

§ 638. Research and development

(a) Declaration of policy

Research and development are major factors in the growth and progress of industry and the national economy. The expense of carrying on research and development programs is beyond the means of many small-business concerns, and such concerns are handicapped in obtaining the benefits of research and development programs conducted at Government expense. These small-business concerns are thereby placed at a competitive disadvantage. This weakens the competitive free enterprise system and prevents the orderly development of the national economy. It is the policy of the Congress that assistance be given to small-business concerns to enable them to undertake and to obtain the benefits of research and development in order to maintain and strengthen the competitive free enterprise system and the national economy.

(b) Assistance to small-business concerns

It shall be the duty of the Administration, and it is empowered—

(1) to assist small-business concerns to obtain Government contracts for research and development;

(2) to assist small-business concerns to obtain the benefits of research and development performed under Government contracts or at Government expense;

(3) to provide technical assistance to small-business concerns to accomplish the purposes of this section; and ^[1]

(4) to develop and maintain a source file and an information program to assure each qualified and interested small business concern the opportunity to participate in Federal agency small business innovation research programs and small business technology transfer programs;

(5) to coordinate with participating agencies a schedule for release of SBIR and STTR solicitations, and to prepare a master release schedule so as to maximize small businesses' opportunities to respond to solicitations;

(6) to independently survey and monitor the operation of SBIR and STTR programs within participating Federal agencies;

(7) to report not less than annually to the Committee on Small Business of the Senate, and to the Committee on Science and the Committee on Small Business of the House of Representatives, on the SBIR and STTR programs of the Federal agencies and the Administration's information and monitoring efforts related to the SBIR and STTR programs, including the data on output and outcomes collected pursuant to subsections (g)(10), (o)(9), and (o)(15) of this section, the number of proposals received from, and the number and total amount of awards to, HUBZone small business concerns under each of the SBIR and STTR programs, and a description of the extent to which Federal agencies are providing in a timely manner information needed to maintain the database described in subsection (k) of this section; and

(8) to provide for and fully implement the tenets of Executive Order No. 13329 (Encouraging Innovation in Manufacturing).

(c) Consultation and cooperation with Government agencies; studies and recommendations

The Administration is authorized to consult and cooperate with all Government agencies and to make studies and recommendations to such agencies, and such agencies are authorized and directed to cooperate with the Administration in order to carry out and to accomplish the purposes of this section.

(d) Joint programs; approval of agreements; withdrawal of approval; publication in Federal Register

(1) The Administrator is authorized to consult with representatives of small-business concerns with a view to assisting and encouraging such firms to undertake joint programs for research and development carried out through such corporate or other mechanism as may be most appropriate for the purpose. Such joint programs may, among other things, include the following purposes:

(A) to construct, acquire, or establish laboratories and other facilities for the conduct of research;

(B) to undertake and utilize applied research;

(C) to collect research information related to a particular industry and disseminate it to participating members;

(D) to conduct applied research on a protected, proprietary, and contractual basis with member or nonmember firms, Government agencies, and others;

(E) to prosecute applications for patents and render patent services for participating members; and

(F) to negotiate and grant licenses under patents held under the joint program, and to establish corporations designed to exploit particular patents obtained by it.

(2) The Administrator may, after consultation with the Attorney General and the Chairman of the Federal Trade Commission, and with the prior written approval of the Attorney General, approve any agreement between small-business firms providing for a joint program of research and development, if the Administrator finds that the joint program proposed will maintain and strengthen the free enterprise system and the economy of the Nation. The Administrator or the Attorney General may at any time withdraw his approval of the agreement and the joint program of research and development covered thereby, if he finds that the agreement or the joint program carried on under it is no longer in the best interests of the competitive free enterprise system and the economy of the Nation. A copy of the statement of any such finding and approval intended to be within the coverage of this subsection, and a copy of any modification or withdrawal of approval, shall be published in the Federal Register. The authority conferred by this subsection on the Administrator shall not be delegated by him.

(3) No act or omission to act pursuant to and within the scope of any joint program for research and development, under an agreement approved by the Administrator under this subsection, shall be construed to be within the prohibitions of the antitrust laws or the Federal Trade Commission Act [15 U.S.C. 41 et seq.]. Upon publication in the Federal Register of the notice of withdrawal of his approval of the agreement granted under this subsection, either by the Administrator or by the Attorney General, the provisions of this subsection shall not apply to any subsequent act or omission to act by reason of such agreement or approval.

