities;
 - (C) communicate the results of ongoing and completed research;
 - (D) lead efforts to coordinate national emphasis areas of highway research, technology, and innovation deployment;
 - (E) leverage partnerships with industry, academia, international entities, and State departments of transportation;
 - (F) lead efforts to reduce unnecessary duplication of effort; and
 - (G) lead efforts to accelerate innovation delivery.
- (5) Program content.-A surface transportation research program shall include-
 - (A) fundamental, long-term highway research;
 - (B) research aimed at significant highway research gaps and emerging issues with national implications; and
 - (C) research related to all highway objectives seeking to improve the performance of the transportation system.
- (6) Stakeholder input.-Federal surface transportation research and development activities shall address the needs of stakeholders. Stakeholders include States,

metropolitan planning organizations, local governments, tribal governments, the private sector, researchers, research sponsors, and other affected parties, including public interest groups.

(7) Competition and peer review.-Except as otherwise provided in this chapter, the Secretary shall award, to the maximum extent practicable, all grants, contracts, and cooperative agreements for research and development under this chapter based on open competition and peer review of proposals.

(8) Performance review and evaluation.-

(A) In general.-To the maximum extent practicable, all surface transportation research and development projects shall include a component of performance measurement and evaluation.

(B) Performance measures.-Performance measures shall be established during the proposal stage of a research and development project and shall, to the maximum extent possible, be outcome-based.

(C) Program plan.-To the maximum extent practicable, each program pursued under this chapter shall be part of a data-driven, outcome-oriented program plan.

(D) Availability of evaluations.-All evaluations under this paragraph shall be made readily available to the public.

(9) Technological innovation.-The programs and activities carried out under this section shall be consistent with the transportation research and development strategic plan under section 6503 of title 49.

(b) General Authority.-

(1) Research, development, and technology transfer activities.-The Secretary may carry out research, development, and technology transfer activities with respect to-

(A) motor carrier transportation;

(B) all phases of transportation planning and development (including construction, operation, transportation system management and operations, modernization, development, design, maintenance, safety, financing, and traffic conditions); and

(C) the effect of State laws on the activities described in subparagraphs (A) and (B).

(2) Tests and development.-The Secretary may test, develop, or assist in testing and developing any material, invention, patented article, or process.

(3) Cooperation, grants, and contracts.-The Secretary may carry out research, development, and technology transfer activities related to transportation-

(A) independently;

(B) in cooperation with other Federal departments, agencies, and instrumentalities and Federal laboratories; or

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- (C) by making grants to, or entering into contracts and cooperative agreements with one or more of the following: the National Academy of Sciences, the American Association of State Highway and Transportation Officials, any Federal laboratory, Federal agency, State agency, authority, association, institution, for-profit or nonprofit corporation, organization, foreign country, or any other person.
- (4) Technological innovation.-The programs and activities carried out under this section shall be consistent with the transportation research and development strategic plan under section 6503 of title 49.
- (5) Funds.-
 - (A) Special account.-In addition to other funds made available to carry out this chapter, the Secretary shall use such funds as may be deposited by any cooperating organization or person in a special account of the Treasury established for this purpose.
 - (B) Use of funds.-The Secretary shall use funds made available to carry out this chapter to develop, administer, communicate, and promote the use of products of research, development, and technology transfer programs under this chapter.
- (6) Pooled funding.-
 - (A) Cooperation.-To promote effective utilization of available resources, the Secretary may cooperate with a State and an appropriate agency in funding research, development, and technology transfer activities of mutual interest on a pooled funds basis.
 - (B) Secretary as agent.-The Secretary may enter into contracts, cooperative agreements, and grants as the agent for all participating parties in carrying out such research, development, or technology transfer activities.
 - (C) Transfer of amounts among states or to federal highway administration.-The Secretary may, at the request of a State, transfer amounts apportioned or allocated to that State under this chapter to another State or the Federal Highway Administration to fund research, development, and technology transfer activities of mutual interest on a pooled funds basis.
 - (D) Transfer of obligation authority.-Obligation authority for amounts transferred under this subsection shall be disbursed in the same manner and for the same amount as provided for the project being transferred.
- (7) Prize competitions.-
 - (A) In general.-The Secretary may use up to 1 percent of the funds made available under section 51001 of the Transportation Research and Innovative Technology Act of 2012 to carry out a program to competitively award cash prizes to stimulate innovation in basic and applied research and technology development that has the potential for application to the national transportation system.
 - (B) Topics.-In selecting topics for prize competitions under this paragraph, the Secretary shall-
 - (i) consult with a wide variety of governmental and nongovernmental representatives; and

- (ii) give consideration to prize goals that demonstrate innovative approaches and strategies to improve the safety, efficiency, and sustainability of the national transportation system.
- (C) Advertising.-The Secretary shall encourage participation in the prize competitions through advertising efforts.
- (D) Requirements and registration.-For each prize competition, the Secretary shall publish a notice on a public website that describes-
 - (i) the subject of the competition;
 - (ii) the eligibility rules for participation in the competition;
 - (iii) the amount of the prize; and
 - (iv) the basis on which a winner will be selected.
- (E) Eligibility.-An individual or entity may not receive a prize under this paragraph unless the individual or entity-
 - (i) has registered to participate in the competition pursuant to any rules promulgated by the Secretary under this section;
 - (ii) has complied with all requirements under this paragraph;
 - (iii)
 - (I) in the case of a private entity, is incorporated in, and maintains a primary place of business in, the United States;
 - or
 - (II) in the case of an individual, whether participating singly or in a group, is a citizen or permanent resident of the United States;
 - (iv) is not a Federal entity or Federal employee acting within the scope of his or her employment; and
 - (v) has not received a grant to perform research on the same issue for which the prize is awarded.
- (F) Liability.-
 - (i) Assumption of risk.-
 - (I) In general.-A registered participant shall agree to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from participation in a competition, whether such injury, death, damage, or loss arises through negligence or otherwise.
 - (II) Related entity.-In this subparagraph, the term “related entity” means a contractor, subcontractor (at any tier), supplier, user, customer, cooperating party, grantee, investigator, or detailee.
 - (ii) Financial responsibility.-A participant shall obtain liability insurance or demonstrate financial responsibility, in amounts determined by the Secretary, for claims by-

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- (I) a third party for death, bodily injury, or property damage, or loss resulting from an activity carried out in connection with participation in a competition, with the Federal Government named as an additional insured under the registered participant's insurance policy and registered participants agreeing to indemnify the Federal Government against third party claims for damages arising from or related to competition activities; and
 - (II) the Federal Government for damage or loss to Government property resulting from such an activity.
- (G) Judges.-
- (i) Selection.-Subject to clause (iii), for each prize competition, the Secretary, either directly or through an agreement under subparagraph (H), may appoint 1 or more qualified judges to select the winner or winners of the prize competition on the basis of the criteria described in subparagraph (D).
 - (ii) Selection.-Judges for each competition shall include individuals from outside the Federal Government, including the private sector.
 - (iii) Limitations.-A judge selected under this subparagraph may not-
 - (I) have personal or financial interests in, or be an employee, officer, director, or agent of, any entity that is a registered participant in a prize competition under this paragraph; or
 - (II) have a familial or financial relationship with an individual who is a registered participant.
- (H) Administering the competition.-The Secretary may enter into an agreement with a private, nonprofit entity to administer the prize competition, subject to the provisions of this paragraph.
- (I) Funding.-
- (i) In general.-
 - (I) Private sector funding.-A cash prize under this paragraph may consist of funds appropriated by the Federal Government and funds provided by the private sector.
 - (II) Government funding.-The Secretary may accept funds from other Federal agencies, State and local governments, and metropolitan planning organizations for a cash prize under this paragraph.
 - (III) No special consideration.-The Secretary may not give any special consideration to any private sector entity in return for a donation under this subparagraph.
 - (ii) Availability of funds.-Notwithstanding any other provision of law, amounts appropriated for prize awards under this paragraph-
 - (I) shall remain available until expended; and
 - (II) may not be transferred, reprogrammed, or expended for other purposes until after the expiration of the 10-year period beginning on the last day of the fiscal year for which the funds were originally appropriated.

