

Sec.	
3708.	Administrative arrangements.
3709.	Repealed.
3710.	Utilization of Federal technology.
3710a.	Cooperative research and development agreements.
3710b.	Rewards for scientific, engineering, and technical personnel of Federal agencies.
3710c.	Distribution of royalties received by Federal agencies.
3710d.	Employee activities.
3711.	National Technology and Innovation Medal.
3711a.	Malcolm Baldrige National Quality Award.
3711b.	Conference on advanced automotive technologies.
3711c.	Advanced motor vehicle research award.
3712.	Personnel exchanges.
3713.	Authorization of appropriations.
3714.	Spending authority.
3715.	Use of partnership intermediaries.
3716.	Critical industries.
3717.	National Quality Council.
3718.	President's Council on Innovation and Competitiveness.
3719.	Prize competitions.
3720.	Office of Innovation and Entrepreneurship.
3721.	Federal loan guarantees for innovative technologies in manufacturing.
3722.	Regional innovation program.
3723.	STEM apprenticeship programs.
3724.	Crowdsourcing and citizen science.

### § 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.

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

#### AMENDMENTS

1986—Par. (10). Pub. L. 99-502 inserted “, which include inventions, computer software, and training technologies,”.

#### SHORT TITLE OF 2017 AMENDMENT

Pub. L. 114-329, title IV, §401(a), Jan. 6, 2017, 130 Stat. 3016, provided that: “This section [enacting section 3724 of this title and amending sections 272, 278, and 3719 of this title] may be cited as the ‘Science Prize Competition Act’.”

#### SHORT TITLE OF 2000 AMENDMENT

Pub. L. 106-404, §1, Nov. 1, 2000, 114 Stat. 1742, provided that: “This Act [enacting section 7261c of Title 42, The Public Health and Welfare, amending sections 3703, 3704, 3707, 3710, 3710a, 3710c, 3714, and 3715 of this title and sections 200, 202, 207, and 209 of Title 35, Patents, and enacting provisions set out as notes under this section and section 3710a of this title] may be cited as the ‘Technology Transfer Commercialization Act of 2000’.”

#### SHORT TITLE OF 1996 AMENDMENT

Pub. L. 104-113, §1, Mar. 7, 1996, 110 Stat. 775, provided that: “This Act [amending sections 272, 278, 278e, 278g-2, 3710, 3710a, 3710c, 3710d, 5401, 5402, 5404 to 5406, 5408, 5409, and 5412 of this title and section 210 of Title 35, Patents, repealing sections 5403 and 5413 of this title, and enacting provisions set out as notes under this section and sections 272 and 275 of this title] may be cited as the ‘National Technology Transfer and Advancement Act of 1995’.”

#### SHORT TITLE OF 1992 AMENDMENT

Pub. L. 102-245, §1, Feb. 14, 1992, 106 Stat. 7, provided that: “This Act [enacting sections 1536, 3704b-1, 3704b-2, 3716, and 3717 of this title and section 6618 of Title 42,

The Public Health and Welfare, amending sections 272, 278d, 278g, 278g-1, 278k, 278n, 1453, 1454, 3703, 3704, 3704b, 3710, 3710a, 3711a, 4603, 4603a, and 4632 of this title and section 6683 of Title 42, enacting provisions set out as notes under this section, sections 271, 278f, 278n, and 1453 of this title, and section 6611 of Title 42, and amending provisions set out as a note under section 278f of this title] may be cited as the ‘American Technology Preeminence Act of 1991’.”

Pub. L. 102-245, title I, §101, Feb. 14, 1992, 106 Stat. 7, provided that: “This title [enacting sections 1536, 3704b-1, and 3704b-2 of this title, amending sections 278d, 278g, 278g-1, 278k, 1453, 1454, 4603, 4603a, and 4632 of this title, enacting provisions set out as notes under this section and sections 278f and 1453 of this title, and amending provisions set out as a note under section 278f of this title] may be cited as the ‘Technology Administration Authorization Act of 1991’.”

#### SHORT TITLE OF 1989 AMENDMENT

Pub. L. 101-189, div. C, title XXXI, §3131, Nov. 29, 1989, 103 Stat. 1674, provided that: “This part [part C (§§3131-3133) of title XXXI of div. C of Pub. L. 101-189, amending sections 3710, 3710a, and 3710c of this title and enacting provisions set out as notes under this section and section 3710a of this title] may be cited as the ‘National Competitiveness Technology Transfer Act of 1989’.”