(e) Definitions

For the purpose of this section—

(1) the term “extramural budget” means the sum of the total obligations minus amounts obligated for such activities by employees of the agency in or through Government-owned, Government-operated facilities, except that for the Department of Energy it shall not include amounts obligated for atomic energy defense programs solely for weapons activities or for naval reactor programs, and except that for the Agency for International Development it shall not include amounts obligated solely for general institutional support of international research centers or for grants to foreign countries;

(2) the term “Federal agency” means an executive agency as defined in section 105 of title 5 or a military department as defined in section 102 of such title, except that it does not include any agency within the Intelligence Community (as the term is defined in section 3.4(f) of Executive Order 12333 or its successor orders);

(3) the term “funding agreement” means any contract, grant, or cooperative agreement entered into between any Federal agency and any small business for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government;

(4) the term “Small Business Innovation Research Program” or “SBIR” means a program under which a portion of a Federal agency’s research or research and development effort is reserved for award to small business concerns through a uniform process having—

(A) a first phase for determining, insofar as possible, the scientific and technical merit and feasibility of ideas that appear to have commercial potential, as described in subparagraph (B), submitted pursuant to SBIR program solicitations;

(B) a second phase, to further develop proposals which meet particular program needs, in which awards shall be made based on the scientific and technical merit and feasibility of the proposals, as evidenced by the first phase, considering, among other things, the proposal’s commercial potential, as evidenced by—

(i) the small business concern’s record of successfully commercializing SBIR or other research;

(ii) the existence of second phase funding commitments from private sector or non-SBIR funding sources;

(iii) the existence of third phase, follow-on commitments for the subject of the research; and

(iv) the presence of other indicators of the commercial potential of the idea; and

(C) where appropriate, a third phase—

(i) in which commercial applications of SBIR-funded research or research and development are funded by non-Federal sources of capital or, for products or services intended for use by the Federal Government, by follow-on non-SBIR Federal funding awards; or

(ii) for which awards from non-SBIR Federal funding sources are used for the continuation of research or research and development that has been competitively selected using peer review or scientific review criteria;

(5) the term “research” or “research and development” means any activity which is

(A) a systematic, intensive study directed toward greater knowledge or understanding of the subject studied;

(B) a systematic study directed specifically toward applying new knowledge to meet a recognized need; or

(C) a systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements;

(6) the term “Small Business Technology Transfer Program” or “STTR” means a program under which a portion of a Federal agency’s extramural research or research and development effort is reserved for award to small business concerns for cooperative research and development through a uniform process having—

(A) a first phase, to determine, to the extent possible, the scientific, technical, and commercial merit and feasibility of ideas submitted pursuant to STTR program solicitations;

(B) a second phase, to further develop proposed ideas to meet particular program needs, in which awards shall be made based on the scientific, technical, and commercial merit and feasibility of the idea, as evidenced by the first phase and by other relevant information; and

(C) where appropriate, a third phase—

(i) in which commercial applications of STTR-funded research or research and development are funded by non-Federal sources of capital or, for products or services intended for use by the Federal Government, by follow-on non-STTR Federal funding awards; and

(ii) for which awards from non-STTR Federal funding sources are used for the continuation of research or research and development that has been competitively selected using peer review or scientific review criteria;

(7) the term “cooperative research and development” means research or research and development conducted jointly by a small business concern and a research institution in which not less than 40 percent of the work is performed by the small business concern, and not less than 30 percent of the work is performed by the research institution;

(8) the term “research institution” means a nonprofit institution, as defined in section 3703 (5) of this title, and includes federally funded research and development centers, as identified by the National Scientific Foundation in accordance with the governmentwide Federal Acquisition Regulation issued in accordance with section 421 (c)(1) ^[2] of title 41 (or any successor regulation thereto); and

(9) the term “commercial applications” shall not be construed to exclude testing and evaluation of products, services, or technologies for use in technical or weapons systems, and further, awards for testing and evaluation of products, services, or technologies for use in technical or weapons systems may be made in either the second or the third phase of the Small Business Innovation Research Program and of the Small Business Technology Transfer Program, as defined in this subsection.

(f) Federal agency expenditures for SBIR program

(1) Required expenditure amounts

Each Federal agency which has an extramural budget for research or research and development in excess of \$100,000,000 for fiscal year 1992, or any fiscal year thereafter, shall expend with small business concerns—

(A) not less than 1.5 percent of such budget in each of fiscal years 1993 and 1994;

(B) not less than 2.0 percent of such budget in each of fiscal years 1995 and 1996; and

(C) not less than 2.5 percent of such budget in each fiscal year thereafter, specifically in connection with SBIR programs which meet the requirements of this section, policy directives, and regulations issued under this section.

(2) Limitations

A Federal agency shall not—

(A) use any of its SBIR budget established pursuant to paragraph (1) for the purpose of funding administrative costs of the program, including costs associated with salaries and expenses; or

(B) make available for the purpose of meeting the requirements of paragraph (1) an amount of its extramural budget for basic research which exceeds the percentages specified in paragraph (1).

(3) Exclusion of certain funding agreements

Funding agreements with small business concerns for research or research and development which result from competitive or single source selections other than an SBIR program shall not be considered to meet any portion of the percentage requirements of paragraph (1).