- (iii) Savings provision.-Nothing in this subparagraph may be construed to permit the obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. 1341).
- (iv) Prize announcement.-A prize may not be announced under this paragraph until all the funds needed to pay out the announced amount of the prize have been appropriated by a governmental source or committed to in writing by a private source.
- (v) Prize increases.-The Secretary may increase the amount of a prize after the initial announcement of the prize under this paragraph if-
 - (I) notice of the increase is provided in the same manner as the initial notice of the prize; and
 - (II) the funds needed to pay out the announced amount of the increase have been appropriated by a governmental source or committed to in writing by a private source.
- (vi) Congressional notification.-A prize competition under this paragraph may offer a prize in an amount greater than \$1,000,000 only after 30 days have elapsed after written notice has been transmitted to the Committee on Commerce, Science, and Transportation of the Senate and the Committees on Transportation and Infrastructure and Science, Space, and Technology of the House of Representatives.
- (vii) Award limit.-A prize competition under this section may not result in the award of more than \$25,000 in cash prizes without the approval of the Secretary.
- (J) Compliance with existing law.-The Federal Government shall not, by virtue of offering or providing a prize under this paragraph, be responsible for compliance by registered participants in a prize competition with Federal law, including licensing, export control, and non-proliferation laws, and related regulations.
- (K) Notice and annual report.-
 - (i) In general.-Not later than 30 days prior to carrying out an activity under subparagraph (A), the Secretary shall notify the Committees on Transportation and Infrastructure and Science, Space, and Technology of the House of Representatives and the Committees on Environment and Public Works and Commerce, Science, and Transportation of the Senate of the intent to use such authority.
 - (ii) Reports.-
 - (I) In general.-The Secretary shall submit to the committees described in clause (i) on an annual basis a report on the activities carried out under subparagraph (A) in the preceding fiscal year if the Secretary exercised the authority under subparagraph (A) in that fiscal year.
 - (II) Information included.-A report under this subparagraph shall include, for each prize competition under subparagraph (A)-

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- (aa) a description of the proposed goals of the prize competition;
- (bb) an analysis of why the use of the authority under subparagraph (A) was the preferable method of achieving the goals described in item (aa) as opposed to other authorities available to the Secretary, such as contracts, grants, and cooperative agreements;
- (cc) the total amount of cash prizes awarded for each prize competition, including a description of the amount of private funds contributed to the program, the source of such funds, and the manner in which the amounts of cash prizes awarded and claimed were allocated among the accounts of the Department for recording as obligations and expenditures;
- (dd) the methods used for the solicitation and evaluation of submissions under each prize competition, together with an assessment of the effectiveness of such methods and lessons learned for future prize competitions;
- (ee) a description of the resources, including personnel and funding, used in the execution of each prize competition together with a detailed description of the activities for which such resources were used and an accounting of how funding for execution was allocated among the accounts of the agency for recording as obligations and expenditures; and
- (ff) a description of how each prize competition advanced the mission of the Department.

(c) Collaborative Research and Development.-

- (1) In general.-To encourage innovative solutions to surface transportation problems and stimulate the deployment of new technology, the Secretary may carry out, on a cost-shared basis, collaborative research and development with:
 - (A) non-Federal entities, including State and local governments, foreign governments, colleges and universities, corporations, institutions, partnerships, sole proprietorships, and trade associations that are incorporated or established under the laws of any State; and
 - (B) Federal laboratories.
- (2) Cooperation, grants, contracts, and agreements.-Notwithstanding any other provision of law, the Secretary may directly initiate contracts, cooperative research and development agreements (as defined in section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a)) to fund, and accept funds from, the Transportation Research Board of the National Research Council of the National Academy of Sciences, State departments of transportation, cities, counties, and their agents to conduct joint transportation research and technology efforts.
- (3) Federal share.-
 - (A) In general.-The Federal share of the cost of activities carried out under a cooperative research and development agreement entered into under this chapter shall not exceed 80 percent, except that if there is substantial public interest or benefit, the Secretary may approve a greater Federal share.

(B) Non-federal share.-All costs directly incurred by the non-Federal partners, including personnel, travel, and hardware development costs, shall be credited toward the non-Federal share of the cost of the activities described in subparagraph (A).

(4) Use of technology.-The research, development, or use of a technology under a cooperative research and development agreement entered into under this chapter, including the terms under which the technology may be licensed and the resulting royalties may be distributed, shall be subject to the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.).

(5) Waiver of advertising requirements.-Section 6101(b) to (d) of title 41 shall not apply to a contract or agreement entered into under this chapter.

(Added Pub. L. 105–178, title V, §5102, June 9, 1998, 112 Stat. 422 ; amended Pub. L. 109–59, title V, §§5201(b)–(g), (i)(1), (j)(1), (k), (l), 5202(a)(1), Aug. 10, 2005, 119 Stat. 1781–1785 ; Pub. L. 110–244, title I, §111(g)(1), June 6, 2008, 122 Stat. 1605 ; Pub. L. 111–350, §5(e)(2), Jan. 4, 2011, 124 Stat. 3847 ; Pub. L. 112–141, div. E, title II, §52002(a), July 6, 2012, 126 Stat. 866 ; Pub. L. 114–94, div. A, title VI, §6019(d)(1)(C), Dec. 4, 2015, 129 Stat. 1581 .)

TITLE 42 — THE PUBLIC HEALTH AND WELFARE

CHAPTER 6A — PUBLIC HEALTH SERVICE

§241. Research and investigations generally [an excerpt]

(a) Authority of Secretary [of Health and Human Services]

The Secretary shall conduct in the Service, and encourage, cooperate with, and render assistance to other appropriate public authorities, scientific institutions, and scientists in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, diagnosis, treatment, control, and prevention of physical and mental diseases and impairments of man, including water purification, sewage treatment, and pollution of lakes and streams.

§282. Director of National Institutes of Health [an excerpt]

(a) Appointment

The National Institutes of Health shall be headed by the Director of NIH who shall be appointed by the President by and with the advice and consent of the Senate. The Director of NIH shall perform functions as provided under subsection

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(b) and as the Secretary may otherwise prescribe.

(c) Availability of substances and organisms for research

The Director of NIH may make available to individuals and entities, for biomedical and behavioral research, substances and living organisms. Such substances and organisms shall be made available under such terms and conditions (including payment for them) as the Secretary determines appropriate.

(e) Dissemination of research information

The Director of NIH shall—

- (1) advise the agencies of the National Institutes of Health on medical applications of research;
- (2) coordinate, review, and facilitate the systematic identification and evaluation of, clinically relevant information from research conducted by or through the national research institutes;
- (3) promote the effective transfer of the information described in paragraph (2) to the health care community and to entities that require such information;
- (4) monitor the effectiveness of the activities described in paragraph (3); and
- (5) ensure that, after January 1, 1994, all new or revised health education and promotion materials developed or funded by the National Institutes of Health and intended for the general public are in a form that does not exceed a level of functional literacy, as defined in the National Literacy Act of 1991 (Public Law 102–73).

§283q. Eureka prize competitions

(a) In general

Pursuant to the authorities and processes established under section 3719 of title 15, the Director of the National Institutes of Health shall support prize competitions for one or both of the following goals:

- (1) Identifying and funding areas of biomedical science that could realize significant advancements through a prize competition.
- (2) Improving health outcomes, particularly with respect to human diseases and conditions-
 - (A) for which public and private investment in research is disproportionately small relative to Federal Government expenditures on prevention and treatment activities with respect to such diseases and conditions, such that Federal expenditures on health programs would be reduced;
 - (B) that are serious and represent a significant disease burden in the United States; or
 - (C) for which there is potential for significant return on investment to the United States.

(b) Tracking; reporting

The Director of the National Institutes of Health shall-

- (1) collect information on-

(A) the effect of innovations funded through the prize competitions under this section in advancing biomedical science or improving health outcomes pursuant to subsection (a); and

(B) the effect of the innovations on Federal expenditures; and

(2) include the information collected under paragraph (1) in the triennial report under section 283 of this title (as amended by section 2032).

(Pub. L. 114–255, div. A, title II, §2002, Dec. 13, 2016, 130 Stat. 1047.)

§284. Directors of national research institutes [an excerpt]

(a) Appointment

(1) In general

The Director of the National Cancer Institute shall be appointed by the President, and the Directors of the other national research institutes and national centers shall be appointed by the Secretary, acting through the Director of National Institutes of Health. Each Director of a national research institute or national center shall report directly to the Director of National Institutes of Health.

(b) Duties and authority; grants, contracts, and cooperative agreements

(1) In carrying out the purposes of section 241 of this title with respect to human diseases or disorders or other aspects of human health for which the national research institutes were established, the Secretary, acting through the Director of each national research institute—

(A) shall encourage and support research, investigations, experiments, demonstrations, and studies in the health sciences related to—

(i) the maintenance of health,

(ii) the detection, diagnosis, treatment, and prevention of human diseases and disorders,

(iii) the rehabilitation of individuals with human diseases, disorders, and disabilities, and

(iv) the expansion of knowledge of the processes underlying human diseases, disorders, and disabilities, the processes underlying the normal and pathological functioning of the body and its organ systems, and the processes underlying the interactions between the human organism and the environment;

(B) may, subject to the peer review prescribed under section 289a(b) of this title and any advisory council review under section 284a(a)(3)(A)(i) of this title, conduct the research, investigations, experiments, demonstrations, and studies referred to in subparagraph (A);

(C) shall, as appropriate, conduct and support research that has the potential to transform the scientific field, has inherently higher risk, and that seeks to address major current challenges;

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- (D) may conduct and support research training (i) for which fellowship support is not provided under section 288 of this title, and (ii) which is not residency training of physicians or other health professionals;
- (E) may develop, implement, and support demonstrations and programs for the application of the results of the activities of the institute to clinical practice and disease prevention activities;
- (F) may develop, conduct, and support public and professional education and information programs;
- (G) may secure, develop and maintain, distribute, and support the development and maintenance of resources needed for research;
- (H) may make available the facilities of the institute to appropriate entities and individuals engaged in research activities and cooperate with and assist Federal and State agencies charged with protecting the public health;
- (I) may accept unconditional gifts made to the institute for its activities, and, in the case of gifts of a value in excess of \$50,000, establish suitable memorials to the donor;
- (J) may secure for the institute consultation services and advice of persons from the United States or abroad;
- (K) may use, with their consent, the services, equipment, personnel, information, and facilities of other Federal, State, or local public agencies, with or without reimbursement therefor;
- (L) may accept voluntary and uncompensated services; and
- (M) may perform such other functions as the Secretary determines are needed to carry out effectively the purposes of the institute.