#### SHORT TITLE OF 1988 AMENDMENT

Pub. L. 100-519, title II, §211, Oct. 24, 1988, 102 Stat. 2594, provided that: “This subtitle [subtitle B (§§211, 212) of title II of Pub. L. 100-519, enacting section 3704b of this title and amending section 3710 of this title] may be cited as the ‘National Technical Information Act of 1988’.”

#### SHORT TITLE OF 1987 AMENDMENT

Pub. L. 100-107, §1, Aug. 20, 1987, 101 Stat. 724, provided that: “This Act [enacting section 3711a of this title, amending section 3708 of this title, and enacting provisions set out as a note under section 3711a of this title] may be cited as the ‘Malcolm Baldrige National Quality Improvement Act of 1987’.”

#### SHORT TITLE OF 1986 AMENDMENTS

Pub. L. 99-502, §1, Oct. 20, 1986, 100 Stat. 1785, provided that: “This Act [enacting sections 3710a to 3710d of this title, amending this section, sections 3702 to 3705, 3707, 3708, 3710 to 3710d, and 3711 to 3714 of this title, and section 210 of Title 35, Patents, and repealing section 3709 of this title] may be cited as the ‘Federal Technology Transfer Act of 1986’.”

Pub. L. 99-382, §1, Aug. 14, 1986, 100 Stat. 811, provided: “That this Act [amending section 3704 of this title] may be cited as the ‘Japanese Technical Literature Act of 1986’.”

#### SHORT TITLE

Pub. L. 96-480, §1, Oct. 21, 1980, 94 Stat. 2311, provided: “That this Act [enacting this chapter] may be cited as the ‘Stevenson-Wydler Technology Innovation Act of 1980’.”

#### STUDY ON ECONOMIC COMPETITIVENESS AND INNOVATIVE CAPACITY OF UNITED STATES AND DEVELOPMENT OF NATIONAL ECONOMIC COMPETITIVENESS STRATEGY

Pub. L. 111-358, title VI, §604, Jan. 4, 2011, 124 Stat. 4037, provided that:

##### “(a) STUDY.—

“(1) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act [Jan. 4, 2011], the Secretary of Commerce shall complete a comprehensive study of the economic competitiveness and innovative capacity of the United States.

“(2) MATTERS COVERED.—The study required by paragraph (1) shall include the following:

“(A) An analysis of the United States economy and innovation infrastructure.

“(B) An assessment of the following:

“(i) The current competitive and innovation performance of the United States economy relative to other countries that compete economically with the United States.

“(ii) Economic competitiveness and domestic innovation in the current business climate, including tax and Federal regulatory policy.

“(iii) The business climate of the United States and those of other countries that compete economically with the United States.

“(iv) Regional issues that influence the economic competitiveness and innovation capacity of the United States, including—

“(I) the roles of State and local governments and institutions of higher education; and

“(II) regional factors that contribute positively to innovation.

“(v) The effectiveness of the Federal Government in supporting and promoting economic competitiveness and innovation, including any duplicative efforts of, or gaps in coverage between, Federal agencies and departments.

“(vi) Barriers to competitiveness in newly emerging business or technology sectors, factors influencing underperforming economic sectors, unique issues facing small and medium enterprises, and barriers to the development and evolution of start-ups, firms, and industries.

“(vii) The effects of domestic and international trade policy on the competitiveness of the United States and the United States economy.

“(viii) United States export promotion and export finance programs relative to export promotion and export finance programs of other countries that compete economically with the United States, including Canada, France, Germany, Italy, Japan, Korea, and the United Kingdom, with noting of export promotion and export finance programs carried out by such countries that are not analogous to any programs carried out by the United States.

“(ix) The effectiveness of current policies and programs affecting exports, including an assessment of Federal trade restrictions and State and Federal export promotion activities.

“(x) The effectiveness of the Federal Government and Federally funded research and development centers in supporting and promoting technology commercialization and technology transfer.

“(xi) Domestic and international intellectual property policies and practices.

“(xii) Manufacturing capacity, logistics, and supply chain dynamics of major export sectors, including access to a skilled workforce, physical infrastructure, and broadband network infrastructure.

