



[NASA SBIR/STTR Program Definitions \[1\]](#)

Allocation of Rights Agreement

A written agreement negotiated between the Small Business Concern and the single, partnering Research Institution, allocating intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization.

Awardee

The organizational entity receiving an SBIR/STTR Phase I, Phase II, or Phase III award.

Commercialization

The process of developing products, processes, technologies, or services and the production and delivery (whether by the originating party or others) of the products, processes, technologies, or services for sale to or use by the Federal government or commercial markets.

Cooperative Research or Cooperative Research and Development (R/R&D)

For purposes of the NASA STTR Program, cooperative R/R&D is that which is to be conducted jointly by the SBC and the RI in which a minimum of 40 percent of the work (before any cost sharing or fee/profit proposed by the firm) is performed by the SBC and a minimum of 30 percent of the work is performed by the RI.

Economically Disadvantaged Women-Owned Small Businesses (EDWOSBs)

To be an eligible EDWOSB, a firm must:

1) Be a Women Owned Small Business (WOSB) that is at least 51% owned by one or more women who are "economically disadvantaged". (2) Have one or more economically disadvantaged women manage the day-to-day operations, make long-term decisions for the business, hold the highest officer position in the business and work at the business full-time during normal working hours. A woman is presumed economically disadvantaged if she has a personal net worth of less than \$750,000 (with some exclusions), her adjusted gross yearly income averaged over the three years preceding the certification less than \$350,000, and the fair market value of all her assets is less than \$6 million.

2) Please note that for both WOSB and EDWOSB, the 51% ownership must be unconditional and direct. For a general definition please see FAR 2.101 ([https://www.acquisition.gov/far/current/html/Subpart 2 1.html](https://www.acquisition.gov/far/current/html/Subpart%202.1.html)) [2].

Essentially Equivalent Work

Work that is substantially the same research, which is proposed for funding in more than one contract proposal or grant application submitted to the same Federal agency or submitted to two or more different Federal agencies for review and funding consideration; or work where a specific research objective and the research design for accomplishing the objective are the same or closely related to another proposal or award, regardless of the funding source.

Feasibility

The practical extent to which a project can be performed successfully.

Federal Laboratory

As defined in 15 U.S.C. §3703, means any laboratory, any federally funded research and development center, or any center established under 15 U.S.C. §§ 3705 & 3707 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.

Funding Agreement

Any contract, grant, cooperative agreement, or other funding transaction entered into between any Federal agency and any entity for the performance of experimental, developmental, research and development, services, or research work funded in whole or in part by the Federal Government.

Funding Agreement Officer

A contracting officer, a grants officer, or a cooperative agreement officer.

Historically Underutilized Business Zone (HUBZone) Small Business Concern

A HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration. To see the full definition of a HUBzone see the FAR 2.101 ([https://www.acquisition.gov/far/current/html/Subpart 2 1.html](https://www.acquisition.gov/far/current/html/Subpart%202.1.html)) [2] [2]) or go to the SBA HUBzone site (www.sba.gov/hubzone) [3] [3]) for more details.

Infusion

The integration of SBIR/STTR developed knowledge or technologies within NASA programs and projects, other Government agencies and/or commercial entities. This includes integration with NASA program and project funding, development and flight and ground demonstrations.

Innovation

An innovation is something new or improved, having marketable potential, including: (1) development of new technologies, (2) refinement of existing technologies, or (3) development of new applications for existing technologies.

Intellectual Property (IP)

The separate and distinct types of intangible property that are referred to collectively as “intellectual property,” including but not limited to: patents, trademarks, copyrights, trade secrets, SBIR/STTR technical data (as defined in section 5.5), ideas, designs, know-how, business, technical and research methods, other types of intangible business assets, and including all types of intangible assets either proposed or generated by the SBC as a result of its participation in the SBIR/STTR Program.

Letters

There are several different types of letters referenced in the Solicitation. This is a summary of each type, whether it is required, and how it is used.

Letters of general support/endorsement:

Letters expressing general technical interest are not required or desired and will not be considered during the review process. However, if submitted, such letter(s) will count against the page limit of the technical proposal.

Letters of commitment from subcontractors/consultants:

Subject to the restrictions set forth in the solicitation, the SBC may establish business arrangements with other entities or individuals to participate in performance of the proposed R/R&D effort. A signed letter of commitment is required for each subcontractor and/or consultant. If a University is proposed as a subcontractor or a RI, the

NASA SBIR/STTR Program Definitions

signed letter shall be on the University letterhead from the Office of Sponsored Programs. If an independent consultant is proposed, the signed letter should not be on a University letterhead. These letters should be submitted as part of the Proposal Budget.