(July 1, 1944, ch. 373, title IV, §405, as added Pub. L. 99-158, §2, Nov. 20, 1985, 99 Stat. 826; amended Pub. L. 100-607, title I, §116, Nov. 4, 1988, 102 Stat. 3053; Pub. L. 100-690, title II, §2613(c), Nov. 18, 1988, 102 Stat. 4239; Pub. L. 103-43, title III, §301(a)(1), (b), June 10, 1993, 107 Stat. 150; Pub. L. 109-482, title I, §102(f)(1)(B), Jan. 15, 2007, 120 Stat. 3685; Pub. L. 114-255, div. A, title II, §§2033(a), (b), 2036(c), Dec. 13, 2016, 130 Stat. 1057, 1058, 1063.)

CHAPTER 23 — DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

§2053. Research for others; charges

Where the [Nuclear Regulatory] Commission finds private facilities or laboratories are inadequate for the purpose, it is authorized to conduct for other persons, through its own facilities, such of those activities and studies of the types specified in section 2051 of this title as it deems appropriate to the development of energy. To the extent the Commission determines that private facilities or laboratories are inadequate for the purpose, and that the Commission's facilities, or scientific or technical resources have the potential of lending significant assistance to other persons in the fields of protection of public health and safety, the Commission may also assist other persons in these fields by conducting for such persons, through the Commission's own facil-

ities, research and development or training activities and studies. The Commission is authorized to determine and make such charges as in its discretion may be desirable for the conduct of the activities and studies referred to in this section.

(Aug. 1, 1946, ch. 724, title I, §33, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 928; amended Pub. L. 90–190, §7, Dec. 14, 1967, 81 Stat. 577; Pub. L. 92–84, title II, §201(b), Aug. 11, 1971, 85 Stat. 307; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944.)

CHAPTER 84 — DEPARTMENT OF ENERGY

§7261. Acquisition of copyrights, patents, etc.

The Secretary is authorized to acquire any of the following described rights if the property acquired thereby is for use by or for, or useful to, the Department:

- (1) copyrights, patents, and applications for patents, designs, processes, and manufacturing data;
- (2) licenses under copyrights, patents, and applications for patents; and
- (3) releases, before suit is brought, for past infringement of patents or copyrights.

(Pub. L. 95–91, title VI, §651, Aug. 4, 1977, 91 Stat. 601.)

CHAPTER 149 — NATIONAL ENERGY POLICY AND PROGRAMS

§16358. Strategic research portfolio analysis and coordination plan

(a) In general

The Secretary [of Energy] shall periodically review all of the science and technology activities of the Department [of Energy] in a strategic framework that takes into account both the frontiers of science to which the Department can contribute and the national needs relevant to the Department’s statutory missions.

(b) Coordination analysis and plan

As part of the review under subsection (a), the Secretary shall develop a coordination plan to improve coordination and collaboration in research, development, demonstration, and commercial application activities across Department organizational boundaries.

(c) Plan contents

The plan shall describe—

- (1) cross-cutting scientific and technical issues and research questions that span more than one program or major office of the Department;
- (2) how the applied technology programs of the Department are coordinating

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their activities, and addressing those questions;

- (3) ways in which the technical interchange within the Department, particularly between the Office of Science and the applied technology programs, can be enhanced, including ways in which the research agendas of the Office of Science and the applied programs can interact and assist each other;
- (4) a description of how the Secretary will ensure that the Department's overall research agenda include, in addition to fundamental, curiosity-driven research, fundamental research related to topics of concern to the applied programs, and applications in Departmental technology programs of research results generated by fundamental, curiosity-driven research.

(d) Plan transmittal

Not later than 12 months after August 8, 2005, and every 4 years thereafter, the Secretary shall transmit to Congress the results of the review under subsection (a) and the coordination plan under subsection (b).

(Pub. L. 109–58, title IX, §994, Aug. 8, 2005, 119 Stat. 914.)

§16391. Improved technology transfer of energy technologies

(a) Technology Transfer Coordinator

The Secretary [of Energy] shall appoint a Technology Transfer Coordinator to be the principal advisor to the Secretary on all matters relating to technology transfer and commercialization.

(b) Qualifications

The Coordinator shall be an individual who, by reason of professional background and experience, is specially qualified to advise the Secretary on matters pertaining to technology transfer at the Department. [of Energy].

(c) Duties of the Coordinator

The Coordinator shall oversee-

- (1) the activities of the Technology Transfer Working Group established under subsection (d);
- (2) the expenditure of funds allocated for technology transfer within the Department;
- (3) the activities of each technology partnership ombudsman appointed under section 7261c of this title; and
- (4) efforts to engage private sector entities, including venture capital companies.

(d) Technology Transfer Working Group

The Secretary shall establish a Technology Transfer Working Group, which shall consist of representatives of the National Laboratories and single-purpose research facilities, to-

- (1) coordinate technology transfer activities occurring at National Laboratories and single-purpose research facilities;
- (2) exchange information about technology transfer practices, including alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters; and

(3) develop and disseminate to the public and prospective technology partners information about opportunities and procedures for technology transfer with the Department, including opportunities and procedures related to alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters.

(e) Technology Commercialization Fund

The Secretary shall establish an Energy Technology Commercialization Fund, using 0.9 percent of the amount made available to the Department for applied energy research, development, demonstration, and commercial application for each fiscal year based on future planned activities and the amount of the appropriations for the fiscal year, to be used to provide matching funds with private partners to promote promising energy technologies for commercial purposes.

(f) Technology transfer responsibility

Nothing in this section affects the technology transfer responsibilities of Federal employees under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.).

(g) Planning and reporting

(1) In general

Not later than 180 days after August 8, 2005, the Secretary shall submit to Congress a technology transfer execution plan.

(2) Updates

Each year after the submission of the plan under paragraph (1), the Secretary shall submit to Congress an updated execution plan and reports that describe progress toward meeting goals set forth in the execution plan and the funds expended under subsection (e).

(Pub. L. 109–58, title X, §1001, Aug. 8, 2005, 119 Stat. 926 ; Pub. L. 113–291, div. C, title XXXI, §3144, Dec. 19, 2014, 128 Stat. 3902 .)

§16396. Prizes for achievement in grand challenges of science and technology

(a) Authority

The Secretary may carry out a program to award cash prizes in recognition of breakthrough achievements in research, development, demonstration, and commercial application that have the potential for application to the performance of the mission of the Department.

(b) Competition requirements

The program under subsection (a) may include prizes for the achievement of goals articulated by the Secretary in a specific area through a widely advertised solicitation of submission of results for research, development, demonstration, or commercial application projects.

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(c) Prizes for processes and technologies to reduce dependence on imported oil

The Secretary, in cooperation with the Freedom Prize Foundation, shall support a program of awarding prizes, to be known as Freedom Prizes, to encourage and recognize the development and deployment of processes and technologies that serve to reduce the dependence of the United States on imported oil.

(d) Relationship to other authority

The program under subsection (a) may be carried out in conjunction with or in addition to the exercise of any other authority of the Secretary to acquire, support, or stimulate research, development, demonstration, or commercial application projects.

(e) Authorization of appropriations

There are authorized to be appropriated-

- (1) \$10,000,000 to carry out the program under subsection (a); and
- (2) \$5,000,000 to carry out the program under subsection (c).

(f) H-prize

(1) Prize authority

(A) In general

As part of the program under this section, the Secretary shall carry out a program to competitively award cash prizes in conformity with this subsection to advance the research, development, demonstration, and commercial application of hydrogen energy technologies.

(B) Advertising and solicitation of competitors

(i) Advertising

The Secretary shall widely advertise prize competitions under this subsection to encourage broad participation, including by individuals, universities (including historically Black colleges and universities and other minority serving institutions), and large and small businesses (including businesses owned or controlled by socially and economically disadvantaged persons).

(ii) Announcement through Federal Register notice

The Secretary shall announce each prize competition under this subsection by publishing a notice in the Federal Register. This notice shall include essential elements of the competition such as the subject of the competition, the duration of the competition, the eligibility requirements for participation in the competition, the process for participants to register for the competition, the amount of the prize, and the criteria for awarding the prize.

(C) Administering the competitions

The Secretary shall enter into an agreement with a private, nonprofit entity to administer the prize competitions under this subsection, subject to the provisions of this subsection (in this subsection referred to as the “administering entity”). The duties of the administering entity under the agreement shall include-

- (i) advertising prize competitions under this subsection and their results;

- (ii) raising funds from private entities and individuals to pay for administrative costs and to contribute to cash prizes, including funds provided in exchange for the right to name a prize awarded under this subsection;
- (iii) developing, in consultation with and subject to the final approval of the Secretary, the criteria for selecting winners in prize competitions under this subsection, based on goals provided by the Secretary;
- (iv) determining, in consultation with the Secretary, the appropriate amount and funding sources for each prize to be awarded under this subsection, subject to the final approval of the Secretary with respect to Federal funding;
- (v) providing advice and consultation to the Secretary on the selection of judges in accordance with paragraph (2)(D), using criteria developed in consultation with and subject to the final approval of the Secretary; and
- (vi) protecting against the administering entity's unauthorized use or disclosure of a registered participant's trade secrets and confidential business information. Any information properly identified as trade secrets or confidential business information that is submitted by a participant as part of a competitive program under this subsection may be withheld from public disclosure.

(D) Funding sources

Prizes under this subsection shall consist of Federal appropriated funds and any funds provided by the administering entity (including funds raised pursuant to subparagraph (C)(ii)) for such cash prize programs. The Secretary may accept funds from other Federal agencies for such cash prizes and, notwithstanding section 3302(b) of title 31, may use such funds for the cash prize program under this subsection. Other than publication of the names of prize sponsors, the Secretary may not give any special consideration to any private sector entity or individual in return for a donation to the Secretary or administering entity.