(g) Administration of small business innovation research programs by Federal agencies required to establish such programs

Each Federal agency required by subsection (f) of this section to establish a small business innovation research program shall, in accordance with this chapter and regulations issued hereunder—

(1) unilaterally determine categories of projects to be in its SBIR program;

(2) issue small business innovation research solicitations in accordance with a schedule determined cooperatively with the Small Business Administration;

(3) unilaterally determine research topics within the agency’s SBIR solicitations, giving special consideration to broad research topics and to topics that further 1 or more critical technologies, as identified by—

- (A) the National Critical Technologies Panel (or its successor) in the 1991 report required under section 6683 ^[3] of title 42, and in subsequent reports issued under that authority; or
- (B) the Secretary of Defense, in the 1992 report issued in accordance with section 2522 ^[3] of title 10, and in subsequent reports issued under that authority;
- (4) unilaterally receive and evaluate proposals resulting from SBIR proposals;
- (5) subject to subsection (l) of this section, unilaterally select awardees for its SBIR funding agreements and inform each awardee under such an agreement, to the extent possible, of the expenses of the awardee that will be allowable under the funding agreement;
- (6) administer its own SBIR funding agreements (or delegate such administration to another agency);
- (7) make payments to recipients of SBIR funding agreements on the basis of progress toward or completion of the funding agreement requirements and, in all cases, make payment to recipients under such agreements in full, subject to audit, on or before the last day of the 12-month period beginning on the date of completion of such requirements;
- (8) make an annual report on the SBIR program to the Small Business Administration and the Office of Science and Technology Policy;
- (9) include, as part of its annual performance plan as required by subsections (a) and (b) of section 1115 of title 31, a section on its SBIR program, and shall submit such section to the Committee on Small Business of the Senate, and the Committee on Science and the Committee on Small Business of the House of Representatives;
- (10) collect, and maintain in a common format in accordance with subsection (v) of this section, such information from awardees as is necessary to assess the SBIR program, including information necessary to maintain the database described in subsection (k) of this section; and
- (11) provide for and fully implement the tenets of Executive Order No. 13329 (Encouraging Innovation in Manufacturing).

(h) Establishment of goals for funding agreements for research or research and development to small business concerns by agencies having budgets for research and development

In addition to the requirements of subsection (f) of this section, each Federal agency which has a budget for research or research and development in excess of \$20,000,000 for any fiscal year beginning with fiscal year 1983 or subsequent fiscal year shall establish goals specifically for funding agreements for research or research and development to small business concerns, and no goal established under this subsection shall be less than the percentage of the agency's research or research and development budget expended under funding agreements with small business concerns in the immediately preceding fiscal year.

(i) Annual reporting

(1) In general

Each Federal agency required by this section to have an SBIR program or to establish goals shall report annually to the Small Business Administration the number of awards pursuant to grants, contracts, or cooperative agreements over \$10,000 in amount and the dollar value of all such awards, identifying SBIR awards and comparing the number and amount of such awards with awards to other than small business concerns.

(2) Calculation of extramural budget

(A) Methodology

Not later than 4 months after the date of the enactment of each appropriations Act for a Federal agency required by this section to have an SBIR program, the Federal agency shall submit to the Administrator a report, which shall include a description of the methodology used for calculating the amount of the extramural budget of that Federal agency.

(B) Administrator's analysis

The Administrator shall include an analysis of the methodology received from each Federal agency referred to in subparagraph (A) in the report required by subsection (b)(7) of this section.

(j) Small Business Administration policy directives for the general conduct of small business innovation research programs

(1) Policy directives

The Small Business Administration, after consultation with the Administrator of the Office of Federal Procurement Policy, the Director of the Office of Science and Technology Policy, and the Intergovernmental Affairs Division of the Office of Management and Budget, shall, within one hundred and twenty days of July 22, 1982, issue policy directives for the general conduct of the SBIR programs within the Federal Government, including providing for—

- (A)** simplified, standardized, and timely SBIR solicitations;
- (B)** a simplified, standardized funding process which provides for
 - (i)** the timely receipt and review of proposals;
 - (ii)** outside peer review for at least phase two proposals, if appropriate;
 - (iii)** protection of proprietary information provided in proposals;
 - (iv)** selection of awardees;
 - (v)** retention of rights in data generated in the performance of the contract by the small business concern;
 - (vi)** transfer of title to property provided by the agency to the small business concern if such a transfer would be more cost effective than recovery of the property by the agency;
 - (vii)** cost sharing; and
 - (viii)** cost principles and payment schedules;
- (C)** exemptions from the regulations under paragraph (2) ^[4] if national security or intelligence functions clearly would be jeopardized;
- (D)** minimizing regulatory burden associated with participation in the SBIR program for the small business concern which will stimulate the cost-effective conduct of Federal research and development and the likelihood of commercialization of the results of research and development conducted under the SBIR program;
- (E)** simplified, standardized, and timely annual report on the SBIR program to the Small Business Administration and the Office of Science and Technology Policy;
- (F)** standardized and orderly withdrawal from program participation by an agency having a SBIR program; at the discretion of the Administration, such directives may require a phased withdrawal over a period of time sufficient in duration to minimize any adverse impact on small business concerns; and
- (G)** the voluntary participation in a SBIR program by a Federal agency not required to establish such a program pursuant to subsection (f) of this section.