“(xiii) Federal and State policies relating to science, technology, and education and other relevant Federal and State policies designed to promote commercial innovation, including immigration policies.

“(C) Development of recommendations on the following:

“(i) How the United States should invest in human capital.

“(ii) How the United States should facilitate entrepreneurship and innovation.

“(iii) How best to develop opportunities for locally and regionally driven innovation by providing Federal support.

“(iv) How best to strengthen the economic infrastructure and industrial base of the United States.

“(v) How to improve the international competitiveness of the United States.

“(3) CONSULTATION.—

“(A) IN GENERAL.—The study required by paragraph (1) shall be conducted in consultation with

the National Economic Council of the Office of Policy Development, such Federal agencies as the Secretary considers appropriate, and the Innovation Advisory Board established under subparagraph (B). The Secretary shall also establish a process for obtaining comments from the public.

“(B) INNOVATION ADVISORY BOARD.—

“(i) IN GENERAL.—The Secretary shall establish an Innovation Advisory Board for purposes of obtaining advice with respect to the conduct of the study required by paragraph (1).

“(ii) COMPOSITION.—The Advisory Board established under clause (i) shall be comprised of 15 members, appointed by the Secretary—

“(I) who shall represent all major industry sectors;

“(II) a majority of whom should be from private industry, including large and small firms, representing advanced technology sectors and more traditional sectors that use technology; and

“(III) who may include economic or innovation policy experts, State and local government officials active in technology-based economic development, and representatives from higher education.

“(iii) EXEMPTION FROM FACa.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the advisory board established under clause (i).

“(b) STRATEGY.—

“(1) IN GENERAL.—Not later than 1 year after the completion of the study required by subsection (a), the Secretary shall develop, based on the study required by subsection (a)(1), a national 10-year strategy to strengthen the innovative and competitive capacity of the Federal Government, State and local governments, United States institutions of higher education, and the private sector of the United States.

“(2) ELEMENTS.—The strategy required by paragraph (1) shall include the following:

“(A) Actions to be taken by individual Federal agencies and departments to improve competitiveness.

“(B) Proposed legislative actions for consideration by Congress.

“(C) Annual goals and milestones for the 10-year period of the strategy.

“(D) A plan for monitoring the progress of the Federal Government with respect to improving conditions for innovation and the competitiveness of the United States.

“(c) REPORT.—

“(1) IN GENERAL.—Upon the completion of the strategy required by subsection (b), the Secretary of Commerce shall submit to Congress and the President a report on the study conducted under subsection (a) and the strategy developed under subsection (b).

“(2) ELEMENTS.—The report required by paragraph (1) shall include the following:

“(A) The findings of the Secretary with respect to the study conducted under subsection (a).

“(B) The strategy required by subsection (b).”

PROMOTING USE OF HIGH-END COMPUTING SIMULATION AND MODELING BY SMALL- AND MEDIUM-SIZED MANUFACTURERS

Pub. L. 111-358, title VI, §605, Jan. 4, 2011, 124 Stat. 4040, provided that:

“(a) FINDINGS.—Congress finds that—

“(1) the utilization of high-end computing simulation and modeling by large-scale government contractors and Federal research entities has resulted in substantial improvements in the development of advanced manufacturing technologies; and

“(2) such simulation and modeling would also benefit small- and medium-sized manufacturers in the United States if such manufacturers were to deploy such simulation and modeling throughout their manufacturing chains.

“(b) POLICY.—It is the policy of the United States to take all effective measures practicable to ensure that Federal programs and policies encourage and contribute to the use of high-end computing simulation and modeling in the United States manufacturing sector.

“(c) STUDY.—

“(1) IN GENERAL.—Not later than 30 days after the date of the enactment of this Act [Jan. 4, 2011], the Secretary of Commerce, in consultation with the Secretary of Energy and the Director of the Office of Science and Technology Policy, shall carry out, through an interagency consulting process, a study of the barriers to the use of high-end computing simulation and modeling by small- and medium-sized manufacturers in the United States.

“(2) FACTORS.—In carrying out the study required by paragraph (1), the Secretary of Commerce, in consultation with the Secretary of Energy and the Director of the Office of Science and Technology Policy, shall consider the following:

“(A) The access of small- and medium-sized manufacturers in the United States to high-performance computing facilities and resources.

“(B) The availability of software and other applications tailored to meet the needs of such manufacturers.

