Small Business Administration

13 CFR Chapter I

RIN: 3245-AF45

Small Business Technology Transfer Program Policy Directive

AGENCY: Small Business Administration

ACTION: Final policy directive with request for comments.

SUMMARY: The U.S. Small Business Administration (SBA) is amending its Small Business Technology Transfer (STTR) Policy Directive. The purpose of these amendments is to implement those provisions of the National Defense Authorization Act for Fiscal Year 2012 affecting the program.

DATES: You must submit your comments on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by RIN: 3245-AF45, by any of the following methods:

• Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

• Mail, Hand Delivery/Courier: Edsel Brown, Assistant Director, Office of Technology, U.S. Small Business Administration, 409 Third Street, SW, Washington, DC 20416.

SBA will post all comments to this policy directive on www.regulations.gov. If you wish to submit confidential business information (CBI) as defined in the User Notice at
www.regulations.gov, you must submit such information to Edsel Brown, or send an email to STTRComments@sba.gov. Highlight the information that you consider to be CBI and explain why you believe SBA should hold this information as confidential. SBA will review your information and determine whether it will make the information public.

FOR FURTHER INFORMATION CONTACT: Edsel Brown, Assistant Director, Office of Technology, at (202) 401-6365.

SUPPLEMENTARY INFORMATION:

I. Executive Summary

The Small Business Act (Act) requires that the U.S. Small Business Administration (SBA) issue a policy directive setting forth guidance to the Federal agencies participating in the STTR program. The STTR Policy Directive outlines how agencies must generally conduct their STTR programs. Each agency, however, can tailor their STTR Program to meet the needs of the individual agency, as long as the general principles of the program set forth in the Act and directive are followed.

With this notice, SBA is issuing an amended policy directive, which implements the recent changes made to the STTR Program as part of the SBIR/STTR Reauthorization Act of 2011 (Reauthorization Act). In fact, the Reauthorization Act requires that SBA issue amendments to the STTR Policy Directive and publish the amendments in the Federal Register by the end of June 2012.

Although the STTR Policy Directive is intended for use by the STTR participating agencies, SBA believes that public input on the directive from all parties involved in the program would be invaluable. Therefore, SBA is soliciting public
comments on this final directive, and may amend the directive in response to these comments at a later time.

The Reauthorization Act made several key changes to the STTR Program relating to eligibility, the STTR award process, STTR Program administration, and fraud, waste and abuse and SBA has addressed these issues in the directive. Although SBA has explained in detail the changes in the preamble, SBA believes it would be beneficial to all if it set forth an abbreviated outline of some of the key provisions and amendments to the Policy Directive in an Executive Summary.

A. Eligibility

With respect to eligibility for an STTR award, the directive:

- addresses the new requirements permitting small business concerns that are majority-owned by multiple venture capital operating companies (VCOCs), hedge funds or private equity firms to participate in the program;
- permits an SBIR Phase I awardee to receive an STTR Phase II award; and
- states that a small business may receive two, sequential Phase II awards.

For example, SBA amended the directive to address the two new statutory exceptions to the general rule that only STTR Phase I awardees may receive an STTR Phase II award. According to the Reauthorization Act, a Federal agency may now issue an STTR Phase II award to an SBIR Phase I awardee in order to further develop the work performed under the SBIR Phase I award.

B. STTR Award Process

With respect to the STTR award process, the Policy Directive incorporates the new statutory requirements, including the following:

- increasing the minimum percentage of an agency's extramural R/R&D budget that must be awarded to small businesses under the program;
- establishing agency measures to evaluate an STTR Phase I applicant's success with prior Phase I and Phase II awards;
• ensuring agencies make award decisions within the statutorily required time frames; and
• increasing the dollar thresholds for Phase I and Phase II awards.

For example, SBA has amended the Policy Directive to clarify that the STTR Program is extended until September 30, 2017 and to address the increase in the minimum percentages of an agency’s extramural budget for R/R&D that must be awarded to SBCs under the STTR program. As required by statute, the minimum percentages increase by 0.05% every two fiscal years through fiscal year 2017.

Further, SBA amended the directive to set forth the criteria by which agencies must establish standards, or benchmarks, to measure the success of certain Phase I awardees in receiving Phase II awards and to measure the success of certain Phase I awardees in receiving Phase III awards. The purpose of these standards, or benchmarks, is to ensure that repeat Phase I awardees are attempting to and have some success in receiving Phase II awards and commercializing their research. As a result, these benchmarks will only apply to those Phase I applicants that have received a certain number of prior Phase I awards.

In addition, the Reauthorization Act requires agencies to make STTR award decisions within a certain amount of time after the close of the solicitation. The purpose of this statutory amendment is to reduce the gap in time between submission of application and time of award, which is an important issue for many small businesses.