(2) Modifications

Not later than 90 days after October 28, 1992, the Administrator shall modify the policy directives issued pursuant to this subsection to provide for—

- (A)** retention by a small business concern of the rights to data generated by the concern in the performance of an SBIR award for a period of not less than 4 years;
- (B)** continued use by a small business concern participating in the third phase of the SBIR program, as a directed bailment, of any property transferred by a Federal agency to the small business concern in the second phase of an SBIR program for a period of not less than 2 years, beginning on the initial date of the concern's participation in the third phase of such program;
- (C)** procedures to ensure, to the extent practicable, that an agency which intends to pursue research, development, or production of a technology developed by a small business concern under an SBIR program enters into follow-on, non-SBIR funding agreements with the small business concern for such research, development, or production;

(D) an increase to \$100,000 in the amount of funds which an agency may award in the first phase of an SBIR program, and to \$750,000 in the second phase of an SBIR program, and an adjustment of such amounts once every 5 years to reflect economic adjustments and programmatic considerations;

(E) a process for notifying the participating SBIR agencies and potential SBIR participants of the 1991, 1992, and the current critical technologies, as identified—

(i) by the National Critical Technologies Panel (or its successor), in accordance with section 6683 ^[5] of title 42; or

(ii) by the Secretary of Defense, in accordance with section 2522 ^[5] of title 10;

(F) enhanced outreach efforts to increase the participation of socially and economically disadvantaged small business concerns, as defined in section 637 (a)(4) of this title, and the participation of small businesses that are 51 percent owned and controlled by women in technological innovation and in SBIR programs, including the third phase of such programs, and the collection of data to document such participation;

(G) technical and programmatic guidance to encourage agencies to develop gap-funding programs to address the delay between an award for the first phase of an SBIR program and the application for and extension of an award for the second phase of such program;

(H) procedures to ensure that a small business concern that submits a proposal for a funding agreement for the first phase of an SBIR program and that has received more than 15 second phase SBIR awards during the preceding 5 fiscal years is able to demonstrate the extent to which it was able to secure third phase funding to develop concepts resulting from previous second phase SBIR awards; and

(I) procedures to ensure that agencies participating in the SBIR program retain the information submitted under subparagraph (H) at least until the Government Accountability Office submits the report required under section 105 of the Small Business Research and Development Enhancement Act of 1992.

(3) Additional modifications

Not later than 120 days after December 21, 2000, the Administrator shall modify the policy directives issued pursuant to this subsection—

(A) to clarify that the rights provided for under paragraph (2)(A) apply to all Federal funding awards under this section, including the first phase (as described in subsection (e)(4)(A) of this section), the second phase (as described in subsection (e)(4)(B) of this section), and the third phase (as described in subsection (e)(4)(C) of this section);

(B) to provide for the requirement of a succinct commercialization plan with each application for a second phase award that is moving toward commercialization;

(C) to require agencies to report to the Administration, not less frequently than annually, all instances in which an agency pursued research, development, or production of a technology developed by a small business concern using an award made under the SBIR program of that agency, and determined that it was not practicable to enter into a follow-on non-SBIR program funding agreement with the small business concern, which report shall include, at a minimum—

(i) the reasons why the follow-on funding agreement with the small business concern was not practicable;

(ii) the identity of the entity with which the agency contracted to perform the research, development, or production; and

(iii) a description of the type of funding agreement under which the research, development, or production was obtained; and

(D) to implement subsection (v) of this section, including establishing standardized procedures for the provision of information pursuant to subsection (k)(3) of this section.

(k) Database

(1) Public database

Not later than 180 days after December 21, 2000, the Administrator shall develop, maintain, and make available to the public a searchable, up-to-date, electronic database that includes—

- (A)** the name, size, location, and an identifying number assigned by the Administrator, of each small business concern that has received a first phase or second phase SBIR or STTR award from a Federal agency;
- (B)** a description of each first phase or second phase SBIR or STTR award received by that small business concern, including—
 - (i)** an abstract of the project funded by the award, excluding any proprietary information so identified by the small business concern;
 - (ii)** the Federal agency making the award; and
 - (iii)** the date and amount of the award;
- (C)** an identification of any business concern or subsidiary established for the commercial application of a product or service for which an SBIR or STTR award is made;
- (D)** information regarding mentors and Mentoring Networks, as required by section 657e (d) of this title; and
- (E)** with respect to assistance under the STTR program only—
 - (i)** whether the small business concern or the research institution initiated their collaboration on each assisted STTR project;
 - (ii)** whether the small business concern or the research institution originated any technology relating to the assisted STTR project;
 - (iii)** the length of time it took to negotiate any licensing agreement between the small business concern and the research institution under each assisted STTR project; and
 - (iv)** how the proceeds from commercialization, marketing, or sale of technology resulting from each assisted STTR project were allocated (by percentage) between the small business concern and the research institution.