(E) Announcement of prizes

The Secretary may not issue a notice required by subparagraph (B)(ii) until all the funds needed to pay out the announced amount of the prize have been appropriated or committed in writing by the administering entity. The Secretary may increase the amount of a prize after an initial announcement is made under subparagraph (B)(ii) if-

- (i) notice of the increase is provided in the same manner as the initial notice of the prize; and
- (ii) the funds needed to pay out the announced amount of the increase have been appropriated or committed in writing by the administering entity.

(F) Sunset

The authority to announce prize competitions under this subsection shall

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terminate on September 30, 2018.

(2) Prize categories

(A) Categories

The Secretary shall establish prizes under this subsection for-

(i) advancements in technologies, components, or systems related to-

(I) hydrogen production;

(II) hydrogen storage;

(III) hydrogen distribution; and

(IV) hydrogen utilization;

(ii) prototypes of hydrogen-powered vehicles or other hydrogen-based products that best meet or exceed objective performance criteria, such as completion of a race over a certain distance or terrain or generation of energy at certain levels of efficiency; and

(iii) transformational changes in technologies for the distribution or production of hydrogen that meet or exceed far-reaching objective criteria, which shall include minimal carbon emissions and which may include cost criteria designed to facilitate the eventual market success of a winning technology.

(B) Awards

(i) Advancements

To the extent permitted under paragraph (1)(E), the prizes authorized under subparagraph (A)(i) shall be awarded biennially to the most significant advance made in each of the four subcategories described in subclauses (I) through (IV) of subparagraph (A)(i) since the submission deadline of the previous prize competition in the same category under subparagraph (A)(i) or December 19, 2007, whichever is later, unless no such advance is significant enough to merit an award. No one such prize may exceed \$1,000,000. If less than \$4,000,000 is available for a prize competition under subparagraph (A)(i), the Secretary may omit one or more subcategories, reduce the amount of the prizes, or not hold a prize competition.

(ii) Prototypes

To the extent permitted under paragraph (1)(E), prizes authorized under subparagraph (A)(ii) shall be awarded biennially in alternate years from the prizes authorized under subparagraph (A)(i). The Secretary is authorized to award up to one prize in this category in each 2-year period. No such prize may exceed \$4,000,000. If no registered participants meet the objective performance criteria established pursuant to subparagraph (C) for a competition under this clause, the Secretary shall not award a prize.

(iii) Transformational technologies

To the extent permitted under paragraph (1)(E), the Secretary shall announce one prize competition authorized under subparagraph (A)(iii) as soon after December 19, 2007, as is practicable. A prize offered under this clause shall be not less than \$10,000,000, paid to the winner in a lump sum, and an additional amount paid to the

winner as a match for each dollar of private funding raised by the winner for the hydrogen technology beginning on the date the winner was named. The match shall be provided for 3 years after the date the prize winner is named or until the full amount of the prize has been paid out, whichever occurs first. A prize winner may elect to have the match amount paid to another entity that is continuing the development of the winning technology. The Secretary shall announce the rules for receiving the match in the notice required by paragraph (1)(B)(ii). The Secretary shall award a prize under this clause only when a registered participant has met the objective criteria established for the prize pursuant to subparagraph (C) and announced pursuant to paragraph (1)(B)(ii). Not more than \$10,000,000 in Federal funds may be used for the prize award under this clause. The administering entity shall seek to raise \$40,000,000 toward the matching award under this clause.

(C) Criteria

In establishing the criteria required by this subsection, the Secretary-

- (i) shall consult with the Department's Hydrogen Technical and Fuel Cell Advisory Committee;
- (ii) shall consult with other Federal agencies, including the National Science Foundation; and
- (iii) may consult with other experts such as private organizations, including professional societies, industry associations, and the National Academy of Sciences and the National Academy of Engineering.

(D) Judges

For each prize competition under this subsection, the Secretary in consultation with the administering entity shall assemble a panel of qualified judges to select the winner or winners on the basis of the criteria established under subparagraph (C). Judges for each prize competition shall include individuals from outside the Department, including from the private sector. A judge, spouse, minor children, and members of the judge's household may not-

- (i) have personal or financial interests in, or be an employee, officer, director, or agent of, any entity that is a registered participant in the prize competition for which he or she will serve as a judge; or
- (ii) have a familial or financial relationship with an individual who is a registered participant in the prize competition for which he or she will serve as a judge.

(3) Eligibility

To be eligible to win a prize under this subsection, an individual or entity-

- (A) shall have complied with all the requirements in accordance with the Federal Register notice required under paragraph (1)(B)(ii);

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- (B) in the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen of, or an alien lawfully admitted for permanent residence in, the United States; and
 - (C) shall not be a Federal entity, a Federal employee acting within the scope of his employment, or an employee of a national laboratory acting within the scope of his employment.
- (4) Intellectual property

The Federal Government shall not, by virtue of offering or awarding a prize under this subsection, be entitled to any intellectual property rights derived as a consequence of, or direct relation to, the participation by a registered participant in a competition authorized by this subsection. This paragraph shall not be construed to prevent the Federal Government from negotiating a license for the use of intellectual property developed for a prize competition under this subsection.

(5) Liability

(A) Waiver of liability

The Secretary may require registered participants to waive claims against the Federal Government and the administering entity (except claims for willful misconduct) for any injury, death, damage, or loss of property, revenue, or profits arising from the registered participants' participation in a competition under this subsection. The Secretary shall give notice of any waiver required under this subparagraph in the notice required by paragraph (1)(B)(ii). The Secretary may not require a registered participant to waive claims against the administering entity arising out of the unauthorized use or disclosure by the administering entity of the registered participant's trade secrets or confidential business information.

(B) Liability insurance

(i) Requirements

Registered participants in a prize competition under this subsection shall be required to obtain liability insurance or demonstrate financial responsibility, in amounts determined by the Secretary, for claims by-

- (I) a third party for death, bodily injury, or property damage or loss resulting from an activity carried out in connection with participation in a competition under this subsection; and
- (II) the Federal Government for damage or loss to Government property resulting from such an activity.

(ii) Federal Government insured

The Federal Government shall be named as an additional insured under a registered participant's insurance policy required under clause (i)(I), and registered participants shall be required to agree to indemnify the Federal Government against third party claims for damages arising from or related to competition activities under this subsection.

(6) Report to Congress

Not later than 60 days after the awarding of the first prize under this subsection, and annually thereafter, the Secretary shall transmit to the Congress a report that-

- (A) identifies each award recipient;
- (B) describes the technologies developed by each award recipient; and
- (C) specifies actions being taken toward commercial application of all technologies with respect to which a prize has been awarded under this subsection.

(7) Authorization of appropriations

(A) In general

(i) Awards

There are authorized to be appropriated to the Secretary for the period encompassing fiscal years 2008 through 2017 for carrying out this subsection-

- (I) \$20,000,000 for awards described in paragraph (2)(A)(i);
- (II) \$20,000,000 for awards described in paragraph (2)(A)(ii); and
- (III) \$10,000,000 for the award described in paragraph (2)(A)(iii).

(ii) Administration

In addition to the amounts authorized in clause (i), there are authorized to be appropriated to the Secretary for each of fiscal years 2008 and 2009 \$2,000,000 for the administrative costs of carrying out this subsection.

(B) Carryover of funds

Funds appropriated for prize awards under this subsection shall remain available until expended, and may be transferred, reprogrammed, or expended for other purposes only after the expiration of 10 fiscal years after the fiscal year for which the funds were originally appropriated. No provision in this subsection permits obligation or payment of funds in violation of section 1341 of title 31 (commonly referred to as the Anti-Deficiency Act).

(8) Nonsubstitution

The programs created under this subsection shall not be considered a substitute for Federal research and development programs.

(Pub. L. 109–58, title X, §1008, Aug. 8, 2005, 119 Stat. 933; Pub. L. 110–140, title VI, §654, Dec. 19, 2007, 121 Stat. 1695.)

§16538. Advanced Research Projects Agency-Energy

(a) Definitions

In this section:

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.
For the latest federal regulations, the reader should refer to www.ecfr.gov.

(1) ARPA-E

The term “ARPA–E” means the Advanced Research Projects Agency-Energy established by subsection (b).

(2) Director

The term “Director” means the Director of ARPA-E appointed under subsection (d).

(3) Fund

The term “Fund” means the Energy Transformation Acceleration Fund established under subsection (n)(1).

(b) Establishment

There is established the Advanced Research Projects Agency-Energy within the Department to overcome the long-term and high-risk technological barriers in the development of energy technologies.

(c) Goals

(1) In general

The goals of ARPA-E shall be-

(A) to enhance the economic and energy security of the United States through the development of energy technologies that result in-

(i) reductions of imports of energy from foreign sources;

(ii) reductions of energy-related emissions, including greenhouse gases; and

(iii) improvement in the energy efficiency of all economic sectors; and

(B) to ensure that the United States maintains a technological lead in developing and deploying advanced energy technologies.

(2) Means

ARPA-E shall achieve the goals established under paragraph (1) through energy technology projects by-

(A) identifying and promoting revolutionary advances in fundamental and applied sciences;

(B) translating scientific discoveries and cutting-edge inventions into technological innovations; and

(C) accelerating transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.

(d) Director

(1) Appointment

There shall be in the Department of Energy a Director of ARPA-E, who shall be appointed by the President, by and with the advice and consent of the Senate.