“(C) Whether such manufacturers employ or have access to individuals with appropriate expertise for the use of such facilities and resources.

“(D) Whether such manufacturers have access to training to develop such expertise.

“(E) The availability of tools and other methods to such manufacturers to understand and manage the costs and risks associated with transitioning to the use of such facilities and resources.

“(3) REPORT.—Not later than 270 days after the commencement of the study required by paragraph (1), the Secretary of Commerce shall, in consultation with the Secretary of Energy and the Director of the Office of Science and Technology Policy, submit to Congress a report on such study. Such report shall include such recommendations for such legislative or administrative action as the Secretary of Commerce considers appropriate in light of the study to increase the utilization of high-end computing simulation and modeling by small- and medium-sized manufacturers in the United States.

“(d) AUTHORIZATION OF DEMONSTRATION AND PILOT PROGRAMS.—As part of the study required by subsection (c)(1), the Secretary of Commerce, the Secretary of Energy, and the Director of the Office of Science and Technology Policy may carry out such demonstration or pilot programs as either [the] Secretary or the Director considers appropriate to gather experiential data to evaluate the feasibility and advisability of a specific program or policy initiative to reduce barriers to the utilization of high-end computer modeling and simulation by small- and medium-sized manufacturers in the United States.”

CONGRESSIONAL FINDINGS; 2000 AMENDMENT

Pub. L. 106-404, §2, Nov. 1, 2000, 114 Stat. 1742, provided that: “The Congress finds that—

“(1) the importance of linking our unparalleled network of over 700 Federal laboratories and our Nation’s universities with United States industry continues to hold great promise for our future economic prosperity;

“(2) the enactment of the Bayh-Dole Act [35 U.S.C. 200 et seq.] in 1980 was a landmark change in United States technology policy, and its success provides a framework for removing bureaucratic barriers and for simplifying the granting of licenses for inventions that are now in the Federal Government’s patent portfolio;

“(3) Congress has demonstrated a commitment over the past 2 decades to fostering technology transfer from our Federal laboratories and to promoting public/private sector partnerships to enhance our international competitiveness;

“(4) Federal technology transfer activities have strengthened the ability of United States industry to compete in the global marketplace; developed a new paradigm for greater collaboration among the scientific enterprises that conduct our Nation’s research and development—government, industry, and universities; and improved the quality of life for the American people, from medicine to materials;

“(5) the technology transfer process must be made ‘industry friendly’ for companies to be willing to invest the significant time and resources needed to develop new products, processes, and jobs using federally funded inventions; and

“(6) Federal technology licensing procedures should balance the public policy needs of adequately protecting the rights of the public, encouraging companies to develop existing government inventions, and making the entire system of licensing government technologies more consistent and simple.”

#### CONGRESSIONAL FINDINGS; 1996 AMENDMENT

Pub. L. 104–113, § 2, Mar. 7, 1996, 110 Stat. 775, provided that: “The Congress finds the following:

“(1) Bringing technology and industrial innovation to the marketplace is central to the economic, environmental, and social well-being of the people of the United States.

“(2) The Federal Government can help United States business to speed the development of new products and processes by entering into cooperative research and development agreements which make available the assistance of Federal laboratories to the private sector, but the commercialization of technology and industrial innovation in the United States depends upon actions by business.

“(3) The commercialization of technology and industrial innovation in the United States will be enhanced if companies, in return for reasonable compensation to the Federal Government, can more easily obtain exclusive licenses to inventions which develop as a result of cooperative research with scientists employed by Federal laboratories.”

#### DEFINITIONS OF TERMS; 1992 AMENDMENT

Pub. L. 102–245, § 2, Feb. 14, 1992, 106 Stat. 7, provided that: “As used in this Act [see Short Title of 1992 Amendment note above]—

“(1) the term ‘high-resolution information systems’ means equipment and techniques required to create, store, recover, and play back high-resolution images and accompanying sound;

“(2) the term ‘advanced manufacturing technology’ means numerically-controlled machine tools, robots, automated process control equipment, computerized flexible manufacturing systems, associated computer software, and other technology for improving manufacturing and industrial processes;

“(3) the term ‘advanced materials’ means a field of research including the study of composites, ceramics, metals, polymers, superconducting materials, materials produced through biotechnology, and materials production technologies, including coated systems, that provide the potential for significant advantages over existing materials;

“(4) the term ‘Institute’ means the National Institute of Standards and Technology;

“(5) the term ‘Secretary’ means the Secretary of Commerce; and

“(6) the term ‘Under Secretary’ means the Under Secretary of Commerce for Technology.”