(2) Government database

Not later than 180 days after December 21, 2000, the Administrator, in consultation with Federal agencies required to have an SBIR program pursuant to subsection (f)(1) of this section or an STTR program pursuant to subsection (n)(1) of this section, shall develop and maintain a database to be used exclusively for SBIR and STTR program evaluation that—

- (A)** contains for each second phase award made by a Federal agency—
 - (i)** information collected in accordance with paragraph (3) on revenue from the sale of new products or services resulting from the research conducted under the award;
 - (ii)** information collected in accordance with paragraph (3) on additional investment from any source, other than first phase or second phase SBIR or STTR awards, to further the research and development conducted under the award; and
 - (iii)** any other information received in connection with the award that the Administrator, in conjunction with the SBIR and STTR program managers of Federal agencies, considers relevant and appropriate;
- (B)** includes any narrative information that a small business concern receiving a second phase award voluntarily submits to further describe the outputs and outcomes of its awards;
- (C)** includes for each applicant for a first phase or second phase award that does not receive such an award—
 - (i)** the name, size, and location, and an identifying number assigned by the Administration;
 - (ii)** an abstract of the project; and
 - (iii)** the Federal agency to which the application was made;
- (D)** includes any other data collected by or available to any Federal agency that such agency considers may be useful for SBIR or STTR program evaluation; and

(E) is available for use solely for program evaluation purposes by the Federal Government or, in accordance with policy directives issued by the Administration, by other authorized persons who are subject to a use and nondisclosure agreement with the Federal Government covering the use of the database.

(3) Updating information for database

(A) In general

A small business concern applying for a second phase award under this section shall be required to update information in the database established under this subsection for any prior second phase award received by that small business concern. In complying with this paragraph, a small business concern may apportion sales or additional investment information relating to more than one second phase award among those awards, if it notes the apportionment for each award.

(B) Annual updates upon termination

A small business concern receiving a second phase award under this section shall—

(i) update information in the database concerning that award at the termination of the award period; and

(ii) be requested to voluntarily update such information annually thereafter for a period of 5 years.

(4) Protection of information

Information provided under paragraph (2) shall be considered privileged and confidential and not subject to disclosure pursuant to section 552 of title 5.

(5) Rule of construction

Inclusion of information in the database under this subsection shall not be considered to be publication for purposes of subsection (a) or (b) of section 102 of title 35.

(I) Reporting of awards made from single proposal, to multiple award winners, or to critical technology topics

(1) Single proposal

If a Federal agency required to establish an SBIR program under subsection (f) of this section makes an award with respect to an SBIR solicitation topic or subtopic for which the agency received only 1 proposal, the agency shall provide written justification for making the award in its next quarterly report to the Administration and in the agency's next annual report required under subsection (g)(8) of this section.

(2) Multiple awards

An agency referred to in paragraph (1) shall include in its next annual report required under subsection (g)(8) of this section an accounting of the awards the agency has made for the first phase of an SBIR program during the reporting period to entities that have received more than 15 awards for the second phase of an SBIR program during the preceding 5 fiscal years.

(3) Critical technology awards

An agency referred to in paragraph (1) shall include in its next annual report required under subsection (g)(8) of this section, an accounting of the number of awards it has made to critical technology topics, as defined in subsection (g)(3) of this section, including an identification of the specific critical technologies topics, and the percentage by number and dollar amount of the agency's total SBIR awards to such critical technology topics.

(m) Termination

The authorization to carry out the Small Business Innovation Research Program established under this section shall terminate on September 30, 2008.

(n) Required expenditures for STTR by Federal agencies

(1) Required expenditure amounts

(A) In general

With respect to each fiscal year through fiscal year 2009, each Federal agency that has an extramural budget for research, or research and development, in excess of \$1,000,000,000 for that fiscal year, shall expend with small business concerns not

less than the percentage of that extramural budget specified in subparagraph (B), specifically in connection with STTR programs that meet the requirements of this section and any policy directives and regulations issued under this section.

(B) Expenditure amounts

The percentage of the extramural budget required to be expended by an agency in accordance with subparagraph (A) shall be—

- (i) 0.15 percent for each fiscal year through fiscal year 2003; and
- (ii) 0.3 percent for fiscal year 2004 and each fiscal year thereafter.