(2) Qualifications

The Director shall be an individual who, by reason of professional background and experience, is especially qualified to advise the Secretary on, and manage research programs addressing, matters pertaining to long-term and high-risk technological barriers to the development of energy technologies.

(3) Relationship to Secretary

The Director shall report to the Secretary.

(4) Relationship to other programs

No other programs within the Department shall report to the Director.

(e) Responsibilities

The responsibilities of the Director shall include-

(1) approving all new programs within ARPA-E;

(2) developing funding criteria and assessing the success of programs through the establishment of technical milestones;

(3) administering the Fund through awards to institutions of higher education, companies, research foundations, trade and industry research collaborations, or consortia of such entities, which may include federally-funded research and development centers, to achieve the goals described in subsection (c) through targeted acceleration of-

(A) novel early-stage energy research with possible technology applications;

(B) development of techniques, processes, and technologies, and related testing and evaluation;

(C) research and development of advanced manufacturing process and technologies for the domestic manufacturing of novel energy technologies; and

(D) coordination with nongovernmental entities for demonstration of technologies and research applications to facilitate technology transfer;

(4) terminating programs carried out under this section that are not achieving the goals of the programs; and

(5) pursuant to subsection (c)(2)(C)-

(A) ensuring that applications for funding disclose the extent of current and prior efforts, including monetary investments as appropriate, in pursuit of the technology area for which funding is being requested;

(B) adopting measures to ensure that, in making awards, program managers adhere to the purposes of subsection (c)(2)(C); and

(C) providing as part of the annual report required by subsection (h)(1) a summary of the instances of and reasons for ARPA-E funding projects in technology areas already being undertaken by industry.

(f) Awards

In carrying out this section, the Director may provide awards in the form of grants, contracts, cooperative agreements, cash prizes, and other transactions.

(g) Personnel

(1) In general

The Director shall establish and maintain within ARPA-E a staff with sufficient

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qualifications and expertise to enable ARPA-E to carry out the responsibilities of ARPA-E under this section in conjunction with other operations of the Department.

(2) Program directors

(A) In general

The Director shall designate employees to serve as program directors for the programs established pursuant to the responsibilities established for ARPA-E under subsection (e).

(B) Responsibilities

A program director of a program shall be responsible for-

- (i) establishing research and development goals for the program, including through the convening of workshops and conferring with outside experts, and publicizing the goals of the program to the public and private sectors;
- (ii) soliciting applications for specific areas of particular promise, especially areas that the private sector or the Federal Government are not likely to undertake alone;
- (iii) building research collaborations for carrying out the program;
- (iv) selecting on the basis of merit each of the projects to be supported under the program after considering-
 - (I) the novelty and scientific and technical merit of the proposed projects;
 - (II) the demonstrated capabilities of the applicants to successfully carry out the proposed project;
 - (III) the consideration by the applicant of future commercial applications of the project, including the feasibility of partnering with 1 or more commercial entities; and
 - (IV) such other criteria as are established by the Director;
- (v) identifying innovative cost-sharing arrangements for ARPA-E projects, including through use of the authority provided under section 16352(b)(3) of this title;
- (vi) monitoring the progress of projects supported under the program;
- (vii) identifying mechanisms for commercial application of successful energy technology development projects, including through establishment of partnerships between awardees and commercial entities; and
- (viii) recommending program restructure or termination of research partnerships or whole projects.

(C) Term

The term of a program manager shall be not more than 3 years and may be renewed.

(3) Hiring and management

(A) In general

The Director shall have the authority to-

- (i) make appointments of scientific, engineering, and professional personnel without regard to the civil service laws;
- (ii) fix the basic pay of such personnel at a rate to be determined by the Director at rates not in excess of Level II of the Executive Schedule (EX-II) without regard to the civil service laws; and
- (iii) pay any employee appointed under this subpart 1 payments in addition to basic pay, except that the total amount of additional payments paid to an employee under this subpart 1 for any 12-month period shall not exceed the least of the following amounts:
 - (I) \$25,000.
 - (II) The amount equal to 25 percent of the annual rate of basic pay of the employee.
 - (III) The amount of the limitation that is applicable for a calendar year under section 5307(a)(1) of title 5.

(B) Number

The Director shall appoint not more than 120 personnel under this section.

(C) Private recruiting firms

The Secretary, or the Director serving as an agent of the Secretary, may contract with private recruiting firms for the hiring of qualified technical staff to carry out this section.

(D) Additional staff

The Director may use all authorities in existence on August 9, 2007, that are provided to the Secretary to hire administrative, financial, and clerical staff as necessary to carry out this section.

(h) Reports and roadmaps

(1) Annual report

As part of the annual budget request submitted for each fiscal year, the Director shall provide to the relevant authorizing and appropriations committees of Congress a report describing projects supported by ARPA-E during the previous fiscal year.

(2) Strategic vision roadmap

Not later than October 1, 2010, and October 1, 2013, the Director shall provide to the relevant authorizing and appropriations committees of Congress a roadmap describing the strategic vision that ARPA-E will use to guide the choices of ARPA-E for future technology investments over the following 3 fiscal years.

(i) Coordination and nonduplication

(1) In general

To the maximum extent practicable, the Director shall ensure that the activities of ARPA-E are coordinated with, and do not duplicate the efforts of, programs

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and laboratories within the Department and other relevant research agencies.

(2) Technology Transfer Coordinator

To the extent appropriate, the Director may coordinate technology transfer efforts with the Technology Transfer Coordinator appointed under section 16391 of this title.

(j) Federal demonstration of technologies

The Director shall seek opportunities to partner with purchasing and procurement programs of Federal agencies to demonstrate energy technologies resulting from activities funded through ARPA-E.

(k) Advice

(l) Advisory committees

The Director may seek advice on any aspect of ARPA-E from-

(A) an existing Department of Energy advisory committee; and

(B) a new advisory committee organized to support the programs of ARPA-E and to provide advice and assistance on-

(i) specific program tasks; or

(ii) overall direction of ARPA-E.

(2) Additional sources of advice

In carrying out this section, the Director may seek advice and review from-

(A) the President's Committee of Advisors on Science and Technology; and

(B) any professional or scientific organization with expertise in specific processes or technologies under development by ARPA-E.

(l) ARPA-E evaluation

(1) In general

After ARPA-E has been in operation for 6 years, the Secretary shall offer to enter into a contract with the National Academy of Sciences under which the National Academy shall conduct an evaluation of how well ARPA-E is achieving the goals and mission of ARPA-E.

(2) Inclusions

The evaluation shall include-

(A) the recommendation of the National Academy of Sciences on whether ARPA-E should be continued or terminated; and

(B) a description of lessons learned from operation of ARPA-E, and the manner in which those lessons may apply to the operation of other programs of the Department.

(3) Availability

On completion of the evaluation, the evaluation shall be made available to Congress and the public.

(m) Existing authorities

The authorities granted by this section are-

(1) in addition to existing authorities granted to the Secretary; and

(2) are not intended to supersede or modify any existing authorities.

(n) Funding

(1) Fund

There is established in the Treasury of the United States a fund, to be known as the “Energy Transformation Acceleration Fund”, which shall be administered by the Director for the purposes of carrying out this section.

(2) Authorization of appropriations

Subject to paragraphs (4) and (5),² there are authorized to be appropriated to the Director for deposit in the Fund, without fiscal year limitation-

- (A) \$300,000,000 for fiscal year 2008;
- (B) such sums as are necessary for each of fiscal years 2009 and 2010;
- (C) \$300,000,000 for fiscal year 2011;
- (D) \$306,000,000 for fiscal year 2012; and
- (E) \$312,000,000 for fiscal year 2013.

(3) Separate budget and appropriation

(A) Budget request

The budget request for ARPA-E shall be separate from the rest of the budget of the Department.

(B) Appropriations

Appropriations to the Fund shall be separate and distinct from the rest of the budget for the Department.

(4) Allocation

Of the amounts appropriated for a fiscal year under paragraph (2)-

- (A) not more than 50 percent of the amount shall be used to carry out subsection (e)(3)(D);
- (B) at least 5 percent of the amount shall be used for technology transfer and outreach activities, consistent with the goal described in subsection (c)(2)(D) and within the responsibilities of program directors described in subsection (g)(2)(B)(vii); and
- (C) no funds may be used for construction of new buildings or facilities during the 5-year period beginning on August 9, 2007.

(Pub. L. 110–69, title V, §5012, Aug. 9, 2007, 121 Stat. 621; Pub. L. 111–358, title IX, §904, Jan. 4, 2011, 124 Stat. 4045.)

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CHAPTER 152 — ENERGY INDEPENDENCE AND SECURITY

§17243. Bright Tomorrow Lighting Prizes

(a) Establishment

Not later than 1 year after December 19, 2007, as part of the program carried out under section 16396 of this title, the Secretary shall establish and award Bright Tomorrow Lighting Prizes for solid state lighting in accordance with this section.

(b) Prize specifications

(1) 60-Watt Incandescent Replacement Lamp Prize

The Secretary shall award a 60-Watt Incandescent Replacement Lamp Prize to an entrant that produces a solid-state-light package simultaneously capable of-

- (A) producing a luminous flux greater than 900 lumens;
- (B) consuming less than or equal to 10 watts;
- (C) having an efficiency greater than 90 lumens per watt;
- (D) having a color rendering index greater than 90;
- (E) having a correlated color temperature of not less than 2,750, and not more than 3,000, degrees Kelvin;
- (F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;
- (G) having a light distribution pattern similar to a soft 60-watt incandescent A19 bulb;
- (H) having a size and shape that fits within the maximum dimensions of an A19 bulb in accordance with American National Standards Institute standard C78.20–2003, figure C78.20–211;
- (I) using a single contact medium screw socket; and
- (J) mass production for a competitive sales commercial market satisfied by producing commercially accepted quality control lots of such units equal to or exceeding the criteria described in subparagraphs (A) through (I).