#### CONGRESSIONAL STATEMENT OF POLICY; 1992 AMENDMENT

Pub. L. 102–245, title I, § 102, Feb. 14, 1992, 106 Stat. 7, provided that: “Congress finds that in order to help United States industries to speed the development of new products and processes so as to maintain the economic competitiveness of the Nation, it is necessary to strengthen the programs and activities of the Depart-

ment of Commerce’s Technology Administration and National Institute of Standards and Technology.”

#### NATIONAL COMMISSION ON REDUCING CAPITAL COSTS FOR EMERGING TECHNOLOGY

Pub. L. 102–245, title IV, § 401, Feb. 14, 1992, 106 Stat. 21, provided that:

“(a) ESTABLISHMENT AND PURPOSE.—There is established a National Commission on Reducing Capital Costs for Emerging Technology (hereafter in this section referred to as the ‘Commission’), for the purpose of developing recommendations to increase the competitiveness of United States industry by encouraging investments in research, the development of new process and product technologies, and the production of those technologies.

“(b) ISSUES.—The function of the Commission shall be to address the following issues:

“(1) How has the overall cost of capital paid by United States companies differed during the past decade from that paid by companies in other industrial economies such as Germany, Japan, and the United Kingdom?

“(2) To what extent has the cost of capital faced by technology companies differed from the overall cost of capital in each of these nations during the same period?

“(3) To what extent do high capital costs in general inhibit investment in projects with long-term pay-offs, such as the development and commercialization of new technology?

“(4) To what extent does the structure of the financial services industry in the United States affect the flow of capital to advanced technology investment, and to what extent do current practices in the equity markets raise the cost of capital and inhibit the availability of capital to fund research and development, purchase advanced manufacturing equipment, and fund other investments necessary to commercialize advanced technology?

“(5) In what ways do Government regulations influence the cost of capital in the United States?

“(6) To what extent have national differences in capital costs facilitated the foreign acquisition of technology-based United States companies?

“(7) What macroeconomic and other policies would promote greater investment in advanced manufacturing techniques, in research and development, and in other activities necessary to commercialize and produce new technologies?

“(8) What specific policies should the Federal Government follow in order to reduce the cost of capital for United States companies to levels that are near parity with those faced by the Nation’s principal trading partners?

“(c) MEMBERSHIP.—(1) The Commission shall be composed of 9 members who are eminent in such fields as advanced technology, manufacturing, finance, and international economics and who are appointed as follows:

“(A) 3 individuals appointed by the President, one of whom shall chair the Commission.

“(B) 3 individuals appointed by the Speaker of the House of Representatives, 1 of whom shall be appointed upon the recommendation of the minority leader of the House of Representatives.

“(C) 3 individuals appointed by the President pro tempore of the Senate, 2 of whom shall be appointed upon the recommendation of the majority leader of the Senate and 1 of whom shall be appointed upon the recommendation of the minority leader of the Senate.

“(2) Each member shall be appointed for the life of the Commission. A vacancy in the Commission shall be filled in the manner in which the original appointment was made.

“(d) PROCEDURES.—(1) The chairman shall call the first meeting of the Commission within 90 days after the date of enactment of this Act [Feb. 14, 1992].

“(2) Recommendations of the Commission shall require the approval of three-quarters of the members of the Commission.

“(3) The Commission may use such personnel detailed from Federal agencies as may be necessary to enable it to carry out its duties.

“(4) Members of the Commission, other than full-time employees of the Federal Government, while attending meetings of the Commission while away from their homes or regular places of business, shall be allowed travel expenses in accordance with subchapter I of chapter 57 of title 5, United States Code.

“(e) REPORTS.—The Commission shall, within 1 year after the date of enactment of this Act [Feb. 14, 1992], submit to the President and Congress a report containing legislative and other recommendations with respect to the issues addressed under subsection (b).

“(f) CONSULTATION.—The Commission shall consult, as appropriate, with the Commission on Technology and Procurement established by section 505 of this Act [set out below].

“(g) TERMINATION.—The Commission shall terminate 6 months after the submission of its report under subsection (e).

“(h) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as may be necessary for the fiscal years 1992 and 1993.”