Further, the STTR Policy Directive sets forth the new maximum thresholds for Phase I and Phase II awards at $150,000 and $1,000,000, respectively. SBA will adjust these amounts every year for inflation and will post the adjusted numbers on www.SBIR.gov.

C. STTR Program Administration
With respect to each agency’s administration of the STTR Program, the Policy Directive incorporates the following new requirements:

- addressing statutory changes for technical assistance provided to STTR awardees;
- creating and setting forth the policies for the new pilot program that permits agencies to use SBIR money for administration of the STTR program; and
- setting forth the new reporting and data collection requirements.

The Act had previously permitted agencies to contract with vendors to provide technical assistance to STTR awardees (e.g. assist STTR awardees in making better technical decisions on STTR projects and commercializing the STTR product or process). The Reauthorization Act amended this current requirement, and SBA has amended the directive, to permit agencies to contract with a vendor for a period of up to 5 years, permit an agency to provide technical assistance to an STTR awardee in an amount up to $5,000 per year (previously the limit had been $4,000 per award), and permit the small business to elect to acquire the technical assistance services itself.

In addition, the Reauthorization Act creates a pilot program that permits agencies to use SBIR funds for certain administrative purposes for the STTR Program. SBA has amended the STTR Policy Directive to set forth when and how agencies may begin using this pilot program authority and to explain that agencies may use no more than 3% of their SBIR funds for one or more of the specified activities.

SBA has also amended the Policy Directive to address the reporting requirements for both the STTR participating agencies and STTR applicants, many of which are newly required by various parts of the Reauthorization Act. Both applicants and agencies will be able to provide the statutorily required information into one or more of seven specific databases, collectively referred to as Tech-Net, which will be available at www.SBIR.gov. The seven databases are the: (1) Solicitations; (2) Company Registry;
The directive explains that the Solicitations Database will collect all solicitations and topic information from the participating STTR agencies. The Company Registry will house company information on all STTR applicants and information on SBC applicants that are majority-owned by multiple VCOCs, hedge funds or private equity firms. The Application Information Database will contain information concerning each STTR application, which will be uploaded by an STTR agency. The Award Information Database will store information about each STTR awardee and must also be uploaded by the STTR agency. The Commercialization Database will store commercialization information for SBCs that have received STTR awards. The Annual Report Database will include all of the information required by the Small Business Act, including the new requirements set forth in the Reauthorization Act regarding the Annual Report that SBA submits to Congress. SBA receives the information for the annual report from the various STTR agencies and departments. The Other Reports Database will include information that is required by statute to be submitted, but does not fit into any of the other databases.

D. Fraud, Waste and Abuse

Finally, this Policy Directive incorporates several amendments relating to fraud, waste and abuse, such as:

- requiring small businesses to certify they are meeting the program's requirements during the life cycle of the funding agreement; and
- establishing specific measures to ensure agencies are preventing fraud, waste and abuse in the program.

As in the past, each small business that receives STTR funding must certify that it is in compliance with the laws relating to the program. However, SBA has amended the
directive to state that these STTR awardees must also submit certifications that they meet the program’s requirement at certain points during the life cycle of the award and provides agencies with the discretion to request additional certifications throughout the life cycle of the award.

In addition to lifecycle certifications, the Policy Directive includes other measures to prevent fraud, waste and abuse in the STTR Program. For example, agencies must include on their website and in each solicitation any telephone hotline number or web-based method for how to report fraud, waste and abuse; designate at least one individual to serve as the liaison between the STTR Program, Office of Inspector General (OIG) and the agency’s Suspension and Debarment Official (SDO); include on the agency’s website successful prosecutions of fraud, waste and abuse in the STTR Program; and create or ensure there is a system to enforce accountability (e.g., creating templates for referrals to the OIG or SDO), among other things.

Additional detail about all of these amendments to the directive is set forth below.

II. Background

In 1992, Congress enacted the Small Business Research and Development Enhancement Act of 1992 (SBRDEA), Public Law 102-564 (codified at 15 U.S.C. 638), which established the Small Business Technology Transfer Program (STTR Program). The statutory purpose of the STTR Program is to stimulate a partnership of ideas and technologies between innovative small business concerns (SBCs) and Research Institutions through Federally-funded research or research and development (R/R&D). By providing awards to SBCs for cooperative R/R&D efforts with Research Institutions, the STTR Program assists the small business and research communities by commercializing innovative technologies.
SBRDEA requires the U.S. Small Business Administration (SBA) to “issue a policy directive for the general conduct of the STTR programs within the Federal Government.” 15 U.S.C. 638(p)(1). The purpose of the Policy Directive is to provide guidance to the Federal agencies participating in the program.