(2) Limitations

A Federal agency shall not—

(A) use any of its STTR budget established pursuant to paragraph (1) for the purpose of funding administrative costs of the program, including costs associated with salaries and expenses, or, in the case of a small business concern or a research institution, costs associated with salaries, expenses, and administrative overhead (other than those direct or indirect costs allowable under guidelines of the Office of Management and Budget and the governmentwide Federal Acquisition Regulation issued in accordance with section 421 (c)(1) of title 41); or

(B) make available for the purpose of meeting the requirements of paragraph (1) an amount of its extramural budget for basic research which exceeds the percentage specified in paragraph (1).

(3) Exclusion of certain funding agreements

Funding agreements with small business concerns for research or research and development which result from competitive or single source selections other than an STTR program shall not be considered to meet any portion of the percentage requirements of paragraph (1).

(o) Federal agency STTR authority

Each Federal agency required to establish an STTR program in accordance with subsection (n) of this section and regulations issued under this chapter, shall—

(1) unilaterally determine categories of projects to be included in its STTR program;

(2) issue STTR solicitations in accordance with a schedule determined cooperatively with the Administration;

(3) unilaterally determine research topics within the agency's STTR solicitations, giving special consideration to broad research topics and to topics that further 1 or more critical technologies, as identified—

(A) by the National Critical Technologies Panel (or its successor) in reports required under section 6683 ^[6] of title 42; or

(B) by the Secretary of Defense, in accordance with section 2522 ^[6] of title 10;

(4) unilaterally receive and evaluate proposals resulting from STTR solicitations;

(5) unilaterally select awardees for its STTR funding agreements and inform each awardee under such an agreement, to the extent possible, of the expenses of the awardee that will be allowable under the funding agreement;

(6) administer its own STTR funding agreements (or delegate such administration to another agency);

(7) make payments to recipients of STTR funding agreements on the basis of progress toward or completion of the funding agreement requirements and, in all cases, make payment to recipients under such agreements in full, subject to audit, on or before the last day of the 12-month period beginning on the date of the completion of such requirements;

(8) include, as part of its annual performance plan as required by subsections (a) and (b) of section 1115 of title 31, a section on its STTR program, and shall submit such section to the Committee on Small Business of the Senate, and the Committee on Science and the Committee on Small Business of the House of Representatives;

(9) collect such data from awardees as is necessary to assess STTR program outputs and outcomes;

- (10)** submit an annual report on the STTR program to the Administration and the Office of Science and Technology Policy;
- (11)** adopt the agreement developed by the Administrator under subsection (w) of this section as the agency's model agreement for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization;
- (12)** develop, in consultation with the Office of Federal Procurement Policy and the Office of Government Ethics, procedures to ensure that federally funded research and development centers (as defined in subsection (e)(8) of this section) that participate in STTR agreements—
- (A)** are free from organizational conflicts of interests relative to the STTR program;
- (B)** do not use privileged information gained through work performed for an STTR agency or private access to STTR agency personnel in the development of an STTR proposal; and
- (C)** use outside peer review, as appropriate;
- (13)** not later than July 31, 1993, develop procedures for assessing the commercial merit and feasibility of STTR proposals, as evidenced by—
- (A)** the small business concern's record of successfully commercializing STTR or other research;
- (B)** the existence of second phase funding commitments from private sector or non-STTR funding sources;
- (C)** the existence of third phase follow-on commitments for the subject of the research; and
- (D)** the presence of other indicators of the commercial potential of the idea;
- (14)** implement an outreach program to research institutions and small business concerns for the purpose of enhancing its STTR program, in conjunction with any such outreach done for purposes of the SBIR program;
- (15)** collect, and maintain in a common format in accordance with subsection (v) of this section, such information from awardees as is necessary to assess the STTR program, including information necessary to maintain the database described in subsection (k) of this section; and
- (16)** provide for and fully implement the tenets of Executive Order No. 13329 (Encouraging Innovation in Manufacturing).

(p) STTR policy directive

(1) Issuance

The Administrator shall issue a policy directive for the general conduct of the STTR programs within the Federal Government. Such policy directive shall be issued after consultation with—

- (A)** the heads of each of the Federal agencies required by subsection (n) of this section to establish an STTR program;
- (B)** the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office; and
- (C)** the Director of the Office of Federal Procurement Policy.