RESEARCH, DEVELOPMENT, TECHNOLOGY UTILIZATION,  
AND GOVERNMENT PROCUREMENT POLICY

Pub. L. 102-245, title V, §505, Feb. 14, 1992, 106 Stat. 25, provided that:

“(a) ESTABLISHMENT OF COMMISSION.—The Secretary, in consultation with the Administrator of the Office of Federal Procurement Policy, shall establish a Commission on Technology and Procurement (hereafter in this section referred to as the ‘Commission’), for the purposes of analyzing the effect of Federal Government procurement laws, procedures, and policies on the development of advanced technologies within the United States and making recommendations on how Federal policy could be changed to promote further the development of advanced technologies.

“(b) ISSUES.—The Commission shall address the following issues:

“(1) To what extent, if any, should Federal Government technology purchase strategies be used to give domestic suppliers a competitive advantage in new generations of existing technologies and in initial market penetration for new technologies?

“(2) Under what conditions can Federal Government purchases of advanced technology-based products be based on performance specifications rather than on product specifications? Should Federal Government procurement first look to the commercial markets for products that will meet performance specifications before purchasing a unique product that has to be developed?

“(3) How can the Federal Government procurement laws, practices, and procedures be used as a strategic tool to foster the use of emerging technologies?

“(4) How can the Federal Government ensure that its suppliers adopt the principles embodied in the Malcolm Baldrige National Quality Award?

“(5) Should Federal Government procurement practices include cooperative efforts between the supplier and the Federal entity to develop products so as to be more easily marketed on a commercial basis? Should a program for the exchange of technical personnel to foster innovation in product development be part of such practices?

“(6) To what extent, if any, should Federal Government documents specify standards that are beneficial to domestic suppliers, aid the compatibility of advanced technologies, and speed the commercial acceptance of those technologies, and what would be the role of the Institute in such an effort?

“(7) Should Federal Government procurement be linked to the Advanced Technology Program and to technology transfer activities so that specification development can incorporate the latest technical advances available?

“(8) To what extent should worldwide, state of the art technology be required in Federal Government procurement?

“(c) MEMBERSHIP AND PROCEDURES.—(1) The Commission shall be composed of 15 members, 8 of whom shall constitute a quorum.

“(2) The Secretary, the Administrator of the Office of Federal Procurement Policy, the Director of the Office of Science and Technology Policy, the Secretary of Defense, and the Administrator of General Services, or their designees who serve in executive level positions, shall serve as members of the Commission.

“(3) The Secretary shall appoint as members of the Commission, from among individuals not employed by the Federal Government—

“(A) 4 members who are eminent in advanced technology businesses representing manufacturing and services industries, including at least 1 member representing labor;

“(B) 3 members who are eminent in the fields of technology and international economic development; and

“(C) with the concurrence of the Administrator of the Office of Federal Procurement Policy, 3 members who are eminent in the field of Federal Government procurement.

“(4) The Secretary shall appoint a Commission chairman from among the members of the Commission. The chairman shall call the first meeting of the Commission within 90 days after the date of enactment of this Act [Feb. 14, 1992].

“(5) The Secretary and the Administrator of the Office of Federal Procurement Policy shall provide such staff as may be required by the Commission to carry out its responsibilities.

“(6) Members of the Commission, other than full-time employees of the Federal Government, while attending meetings of the Commission or otherwise performing duties of the Commission while away from their homes or regular places of business, shall be allowed travel expenses in accordance with subchapter I of chapter 57 of title 5, United States Code.

“(d) REPORTS.—(1) The Commission shall, within 1 year after the date of enactment of this Act [Feb. 14, 1992], submit to the Secretary, the Administrator of the Office of Federal Procurement Policy, the President, and Congress a report containing preliminary recommendations with respect to the issues addressed under subsection (b).

“(2) The Commission shall, within 2 years after the date of enactment of this Act, submit to the Secretary and Congress a final report containing final recommendations with respect to the issues addressed under subsection (b).

“(e) CONSULTATION.—The Commission shall consult, as appropriate, with the National Commission on Reducing Capital Costs for Emerging Technology.

“(f) TERMINATION.—The Commission shall terminate 6 months after the submission of its final report under subsection (d)(2).

“(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as may be necessary for the fiscal years 1992, 1993, and 1994.”