Letters of availability/commitment for federal facility usage:

In cases where an offeror seeks to use NASA or another federal department or agency services, equipment or facilities, the offeror shall provide the following:

1. Statement, signed by the appropriate government official at the effected federal department or agency, verifying that the resources should be available during the proposed period of performance.
2. Signed letter on company letterhead from the contractor's Small Business Official explaining why the SBIR/STTR research project requires the use of federal services, equipment or facilities, including data that verifies the absence of non-federal facilities or personnel capable of supporting the research effort, a statement confirming that the facility proposed is not a federal laboratory, if applicable, and the associated cost estimate.

Letters of funding commitments:

Letters of funding support commitments are allowable for Phase II proposals but will be considered only under Factor 4 - Commercial Potential and Feasibility. Letters of commitment will specify the level of funding commitments, other sources to be provided and any funding contingencies/conditions, in addition to timing of the funding being made available to the SBC. Expressions of technical interest in the Phase II research or of potential future financial support are not sufficient and will not be considered as capital commitments to the Phase II proposal and Phase III activities. Letters of commitment must be signed by a duly authorized representative of the outside funding source and SBC with the authority to obligate funding. Letters of funding support commitments should be submitted as part of the Capital Commitments Addendum.

NASA Intellectual Property (NASA IP)

NASA IP is NASA-owned, patented technologies that NASA is offering under a non-exclusive, royalty-free research license for use under the SBIR/STTR award.

New Technology Reporting Requirements

Anyone performing experimental, developmental, or research work under a NASA funding agreement, including SBIR/STTR Awardees, is required to disclose any new technology, invention or innovation as a result of the work performed under the contract. Any improvement, regardless of how big or small, should be reported via the New Technology Report (NTR) process defined below. Reportable items include a discovery, an invention, an innovation, or simply an advance in the state of the art. More detail on NASA's New Technology Reporting requirements can be found at: <https://invention.nasa.gov> [4].

New Technology Report (NTR)

NASA's New Technology Report (NTR), also known as a NASA Form 1679, is the method by which new technologies (inventions and/or innovations) are disclosed. The NTR captures essential information about the technology /innovation, including its purpose, features, benefits and uses. NTR's should be submitted within two months after the inventor discloses it in writing to the Awardee's personnel responsible for patent matters. NTRs shall be submitted to e-NTR via the SBIR/STTR EHB at <http://sbir.nasa.gov> [5] under the Handbooks section.

New Technology Summary Reports (NTSR): Interim and Final

The New Technology Summary Report is a required deliverable in all research contracts. It is used to summarize any and all technologies (inventions and/or innovations) developed during the performance of the contract. If no new technologies were developed under the contract, the Awardee shall submit an NTSR which contains a certification stating no new technology was developed. NTSRs shall be submitted to e-NTR via the SBIR/STTR EHB at <http://sbir.nasa.gov> [5] under the Handbooks section.

NASA SBIR/STTR Program Definitions

NASA's Electronic New Technology Reporting System (e-NTR)

NASA's e-NTR system is an on-line system used to submit NTRs, Interim NTSRs and Final NTSRs. The system may be found at URL: <https://invention.nasa.gov> [4]. For SBIR/STTR awardees, the e-NTR system link may be found within the SBIR/STTR EHB.

Principal Investigator (PI)

The one individual designated by the SBC to provide the scientific and technical direction to a project supported by the funding agreement.

Research Institution (RI)

A U.S. research institution is one that is: (1) a contractor-operated Federally funded research and development center, as identified by the National Science Foundation in accordance with the Government-wide Federal Acquisition Regulation issued in Section 35(c)(1) of the Office of Federal Procurement Policy Act (or any successor legislation thereto), or (2) a nonprofit research institution as defined in Section 4(3) of the Stevenson-Wydler Technology Innovation Act of 1980, or (3) a nonprofit college or university.

Research or Research and Development (R/R&D)

Creative work that is undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture, and society, and the use of this stock of knowledge to devise new applications. It includes administrative expenses for R&D. It excludes physical assets for R&D, such as R&D equipment and facilities. It also excludes routine product testing, quality control, mapping, collection of general-purpose statistics, experimental production, routine monitoring and evaluation of an operational program, and training of scientific and technical personnel.

Basic Research: systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind. Basic research, however, may include activities with broad applications in mind. Applied Research: systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met. Development: systematic application of knowledge or understanding, directed 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.

Note: NASA SBIR/STTR programs do not accept proposals solely directed towards system studies, market research, routine engineering development of existing products or proven concepts and modifications of existing products without substantive innovation (see section 1.1).

SBIR/STTR Technical Data

Technical data includes all data generated in the performance of any SBIR/STTR funding agreement.

SBIR/STTR Technical Data Rights

The rights an SBC obtains for data generated in the performance of any SBIR/STTR funding agreement that an awardee delivers to the Government during or upon completion of a federally funded project, and to which the Government receives a license.