(2) Contents

The policy directive required by paragraph (1) shall provide for—

- (A)** simplified, standardized, and timely STTR solicitations;
- (B)** a simplified, standardized funding process that provides for—
- (i)** the timely receipt and review of proposals;
- (ii)** outside peer review, if appropriate;
- (iii)** protection of proprietary information provided in proposals;
- (iv)** selection of awardees;
- (v)** retention by a small business concern of the rights to data generated by the concern in the performance of an STTR award for a period of not less than 4 years;
- (vi)** continued use by a small business concern, as a directed bailment, of any property transferred by a Federal agency to the small business concern in the second

phase of the STTR program for a period of not less than 2 years, beginning on the initial date of the concern's participation in the third phase of such program;

- (vii)** cost sharing;
- (viii)** cost principles and payment schedules; and
- (ix)** 1-year awards for the first phase of an STTR program, generally not to exceed \$100,000, and 2-year awards for the second phase of an STTR program, generally not to exceed \$750,000, greater or lesser amounts to be awarded at the discretion of the awarding agency, and shorter or longer periods of time to be approved at the discretion of the awarding agency where appropriate for a particular project;

(C) minimizing regulatory burdens associated with participation in STTR programs;

(D) guidelines for a model agreement, to be used by all agencies, for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization;

(E) procedures to ensure that—

- (i)** a recipient of an STTR award is a small business concern, as defined in section 632 of this title and the regulations promulgated thereunder; and
- (ii)** such small business concern exercises management and control of the performance of the STTR funding agreement pursuant to a business plan providing for the commercialization of the technology that is the subject matter of the award; and

(F) procedures to ensure, to the extent practicable, that an agency which intends to pursue research, development, or production of a technology developed by a small business concern under an STTR program enters into follow-on, non-STTR funding agreements with the small business concern for such research, development, or production.

(3) Modifications

Not later than 120 days after October 15, 2001, the Administrator shall modify the policy directive issued pursuant to this subsection to clarify that the rights provided for under paragraph (2)(B)(v) apply to all Federal funding awards under this section, including the first phase (as described in subsection (e)(6)(A) of this section), the second phase (as described in subsection (e)(6)(B) of this section), and the third phase (as described in subsection (e)(6)(C) of this section).

(q) Discretionary technical assistance

(1) In general

Each Federal agency required by this section to conduct an SBIR program may enter into an agreement with a vendor selected under paragraph (2) to provide small business concerns engaged in SBIR projects with technical assistance services, such as access to a network of scientists and engineers engaged in a wide range of technologies, or access to technical and business literature available through on-line data bases, for the purpose of assisting such concerns in—

- (A)** making better technical decisions concerning such projects;
- (B)** solving technical problems which arise during the conduct of such projects;
- (C)** minimizing technical risks associated with such projects; and
- (D)** developing and commercializing new commercial products and processes resulting from such projects.

(2) Vendor selection

Each agency may select a vendor to assist small business concerns to meet the goals listed in paragraph (1) for a term not to exceed 3 years. Such selection shall be competitive and shall utilize merit-based criteria.

(3) Additional technical assistance

(A) First phase

Each agency referred to in paragraph (1) may provide services described in paragraph (1) to first phase SBIR award recipients in an amount equal to not more than \$4,000, which shall be in addition to the amount of the recipient's award.

(B) Second phase

Each agency referred to in paragraph (1) may authorize any second phase SBIR award recipient to purchase, with funds available from their SBIR awards, services described in paragraph (1), in an amount equal to not more than \$4,000 per year.

(r) Third phase agreements

(1) In general

In the case of a small business concern that is awarded a funding agreement for the second phase of an SBIR or STTR program, a Federal agency may enter into a third phase agreement with that business concern for additional work to be performed during or after the second phase period. The second phase funding agreement with the small business concern may, at the discretion of the agency awarding the agreement, set out the procedures applicable to third phase agreements with that agency or any other agency.

(2) "Third phase agreement" defined

In this subsection, the term "third phase agreement" means a follow-on, non-SBIR or non-STTR funded contract as described in paragraph (4)(C) or paragraph (6)(C) of subsection (e) of this section.

(3) Intellectual property rights

Each funding agreement under an SBIR or STTR program shall include provisions setting forth the respective rights of the United States and the small business concern with respect to intellectual property rights and with respect to any right to carry out follow-on research.

(s) Repealed. Pub. L. 105-135, title V, § 501(b)(2), Dec. 2, 1997, 111 Stat. 2622

(t) Inclusion in strategic plans

Program information relating to the SBIR and STTR programs shall be included by each Federal agency in any update or revision required of the Federal agency under section 306 (b) of title 5.

(u) Coordination of technology development programs

(1) Definition of technology development program

In this subsection, the term "technology development program" means—

(A) the Experimental Program to Stimulate Competitive Research of the National Science Foundation, as established under section 1862g of title 42;

(B) the Defense Experimental Program to Stimulate Competitive Research of the Department of Defense;

(C) the Experimental Program to Stimulate Competitive Research of the Department of Energy;

(D) the Experimental Program to Stimulate Competitive Research of the Environmental Protection Agency;

(E) the Experimental Program to Stimulate Competitive Research of the National Aeronautics and Space Administration;

(F) the Institutional Development Award Program of the National Institutes of Health; and

(G) the National Research Initiative Competitive Grants Program of the Department of Agriculture.