STUDY OF TESTING AND CERTIFICATION

Pub. L. 102-245, title V, §508, Feb. 14, 1992, 106 Stat. 29, provided that:

“(a) CONTRACT WITH NATIONAL RESEARCH COUNCIL.—Within 90 days after the date of enactment of this Act [Feb. 14, 1992] and within available appropriations, the Secretary shall enter into a contract with the National Research Council for a thorough review of international product testing and certification issues. The National Research Council will be asked to address the following issues and make recommendations as appropriate:

“(1) The impact on United States manufacturers, testing and certification laboratories, certification organizations, and other affected bodies of the Euro-

pean Community's plans for testing and certification of regulated and nonregulated products of non-European origin.

"(2) Ways for United States manufacturers to gain acceptance of their products in the European Community and in other foreign countries and regions.

"(3) The feasibility and consequences of having mutual recognition agreements between testing and certification organizations in the United States and those of major trading partners on the accreditation of testing and certification laboratories and on quality control requirements.

"(4) Information coordination regarding product acceptance and conformity assessment mechanisms between the United States and foreign governments.

"(5) The appropriate Federal, State, and private roles in coordination and oversight of testing, certification, accreditation, and quality control to support national and international trade.

"(b) MEMBERSHIP.—In selecting the members of the review panel, the National Research Council shall consult with and draw from, among others, laboratory accreditation organizations, Federal and State government agencies involved in testing and certification, professional societies, trade associations, small business, and labor organizations.

"(c) REPORT.—A report based on the findings and recommendations of the review panel shall be submitted to the Secretary, the President, and Congress within 18 months after the Secretary signs the contract with the National Research Council."

CONGRESSIONAL FINDINGS AND PURPOSES; 1989  
AMENDMENT

Pub. L. 101-189, div. C, title XXXI, §3132, Nov. 29, 1989, 103 Stat. 1674, provided that:

"(a) FINDINGS.—Congress finds that—

"(1) technology advancement is a key component in the growth of the United States industrial economy, and a strong industrial base is an essential element of the security of this country;

"(2) there is a need to enhance United States competitiveness in both domestic and international markets;

"(3) innovation and the rapid application of commercially valuable technology are assuming a more significant role in near-term marketplace success;

"(4) the Federal laboratories and other facilities have outstanding capabilities in a variety of advanced technologies and skilled scientists, engineers, and technicians who could contribute substantially to the posture of United States industry in international competition;

"(5) improved opportunities for cooperative research and development agreements between contractor-managers of certain Federal laboratories and the private sector in the United States, consistent with the program missions at those facilities, particularly the national security functions involved in atomic energy defense activities, would contribute to our national well-being; and

"(6) more effective cooperation between those laboratories and the private sector in the United States is required to provide speed and certainty in the technology transfer process.

"(b) PURPOSES.—The purposes of this part [part C (§§ 3131-3133) of title XXXI of div. C of Pub. L. 101-189, see Short Title of 1989 Amendment note above] are to—

"(1) enhance United States national security by promoting technology transfer between Government-owned, contractor-operated laboratories and the private sector in the United States; and

"(2) enhance collaboration between universities, the private sector, and Government-owned, contractor-operated laboratories in order to foster the development of technologies in areas of significant economic potential."

EX. ORD. NO. 13185. TO STRENGTHEN THE FEDERAL GOVERNMENT-UNIVERSITY RESEARCH PARTNERSHIP

Ex. Ord. No. 13185, Dec. 28, 2000, 66 F.R. 701, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to keep the Federal Government-University research partnership strong, it is hereby ordered as follows:

SECTION 1. *Principles of the Government-University Partnership.* The partnership in science and technology that has evolved between the Federal Government and American universities has yielded benefits that are vital to each. It continues to prove exceptionally productive, successfully promoting the discovery of knowledge, stimulating technological innovation, improving the quality of life, educating and training the next generation of scientists and engineers, and contributing to America's economic prosperity and national security. In order to reaffirm and strengthen this partnership, this order sets forth the following guiding and operating principles that are fully described in the April 1999 National Science and Technology Council report, "Renewing the Government-University Partnership." These principles shall provide the framework for the development and analysis of all future Federal policies, rules, and regulations for the Federal Government-University research partnership.

(a) The guiding principles that shall govern interactions between the Federal Government and universities that perform research are:

- (1) Research is an investment in the future;
- (2) The integration of research and education is vital;
- (3) Excellence is promoted when investments are guided by merit review; and
- (4) Research must be conducted with integrity.