(2) PAR Type 38 Halogen Replacement Lamp Prize

The Secretary shall award a Parabolic Aluminized Reflector Type 38 Halogen Replacement Lamp Prize (referred to in this section as the “PAR Type 38 Halogen Replacement Lamp Prize”) to an entrant that produces a solid-state-light package simultaneously capable of-

- (A) producing a luminous flux greater than or equal to 1,350 lumens;
- (B) consuming less than or equal to 11 watts;
- (C) having an efficiency greater than 123 lumens per watt;
- (D) having a color rendering index greater than or equal to 90;
- (E) having a correlated color coordinate temperature of not less than 2,750, and not more than 3,000, degrees Kelvin;
- (F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;
- (G) having a light distribution pattern similar to a PAR 38 halogen lamp;

(H) having a size and shape that fits within the maximum dimensions of a PAR 38 halogen lamp in accordance with American National Standards Institute standard C78–21–2003, figure C78.21–238;

(I) using a single contact medium screw socket; and

(J) mass production for a competitive sales commercial market satisfied by producing commercially accepted quality control lots of such units equal to or exceeding the criteria described in subparagraphs (A) through (I).

(3) Twenty-First Century Lamp Prize

The Secretary shall award a Twenty-First Century Lamp Prize to an entrant that produces a solid-state-light-light 1 capable of-

(A) producing a light output greater than 1,200 lumens;

(B) having an efficiency greater than 150 lumens per watt;

(C) having a color rendering index greater than 90;

(D) having a color coordinate temperature between 2,800 and 3,000 degrees Kelvin; and

(E) having a lifetime exceeding 25,000 hours.

(c) Private funds

(1) In general

Subject to paragraph (2), and notwithstanding section 3302 of title 31, the Secretary may accept, retain, and use funds contributed by any person, government entity, or organization for purposes of carrying out this subsection-

(A) without further appropriation; and

(B) without fiscal year limitation.

(2) Prize competition

A private source of funding may not participate in the competition for prizes awarded under this section.

(d) Technical review

The Secretary shall establish a technical review committee composed of non-Federal officers to review entrant data submitted under this section to determine whether the data meets the prize specifications described in subsection (b).

(e) Third party administration

The Secretary may competitively select a third party to administer awards under this section.

(f) Eligibility for prizes

To be eligible to be awarded a prize under this section-

(1) in the case of a private entity, the entity shall be incorporated in and maintain a primary place of business in the United States; and

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- (2) in the case of an individual (whether participating as a single individual or in a group), the individual shall be a citizen or lawful permanent resident of the United States.

(g) Award amounts

Subject to the availability of funds to carry out this section, the amount of-

- (1) the 60-Watt Incandescent Replacement Lamp Prize described in subsection (b)(1) shall be \$10,000,000;
- (2) the PAR Type 38 Halogen Replacement Lamp Prize described in subsection (b)(2) shall be \$5,000,000; and
- (3) the Twenty-First Century Lamp Prize described in subsection (b)(3) shall be \$5,000,000.

(h) Federal procurement of solid-state-lights

(1) 60-watt incandescent replacement

Subject to paragraph (3), as soon as practicable after the successful award of the 60-Watt Incandescent Replacement Lamp Prize under subsection (b)(1), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with a goal of replacing the use of 60-watt incandescent lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(1) by not later than the date that is 5 years after the date the award is made.

(2) PAR 38 halogen replacement lamp replacement 1

Subject to paragraph (3), as soon as practicable after the successful award of the PAR Type 38 Halogen Replacement Lamp Prize under subsection (b)(2), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with the goal of replacing the use of PAR 38 halogen lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(2) by not later than the date that is 5 years after the date the award is made.

(3) Waivers

(A) In general

The Secretary or the Administrator of General Services may waive the application of paragraph (1) or (2) if the Secretary or Administrator determines that the return on investment from the purchase of a solid-state-light package described in paragraph (1) or (2) of subsection (b), respectively, is cost prohibitive.

(B) Report of waiver

If the Secretary or Administrator waives the application of paragraph (1) or (2), the Secretary or Administrator, respectively, shall submit to Congress an annual report that describes the waiver and provides a detailed justification for the waiver.

(i) Report

Not later than 2 years after December 19, 2007, and annually thereafter, the Administrator of General Services shall submit to the Energy Information Agency a report describing the quantity, type, and cost of each lighting product purchased by the Federal Government.

(j) Bright Tomorrow Lighting Award Fund

(1) Establishment

There is established in the United States Treasury a Bright Tomorrow Lighting permanent fund without fiscal year limitation to award prizes under paragraphs (1), (2), and (3) of subsection (b).

(2) Sources of funding

The fund established under paragraph (1) shall accept-

(A) fiscal year appropriations; and

(B) private contributions authorized under subsection (c).

(k) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110–140, title VI, §655, Dec. 19, 2007, 121 Stat. 1700.)

TITLE 47 — TELECOMMUNICATIONS

CHAPTER 14 — MAKING OPPORTUNITIES FOR BROADBAND INVESTMENT AND LIMITING EXCESSIVE AND NEEDLESS OBSTACLES TO WIRELESS

§1509. Spectrum Challenge Prize

(a) Short title

This section may be cited as the “Spectrum Challenge Prize Act”.

(b) Definition of prize competition

In this section, the term “prize competition” means a prize competition conducted by the Secretary under subsection (c)(1).

(c) Spectrum Challenge Prize

(1) In general

The Secretary, in consultation with the Assistant Secretary of Commerce for Communications and Information and the Under Secretary of Commerce for Standards and Technology, shall, subject to the availability of funds for prize competitions under this section-

(A) conduct prize competitions to dramatically accelerate the development and commercialization of technology that improves spectrum efficiency and is capable of cost-effective deployment; and

(B) define a measurable set of performance goals for participants in the prize competitions to demonstrate their solutions on a level playing field while making a significant advancement over the current state of the art.

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.
For the latest federal regulations, the reader should refer to www.ecfr.gov.

(2) Authority of Secretary

In carrying out paragraph (1), the Secretary may-

- (A) enter into a grant, contract, cooperative agreement, or other agreement with a private sector for-profit or nonprofit entity to administer the prize competitions;
- (B) invite the Defense Advanced Research Projects Agency, the Commission, the National Aeronautics and Space Administration, the National Science Foundation, or any other Federal agency to provide advice and assistance in the design or administration of the prize competitions; and
- (C) award not more than \$5,000,000, in the aggregate, to the winner or winners of the prize competitions.

(d) Criteria

Not later than 180 days after the date on which funds for prize competitions are made available pursuant to this section, the Commission shall publish a technical paper on spectrum efficiency providing criteria that may be used for the design of the prize competitions.

(e) Authorization of appropriations

There are authorized to be appropriated such sums as may be necessary to carry out this section.

(Pub. L. 115–141, div. P, title VI, §619, Mar. 23, 2018, 132 Stat. 1113.)

TITLE 51 — NATIONAL AND COMMERCIAL SPACE PROGRAMS

CHAPTER 201 — NATIONAL AERONAUTICS AND SPACE PROGRAM

§20113. Powers of the Administration in performance of functions [an excerpt]

- (e) Contracts, Leases, and Agreements.—In the performance of its functions, the Administration is authorized, without regard to subsections (a) and (b) of section 3324 of title 31, to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any State, territory, or possession, or with any political subdivision thereof, or with any person, firm, association, corporation, or educational institution. To the maximum extent practicable and consistent with the accomplishment of the purpose of this chapter, such contracts, leases, agreements, and other transactions shall be allocated by the Administrator in a manner which will enable small-business concerns to participate equitably and proportionately in the conduct of the work of the Administration.
- (f) Cooperation With Federal Agencies and Others.—In the performance of its functions, the Administration is authorized to use, with their consent, the services, equipment, personnel, and facilities of Federal and other agencies with or without reimbursement, and on a similar basis to cooperate with other public and private

agencies and instrumentalities in the use of services, equipment, and facilities. Each department and agency of the Federal Government shall cooperate fully with the Administration in making its services, equipment, personnel, and facilities available to the Administration, and any such department or agency is authorized, notwithstanding any other provision of law, to transfer to or to receive from the Administration, without reimbursement, aeronautical and space vehicles, and supplies and equipment other than administrative supplies or equipment.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3333; Pub. L. 114–90, title I, §112(d), Nov. 25, 2015, 129 Stat. 712; Pub. L. 115–10, title VIII, §835(d), Mar. 21, 2017, 131 Stat. 69.)