(2) Coordination requirements

Each Federal agency that is subject to subsection (f) of this section and that has established a technology development program may, in each fiscal year, review for funding under that technology development program—

(A) any proposal to provide outreach and assistance to one or more small business concerns interested in participating in the SBIR program, including any proposal to make a grant or loan to a company to pay a portion or all of the cost of developing an SBIR proposal, from an entity, organization, or individual located in—

(i) a State that is eligible to participate in that program; or

(ii) a State described in paragraph (3); or

(B) any proposal for the first phase of the SBIR program, if the proposal, though meritorious, is not funded through the SBIR program for that fiscal year due to funding restraints, from a small business concern located in—

- (i)** a State that is eligible to participate in a technology development program; or
- (ii)** a State described in paragraph (3).

(3) Additionally eligible State

A State referred to in subparagraph (A)(ii) or (B)(ii) of paragraph (2) is a State in which the total value of contracts awarded to small business concerns under all SBIR programs is less than the total value of contracts awarded to small business concerns in a majority of other States, as determined by the Administrator in biennial fiscal years, beginning with fiscal year 2000, based on the most recent statistics compiled by the Administrator.

(v) Simplified reporting requirements

The Administrator shall work with the Federal agencies required by this section to have an SBIR or STTR program to standardize reporting requirements for the collection of data from SBIR or STTR applicants and awardees, including data for inclusion in the database under subsection (k) of this section, taking into consideration the unique needs of each agency, and to the extent possible, permitting the updating of previously reported information by electronic means. Such requirements shall be designed to minimize the burden on small businesses.

(w) STTR model agreement for intellectual property rights

(1) In general

The Administrator shall promulgate regulations establishing a single model agreement for use in the STTR program that allocates between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization.

(2) Opportunity for comment

In promulgating regulations under paragraph (1), the Administrator shall provide to affected agencies, small business concerns, research institutions, and other interested parties the opportunity to submit written comments.

(x) Research and development focus

(1) Revision and update of criteria and procedures of identification

In carrying out subsection (g) of this section, the Secretary of Defense shall, not less often than once every 4 years, revise and update the criteria and procedures utilized to identify areas of the research and development efforts of the Department of Defense which are suitable for the provision of funds under the Small Business Innovation Research Program and the Small Business Technology Transfer Program.

(2) Utilization of plans

The criteria and procedures described in paragraph (1) shall be developed through the use of the most current versions of the following plans:

(A) The Joint Warfighting Science and Technology Plan required under section 270 of the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201; 10 U.S.C. 2501 note).

(B) The Defense Technology Area Plan of the Department of Defense.

(C) The Basic Research Plan of the Department of Defense.

(3) Input in identification of areas of effort

The criteria and procedures described in paragraph (1) shall include input in the identification of areas of research and development efforts described in that paragraph from Department of Defense program managers (PMs) and program executive officers (PEOs).

(y) Commercialization Pilot Program

(1) In general

The Secretary of Defense and the Secretary of each military department is authorized to create and administer a “Commercialization Pilot Program” to accelerate the

transition of technologies, products, and services developed under the Small Business Innovation Research Program to Phase III, including the acquisition process.

(2) Identification of research programs for accelerated transition to acquisition process

In carrying out the Commercialization Pilot Program, the Secretary of Defense and the Secretary of each military department shall identify research programs of the Small Business Innovation Research Program that have the potential for rapid transitioning to Phase III and into the acquisition process.

(3) Limitation

No research program may be identified under paragraph (2) unless the Secretary of the military department concerned certifies in writing that the successful transition of the program to Phase III and into the acquisition process is expected to meet high priority military requirements of such military department.

(4) Funding

For payment of expenses incurred to administer the Commercialization Pilot Program under this subsection, the Secretary of Defense and each Secretary of a military department is authorized to use not more than an amount equal to 1 percent of the funds available to the Department of Defense or the military department pursuant to the Small Business Innovation Research Program. Such funds—

(A) shall not be subject to the limitations on the use of funds in subsection (f)(2) of this section; and

(B) shall not be used to make Phase III awards.

(5) Evaluative report

At the end of each fiscal year, the Secretary of Defense shall submit to the Committee on Armed Services and the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Armed Services and the Committee on Small Business of the House of Representatives an evaluative report regarding activities under the Commercialization Pilot Program. The report shall include—

(A) an accounting of the funds used in the Commercialization Pilot Program;

(B) a detailed description of the Commercialization Pilot Program, including incentives and activities undertaken by acquisition program managers, program executive officers, and prime contractors; and

(C) a detailed compilation of results achieved by the Commercialization Pilot Program, including the number of small business concerns assisted and the number of projects commercialized.

(6) Sunset

The pilot program under this subsection shall terminate at the end of fiscal year 2009.

[1] So in original. The word “and” probably should not appear.

[2] See References in Text note below.

[3] See References in Text note below.

[4] So in original. Probably should be “subparagraph (B)”.

[5] See References in Text note below.

[6] See References in Text note below