(b) The operating principles that shall assist agencies, universities, individual researchers, and auditing and regulatory bodies in implementing the guiding principles are:

- (1) Agency cost-sharing policies and practices must be transparent;
- (2) Partners should respect the merit review process;
- (3) Agencies and universities should manage research in a cost-efficient manner;
- (4) Accountability and accounting are not the same;
- (5) The benefits of simplicity in policies and practices should be weighed against the costs;
- (6) Change should be justified by need and the process made transparent.

(c) Each executive branch department or agency that supports research at universities shall regularly review its existing policies and procedures to ensure that they meet the spirit and intent of the guiding and operating principles stated above.

SEC. 2. *Office of Science and Technology (OSTP) Review of the Government-University Research Partnership.* (a) The OSTP, in conjunction with the National Science and Technology Council, shall conduct a regular review of the Government-University research partnership and prepare a report on the status of the partnership. The OSTP should receive input from all departments or agencies that have a major impact on the Government-University partnership through their support of research and education, policy making, regulatory activities, and research administration. In addition, OSTP may seek the input of the National Science Board and the President's Committee of Advisors for Science and Technology, as well as other stakeholders, such as State and local governments, industry, the National Academy of Sciences, and the Federal Demonstration Partnership.

(b) The purpose of the review and the report is to determine the overall health of the Government-University research partnership, being mindful of the guiding and operating principles stated above. The report should include recommendations on how to improve the Government-University partnership.

(c) The Director of OSTP shall deliver the report to the President.

SEC. 3. *Judicial Review.* This order does not create any enforceable rights against the United States, its agencies, its officers, or any person.

WILLIAM J. CLINTON.

**§ 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.)

## AMENDMENTS

1986—Par. (2). Pub. L. 99-502, §9(b)(1), substituted “cooperative research centers” for “centers for industrial technology”.

Par. (3). Pub. L. 99-502, §9(f)(2), inserted “, including inventions, software, and training technologies.”.

**§ 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.
- (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.)

## REFERENCES IN TEXT

The Plant Variety Protection Act, referred to in par. (7), is Pub. L. 91-577, Dec. 24, 1970, 84 Stat. 1542, as amended, which is classified principally to chapter 57 (§2321 et seq.) of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 2321 of Title 7 and Tables.

## AMENDMENTS

2007—Pub. L. 110-69 redesignated pars. (2) and (4) to (13) as (1) and (2) to (11), respectively, and struck out pars. (1) and (3) which defined “Office” and “Under Secretary”, respectively.

2000—Pars. (4), (6). Pub. L. 106-404 made technical amendments to references in original act which appear in text as references to sections 3705 and 3707 of this title.

1992—Par. (8). Pub. L. 102-245 inserted before period at end “, as well as any agency of the legislative branch of the Federal Government”.

1988—Par. (1). Pub. L. 100-519, §201(d)(1)(A), substituted “Technology Policy” for “Productivity, Technology, and Innovation”.

Par. (3). Pub. L. 100-519, §201(d)(1)(B), amended par. (3) generally, substituting provisions defining “Under Secretary” for provisions defining “Assistant Secretary”.

Par. (13). Pub. L. 100-418 added par. (13).

1986—Par. (1). Pub. L. 99-502, §9(b)(2)(A), substituted “Productivity, Technology, and Innovation” for “Industrial Technology”.

Par. (3). Pub. L. 99-502, §9(b)(2)(B), substituted “‘Assistant Secretary’ means the Assistant Secretary for Productivity, Technology, and Innovation” for “‘Director’ means the Director of the Office of Industrial Technology”.

Par. (4). Pub. L. 99-502, §9(b)(2)(C), substituted “Cooperative Research Centers” for “Centers for Industrial Technology”.

Par. (6). Pub. L. 99-502, §9(b)(2)(D), (E), redesignated par. (7) as (6), substituted “owned, leased, or otherwise used by a Federal agency and funded” for “owned and funded”, and struck out former par. (6) which defined “Board” to mean the National Industrial Technology Board established pursuant to section 3709 of this title.

Pars. (7) to (12). Pub. L. 99-502, §9(b)(2)(D), (d), redesignated pars. (7) and (8) as (6) and (7), respectively, and added pars. (8) to (12).