§20144. Prize authority

- (a) In General.-The Administration may carry out a program to competitively award cash prizes to stimulate innovation in basic and applied research, technology development, and prototype demonstration that have the potential for application to the performance of the space and aeronautical activities of the Administration. The Administration may carry out a program to award prizes only in conformity with this section.
- (b) Topics.-In selecting topics for prize competitions, the Administrator shall consult widely both within and outside the Federal Government, and may empanel advisory committees. The Administrator shall give consideration to prize goals such as the demonstration of the ability to provide energy to the lunar surface from space-based solar power systems, demonstration of innovative near-Earth object survey and deflection strategies, and innovative approaches to improving the safety and efficiency of aviation systems.
- (c) Advertising.-The Administrator shall widely advertise prize competitions to encourage participation.
- (d) Requirements and Registration.-For each prize competition, the Administrator shall publish a notice in the Federal Register announcing the subject of the competition, the rules for being eligible to participate in the competition, the amount of the prize, and the basis on which a winner will be selected.
- (e) Eligibility.-To be eligible to win a prize under this section, an individual or entity-
 - (1) shall have registered to participate in the competition pursuant to any rules promulgated by the Administrator under subsection (d);
 - (2) shall have complied with all the requirements under this section;
 - (3) in the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States; and
 - (4) shall not be a Federal entity or Federal employee acting within the scope of their employment.
- (f) Liability.-

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.
For the latest federal regulations, the reader should refer to www.ecfr.gov.

- (1) Assumption of risk.-Registered participants must agree to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in a competition, whether such injury, death, damage, or loss arises through negligence or otherwise. For the purposes of this paragraph, the term “related entity” means a contractor or subcontractor at any tier, and a supplier, user, customer, cooperating party, grantee, investigator, or detailee.
- (2) Liability insurance.-Participants must obtain liability insurance or demonstrate financial responsibility, in amounts determined by the Administrator, for claims by-
 - (A) a third party for death, bodily injury, or property damage, or loss resulting from an activity carried out in connection with participation in a competition, with the Federal Government named as an additional insured under the registered participant’s insurance policy and registered participants agreeing to indemnify the Federal Government against third party claims for damages arising from or related to competition activities; and
 - (B) the Federal Government for damage or loss to Government property resulting from such an activity.
- (g) Judges.-For each competition, the Administration, either directly or through an agreement under subsection (h), shall assemble a panel of qualified judges to select the winner or winners of the prize competition on the basis described pursuant to subsection (d). Judges for each competition shall include individuals from outside the Administration, including from the private sector. A judge may not-
 - (1) have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in a competition; or
 - (2) have a familial or financial relationship with an individual who is a registered participant.
- (h) Administering the Competition.-The Administrator may enter into an agreement with a private, nonprofit entity to administer the prize competition, subject to the provisions of this section.
- (i) Funding.-
 - (1) Sources.-Prizes under this section may consist of Federal appropriated funds and funds provided by the private sector for such cash prizes. The Administrator may accept funds from other Federal agencies for such cash prizes. The Administrator may not give any special consideration to any private sector entity in return for a donation.
 - (2) Availability.-
 - (A) Definition of provisions known as the anti-deficiency act.-In this paragraph, the term “provisions known as the Anti-Deficiency Act” means sections 1341, 1342, 1349(a), 1350, 1351, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, and 1519 of title 31.
 - (B) In general.-Notwithstanding any other provision of law, funds appropriated for prize awards under this section shall remain available until expended,

and may be transferred, reprogrammed, or expended for other purposes only after the expiration of 10 fiscal years after the fiscal year for which the funds were originally appropriated. No provision in this section permits obligation or payment of funds in violation of the provisions known as the Anti-Deficiency Act.

(3) Appropriation or commitment of funds required before announcement of prize or increase.-

(A) In general.-No prize may be announced under subsection (d) until all the funds needed to pay out the announced amount of the prize have been appropriated or committed in writing by a private source.

(B) Increase.-The Administrator may increase the amount of a prize after an initial announcement is made under subsection (d) if-

(i) notice of the increase is provided in the same manner as the initial notice of the prize; and

(ii) the funds needed to pay out the announced amount of the increase have been appropriated or committed in writing by a private source.

(4) Notice to committees for prize greater than \$50,000,000.-No prize competition under this section may offer a prize in an amount greater than \$50,000,000 unless 30 days have elapsed after written notice has been transmitted to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

(5) Approval of administrator for prize greater than \$1,000,000.-No prize competition under this section may result in the award of more than \$1,000,000 in cash prizes without the approval of the Administrator.

(j) Use of Administration Name or Insignia.-A registered participant in a competition under this section may use the Administration's name, initials, or insignia only after prior review and written approval by the Administration.

(k) Compliance With Existing Law.-The Federal Government shall not, by virtue of offering or providing a prize under this section, be responsible for compliance by registered participants in a prize competition with Federal law, including licensing, export control, and non-proliferation laws, and related regulations.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3350; Pub. L. 111-358, title I, §105(b), Jan. 4, 2011, 124 Stat. 3993.)

For the legislative history and the latest authoritative version of any section of the United States Code, the reader should refer to <http://uscode.house.gov>.
For the latest federal regulations, the reader should refer to www.ecfr.gov.

SECTION 4
Executive Guidance

EXECUTIVE ORDER 12591

FACILITATING ACCESS TO SCIENCE AND TECHNOLOGY

Source: The provisions of Executive Order 12591 of Apr. 10, 1987, appear at 52 FR 13414, 3 CFR, 1987 Comp., p. 220, unless otherwise noted.

By the authority vested in me as President by the Constitution and laws of the United States of America, including the Federal Technology Transfer Act of 1986 (Public Law 99-502), the Trademark Clarification Act of 1984 (Public Law 98-620), and the University and Small Business Patent Procedure Act of 1980 (Public Law 96-517), and in order to ensure that Federal agencies and laboratories assist universities and the private sector in broadening our technology base by moving new knowledge from the research laboratory into the development of new products and processes, it is hereby ordered as follows:

Section 1. Transfer of Federally Funded Technology.

- (a) The head of each Executive department and agency, to the extent permitted by law, shall encourage and facilitate collaboration among Federal laboratories, State and local governments, universities, and the private sector, particularly small business, in order to assist in the transfer of technology to the marketplace.
- (b) The head of each Executive department and agency shall, within overall funding allocations and to the extent permitted by law:
 - (1) delegate authority to its government-owned, government-operated Federal laboratories:
 - (A) to enter into cooperative research and development agreements with other Federal laboratories, State and local governments, universities, and the private sector; and
 - (B) to license, assign, or waive rights to intellectual property developed by the laboratory either under such cooperative research or development agreements and from within individual laboratories.
 - (2) identify and encourage persons to act as conduits between and among Federal laboratories, universities, and the private sector for the transfer of technology developed from federally funded research and development efforts;
 - (3) ensure that State and local governments, universities, and the private sector are provided with information on the technology, expertise, and facilities available in Federal laboratories;
 - (4) promote the commercialization, in accord with my Memorandum to the Heads of Executive Departments and Agencies of February 18, 1983, of patentable results of federally funded research by granting to all contractors, regardless of size, the title to patents made in whole or in part with Federal funds, in exchange for royalty-free use by or on behalf of the government;

- (5) administer all patents and licenses to inventions made with federal assistance, which are owned by the non-profit contractor or grantee, in accordance with Section 202(c)(7) of Title 35 of the United States Code as amended by Public Law 98-620, without regard to limitations on licensing found in that section prior to amendment or in Institutional Patent Agreements now in effect that were entered into before that law was enacted on November 8, 1984, unless, in the case of an invention that has not been marketed, the funding agency determines, based on information in its files, that the contractor or grantee has not taken adequate steps to market the inventions, in accordance with applicable law or an Institutional Patent Agreement;
- (6) implement, as expeditiously as practicable, royalty-sharing programs with inventors who were employees of the agency at the time their inventions were made, and cash award programs; and
- (7) cooperate, under policy guidance provided by the Office of Federal Procurement Policy, with the heads of other affected departments and agencies in the development of a uniform policy permitting Federal contractors to retain rights to software, engineering drawings, and other technical data generated by Federal grants and contracts, in exchange for royalty-free use by or on behalf of the government.

[Sec. 1 amended by Executive Order 12618 of Dec. 22, 1987, 52 FR 48661, 3 CFR, 1987 Comp., p. 262]

Sec. 2. Establishment of the Technology Share Program.

The Secretaries of Agriculture, Commerce, Energy, and Health and Human Services and the Administrator of the National Aeronautics and Space Administration shall select one or more of their Federal laboratories to participate in the Technology Share Program. Consistent with its mission and policies and within its overall funding allocation in any year, each Federal laboratory so selected shall:

- (a) Identify areas of research and technology of potential importance to long-term national economic competitiveness and in which the laboratory possesses special competence and/or unique facilities;
- (b) Establish a mechanism through which the laboratory performs research in areas identified in Section 2(a) as a participant of a consortium composed of United States industries and universities. All consortia so established shall have, at a minimum, three individual companies that conduct the majority of their business in the United States; and
- (c) Limit its participation in any consortium so established to the use of laboratory personnel and facilities. However, each laboratory may also provide financial support generally not to exceed 25 percent of the total budget for the activities of the consortium. Such financial support by any laboratory in all such consortia shall be limited to a maximum of \$5 million per annum.

Sec. 3. Technology Exchange—Scientists and Engineers.

The Executive Director of the President's Commission on Executive Exchange shall assist Federal agencies, where appropriate, by developing and implementing an exchange program whereby scientists and engineers in the private sector may take temporary assignments in Federal laboratories, and scientists and engineers in Federal laboratories may take temporary assignments in the private sector.

Sec. 4. International Science and Technology.