Service Disabled Veteran-Owned Small Business

A Service-Disabled Veteran-Owned Small Business is one that is: (1) Not less than 51% of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51% of the stock of which is owned by one or more service-disabled veterans; (2) management and daily business operations, which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran; and (3) is small as defined by e-CFR §125.11.

NASA SBIR/STTR Program Definitions

Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service connected, as defined in 38 U.S.C. 101(16). For a general definition, see FAR 2.101 ([https://www.acquisition.gov/far/current/html/Subpart 2 1.html](https://www.acquisition.gov/far/current/html/Subpart%201.html)) [2] [2]).

Small Business Concern (SBC)

An SBC is one that, at the time of award of Phase I and Phase II funding agreements, meets the following criteria: (1) Is organized for profit, with a place of business located in the United States, which operates primarily within the United States or which makes a significant contribution to the United States economy through payment of taxes or use of American products, materials or labor; (2) is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative; except that where the form is a joint venture, there can be no more than 49 percent participation by business entities in the joint venture; (3) is at least 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States: except in the case of a joint venture, where each entity to the venture must be 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States; and (4) has, including its affiliates, not more than 500 employees.

The terms “affiliates” and “number of employees” are defined in greater detail in 13 CFR Part 121. For a general definition please see FAR 2.101 ([https://www.acquisition.gov/far/current/html/Subpart 2 1.html](https://www.acquisition.gov/far/current/html/Subpart%201.html)) [2].

Socially and Economically Disadvantaged Individual

Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias within American society because of their identities as members of groups and without regard to their individual qualities. The social disadvantage must stem from circumstances beyond their control.

Economically disadvantaged individuals are socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same or similar line of business who are not socially disadvantaged.

See 13 C.F.R. § 124.103 & 124.104

(https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title13/13cfr124_main_02.tpl) [6].

Socially and Economically Disadvantaged Small Business Concern

An applicant or Participant must be at least 51 percent unconditionally and directly owned by one or more socially and economically disadvantaged individuals who are citizens of the United States, except for concerns owned by Indian tribes, Alaska Native Corporations, Native Hawaiian Organizations, or Community Development Corporations (CDCs). See §124.3 for definition of unconditional ownership; and §§124.109, 124.110, and 124.111, respectively, for special ownership requirements for concerns owned by Indian tribes, ANCs, Native Hawaiian Organizations, and CDCs.

See 13 C.F.R. § 124, Subpart B

(https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title13/13cfr124_main_02.tpl) [6].

Subcontract

Any agreement, other than one involving an employer-employee relationship, entered into by an awardee of a funding agreement calling for supplies or services for the performance of the original funding agreement.

Technology Readiness Level (TRLs)

Technology Readiness Level (TRLs) is a uni-dimensional scale used to provide a measure of technology maturity. (See Appendix A for more detail.)

Level 1: Basic principles observed and reported.

Level 2: Technology concept and/or application formulated.

NASA SBIR/STTR Program Definitions

Level 3: Analytical and experimental critical function and/or characteristic proof of concept.

Level 4: Component and/or breadboard validation in laboratory environment.

Level 5: Component and/or breadboard validation in relevant environment.

Level 6: System/subsystem model or prototype demonstration in a relevant environment (Ground or Space).

Level 7: System prototype demonstration in an operational (space) environment.

Level 8: Actual system completed and (flight) qualified through test and demonstration (Ground and Space).

Level 9: Actual system (flight) proven through successful mission operations.

United States

Includes the 50 States, the territories and possessions of the Federal Government, the Commonwealth of Puerto Rico, the District of Columbia, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau.

Veteran-Owned Small Business

A veteran-owned SBC is a small business that: (1) is at least 51% unconditionally owned by one or more veterans, as defined at 38 U.S.C. 101(2); or in the case of any publicly owned business, at least 51% of the stock of which is unconditionally owned by one or more veterans; and (2) whose management and daily business operations are controlled by one or more veterans. For a general definition please see FAR 2.101 ([https://www.acquisition.gov/far/current/html/Subpart 2_1.html](https://www.acquisition.gov/far/current/html/Subpart%202.1.html) [2]).

Women-Owned Small Business (WOSB)

To be an eligible WOSB, a company must: (1) be a small business that is at least 51% percent unconditionally and directly owned and controlled by one or more women who are United States citizens. (2) have one or more women who manage the day-to-day operations, make long-term decisions for the business, hold the highest officer position in the business and work at the business full-time during normal working hours.

Please note that for a WOSB the 51% ownership must be unconditional and direct. For a general definition please see FAR 2.101 ([https://www.acquisition.gov/far/current/html/Subpart 2_1.html](https://www.acquisition.gov/far/current/html/Subpart%202.1.html) [2]).