In order to ensure that the United States benefits from and fully exploits scientific research and technology developed abroad,

- (a) The head of each Executive department and agency, when negotiating or entering into cooperative research and development agreements and licensing arrangements with foreign persons or industrial organizations (where these entities are directly or indirectly controlled by a foreign company or government), shall, in consultation with the United States Trade Representative, give appropriate consideration:
 - (1) to whether such foreign companies or governments permit and encourage United States agencies, organizations, or persons to enter into cooperative research and development agreements and licensing arrangements on a comparable basis;
 - (2) to whether those foreign governments have policies to protect the United States intellectual property rights; and
 - (3) where cooperative research will involve data, technologies, or products subject to national security export controls under the laws of the United States, to whether those foreign governments have adopted adequate measures to prevent the transfer of strategic technology to destinations prohibited under such national security export controls, either through participation in the Coordinating Committee for Multilateral Export Controls (COCOM) or through other international agreements to which the United States and such foreign governments are signatories.
- (b) The Secretary of State shall develop a recruitment policy that encourages scientists and engineers from other Federal agencies, academic institutions, and industry to apply for assignments in embassies of the United States; and
- (c) The Secretaries of State and Commerce and the Director of the National Science Foundation shall develop a central mechanism for the prompt and efficient dissemination of science and technology information developed abroad to users in Federal laboratories, academic institutions, and the private sector on a fee-for-service basis.

Sec. 5. Technology Transfer from the Department of Defense.

Within 6 months of the date of this Order, the Secretary of Defense shall identify a list of funded technologies that would be potentially useful to United States industries and universities. The Secretary shall then accelerate efforts to make these technologies more readily available to United States industries and universities.

Sec. 6. Basic Science and Technology Centers.

The head of each Executive department and agency shall examine the potential for including the establishment of university research centers in engineering, science, or technology in the strategy and planning for any future research and development programs. Such university centers shall be jointly funded by the Federal Government, the private sector, and, where appropriate, the States and shall focus on areas of fundamental research and technology that are both scientifically promising and have the potential to contribute to the Nation's long-term economic competitiveness.

Sec. 7. Reporting Requirements.

- (a) Within 1 year from the date of this Order, the Director of the Office of Science and Technology Policy shall convene an interagency task force comprised of the heads of representative agencies and the directors of representative Federal laboratories, or their designees, in order to identify and disseminate creative approaches to technology transfer from Federal laboratories. The task force will report to the President on the progress of and problems with technology transfer from Federal laboratories.
- (b) Specifically, the report shall include:
 - (1) a listing of current technology transfer programs and an assessment of the effectiveness of these programs;
 - (2) identification of new or creative approaches to technology transfer that might serve as model programs for Federal laboratories;
 - (3) criteria to assess the effectiveness and impact on the Nation's economy of planned or future technology transfer efforts; and
 - (4) a compilation and assessment of the Technology Share Program established in Section 2 and, where appropriate, related cooperative research and development venture programs.

Sec. 8. Relation to Existing Law.

Nothing in this Order shall affect the continued applicability of any existing laws or regulations relating to the transfer of United States technology to other nations. The head of any Executive department or agency may exclude from consideration, under this Order, any technology that would be, if transferred, detrimental to the interests of national security.

RONALD REAGAN

The White House

April 10, 1987

PRESIDENTIAL MEMORANDUM

ACCELERATING TECHNOLOGY TRANSFER AND COMMERCIALIZATION OF FEDERAL RESEARCH IN SUPPORT OF HIGH-GROWTH BUSINESSES

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

SUBJECT: Accelerating Technology Transfer and Commercialization of Federal Research in Support of High- Growth Businesses

Section 1. Policy. Innovation fuels economic growth, the creation of new industries, companies, jobs, products and services, and the global competitiveness of U.S. industries. One driver of successful innovation is technology transfer, in which the private sector adapts Federal research for use in the marketplace. One of the goals of my Administration's "Startup America" initiative, which supports high-growth entrepreneurship, is to foster innovation by increasing the rate of technology transfer and the economic and societal impact from Federal research and development (R&D) investments. This will be accomplished by committing each executive department and agency (agency) that conducts R&D to improve the results from its technology transfer and commercialization activities. The aim is to increase the successful outcomes of these activities significantly over the next 5 years, while simultaneously achieving excellence in our basic and mission-focused research activities.

I direct that the following actions be taken to establish goals and measure performance, streamline administrative processes, and facilitate local and regional partnerships in order to accelerate technology transfer and support private sector commercialization.

Sec. 2. Establish Goals and Measure Progress. Establishing performance goals, metrics, and evaluation methods, as well as implementing and tracking progress relative to those goals, is critical to improving the returns from Federal R&D investments. Therefore, I direct that:

- (a) Agencies with Federal laboratories shall develop plans that establish performance goals to increase the number and pace of effective technology transfer and commercialization activities in partnership with non-federal entities, including private firms, research organizations, and non-profit entities. These plans shall cover the 5-year period from 2013 through 2017 and shall contain goals, metrics, and methods to evaluate progress relative to the performance goals. These goals, metrics, and evaluation methods may vary by agency as appropriate to that agency's mission and types of research activities, and may include the number and quality of, among other things, invention disclosures, licenses issued on existing patents, Cooperative Research and Development Agreements (CRADAs), industry partnerships, new products, and successful self-sustaining spinoff companies created for such products. Within 180 days of the date of this memorandum, these plans shall be submitted to the Office of Management and Budget (OMB) which,

in consultation with the Office of Science and Technology Policy (OSTP) and the Department of Commerce, shall review and monitor implementation of the plans.

- (b) The Interagency Workgroup on Technology Transfer, established pursuant to Executive Order 12591 of April 10, 1987, shall recommend to the Department of Commerce opportunities for improving technology transfer from Federal laboratories, including: (i) current technology transfer programs and standards for assessing the effectiveness of these programs; (ii) new or creative approaches to technology transfer that might serve as model programs for Federal laboratories; (iii) criteria to assess the effectiveness and impact on the Nation's economy of planned or future technology transfer efforts; and (iv) an assessment of cooperative research and development venture programs.
- (c) The Secretary of Commerce, in consultation with other agencies, including the National Center for Science and Engineering Statistics, shall improve and expand, where appropriate, its collection of metrics in the Department of Commerce's annual technology transfer summary report, submitted pursuant to 15 U.S.C. 3710(g)(2).
- (d) The heads of agencies with Federal laboratories are encouraged to include technology transfer efforts in overall laboratory evaluation.

Sec. 3. Streamline the Federal Government's Technology Transfer and Commercialization Process. Streamlining licensing procedures, improving public availability of federally owned inventions from across the Federal Government, and improving the executive branch's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (SBTT) programs based on best practices will accelerate technology transfer from Federal laboratories and other facilities and spur entrepreneurship. Some agencies have already implemented administrative changes to their SBIR and SBTT programs on a pilot basis and achieved significant results, such as reducing award times by 50 percent or more. Over the past year, some agencies have also initiated pilot programs to streamline the SBIR award timeline and licensing process for small businesses. In addition, some agencies have developed new short-term exclusive license agreements for startups to facilitate licensing of inventions to small companies. Therefore:

- (a) Agencies with Federal laboratories shall review their licensing procedures and practices for establishing CRADAs with the goal of reducing the time required to license their technologies and establish CRADAs to the maximum practicable extent.
- (b) The Federal Chief Information Officer and the Assistant to the President and Chief Technology Officer shall, in coordination with other agencies: (i) list all publicly available federally owned inventions and, when available, licensing agreements on a public Government database; (ii) develop strategies to increase the usefulness and accessibility of this data, such as competitions, awards or prizes; and (iii) report their initial progress to OMB and OSTP within 180 days of the date of this memorandum.
- (c) The heads of agencies participating in the SBIR and SBTT programs shall implement administrative practices that reduce the time from grant application to award by the maximum practicable extent; publish performance timelines to increase transparency and accountability; explore award flexibility to encourage high quality submissions; engage private sector scientists and engineers in

reviewing grant proposals; encourage private sector co-investment in SBIR grantees; partner with external organizations such as mentoring programs, university proof of concept centers, and regional innovation clusters; and track scientific and economic outcomes. The OMB, OSTP, and the Small Business Administration shall work with agencies to facilitate, to the extent practicable, a common reporting of these performance measures.

Sec. 4. Facilitate Commercialization through Local and Regional Partnerships. Agencies must take steps to enhance successful technology-innovation networks by fostering increased Federal laboratory engagement with external partners, including universities, industry consortia, economic development entities, and State and local governments. Accordingly:

- (a) I encourage agencies with Federal laboratories to collaborate, consistent with their missions and authorities, with external partners to share the expertise of Federal laboratories with businesses and to participate in regional technology innovation clusters that are in place across the country.
- (b) I encourage agencies, where appropriate and in accordance with OMB Circular A-11, to use existing authorities, such as Enhanced Use Leasing or Facility Use Agreements, to locate applied research and business support programs, such as incubators and research parks, on or near Federal laboratories and other research facilities to further technology transfer and commercialization.
- (c) I encourage agencies with Federal laboratories and other research facilities to engage in public-private partnerships in those technical areas of importance to the agency's mission with external partners to strengthen the commercialization activities in their local region.

Sec. 5. General Provisions. (a) For purposes of this memorandum, the term "Federal laboratories" shall have the meaning set forth for that term in 15 U.S.C. 3703(4).

- (b) This memorandum shall be implemented consistent with applicable law and subject to the availability of appropriations.
- (c) Nothing in this memorandum shall be construed to impair or otherwise affect the functions of the Director of OMB relating to budgetary, administrative, and legislative proposals.
- (d) Independent agencies are strongly encouraged to comply with this memorandum.
- (e) This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

BARACK OBAMA

The White House

October 28, 2011

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