As a result of the abbreviated time frame set forth in the Reauthorization Act by which SBA is required to issue the amended Policy Directive, the Agency was unable to conduct public outreach prior to drafting and issuing the directive. Therefore, SBA is soliciting public comments on this final directive, and may amend the directive in response to these comments at a later time. SBA also plans to conduct public outreach sessions following publication, such as town hall meetings and webinars, to gather additional input on these statutory provisions and SBA’s implementation. SBA will release more information about these public sessions later, which will be available at www.SBIR.gov. The SBA notes that it consulted with the STTR participating agencies when drafting these amendments.

III. Amendments

SBA has amended the STTR Policy Directive to address the various sections of the Reauthorization Act. SBA’s amendments are set forth in an analysis below, based on
the specific section of the directive. SBA welcomes comments on all issues arising from this notice.

SBA notes that it intends to update its Policy Directive on a regular basis and over the next year it plans to restructure and reorganize the directive as well as address certain policy issues (e.g., those concerning data rights). However, at this time it is amending the directive primarily to implement the new provisions contained in the Reauthorization Act.

A. Section 1 – Purpose

Section 5144 of the Reauthorization Act requires SBA to issue regulations or guidelines to simplify the application and award process. The Reauthorization Act requires SBA to issue such guidelines or regulations after an opportunity for notice and public comment. The regulations or guidelines must take into consideration the unique needs of each Federal agency, yet ensure that program proposal, selection, contracting, compliance, and audit procedures are simplified and standardized across participating agencies. This includes reducing the paperwork and regulatory compliance burden on small business concerns applying to and participating in the STTR Program.

SBA has amended the directive to fulfill this statutory requirement to simplify and standardize the proposal, selection, contracting, compliance, and audit procedures for the STTR program to the extent practicable while allowing the STTR agencies flexibility in the operation of their individual STTR Programs. Wherever possible, SBA has attempted to reduce the paperwork and regulatory compliance burden on SBCs applying to and participating in the STTR Program while still meeting the statutory reporting and data collection requirements. For example, as discussed later in this notice, SBA has created a program data management system for collecting and storing application information that
will be utilized by all STTR agencies, thus eliminating the need for STTR applicants to submit the same data to multiple agencies.

SBA requests comments on other ways it can simplify and standardize these requirements. Specifically, SBA requests comments on ways improve the application process, including simplifying and streamlining that process.

B. **Section 2 - Summary of Statutory Provisions**

SBA has implemented section 5101 of the Reauthorization Act by amending section 2 to clarify that the STTR Program is extended until September 30, 2017, unless otherwise provided in law. In addition, in order to implement section 5102 of the Reauthorization Act, SBA has amended section 2 of the directive to address the increase in the minimum percentages of an agency’s extramural budget for R/R&D that must be awarded to SBCs under the STTR program. As required by statute, the minimum percentages will increase by .05% every two fiscal years through fiscal year 2017. The directive clarifies that agencies may exceed these minimum percentages and make additional awards to SBCs under this program.

C. **Section 3 - Definitions**

SBA has amended the definition of “commercialization” as required by section 5125 of the Reauthorization Act. Further, SBA has amended the definition for the term “small business concern” by simply referencing its size regulations at 13 C.F.R. §§ 121.701-705. Those size regulations define the ownership and size requirements for the SBIR and STTR Programs. SBA has recently issued a rule proposing to amend those regulations and the definition of “small business concern” for purposes of the SBIR and STTR Programs as a result of certain provisions of the Reauthorization Act (see 77 Fed. Reg. 30227 (May 22, 2012)). SBA believes the proposed rule will not become final until
late 2012. In order to ensure that any changes made to the definition of “small business concern,” which become effective in the regulation in late 2012, are incorporated into the Policy Directive, it is best to simply reference the regulation in the Policy Directive at this time. When SBA issues the final regulations defining “small business concern,” SBA intends to amend the Policy Directive to explicitly incorporate the new definition rather than only reference the regulation.

D. Section 4 - Competitively Phased Structure of the Program

SBA amended the introductory paragraph to this section of the Policy Directive to explain that agencies must issue STTR awards pursuant to competitive and merit-based selection procedures. This amendment implements section 5162 of the Reauthorization Act.

SBA also amended this paragraph to explain that agencies may not use investment of venture capital, hedge funds or private equity firms as a criterion for a Phase I, Phase II or Phase III award. This amendment is required by section 5107(a) of the Reauthorization Act.

1. Section 4(a) – Phase I Awards

SBA has amended this section of the directive, which addresses Phase I awards, to incorporate the provisions of section 5165 of the Reauthorization Act concerning agency measures of progress towards commercialization. Specifically, section 5165 requires that agencies establish standards, or benchmarks, to measure the success of Phase I awardees in receiving Phase II awards. These standards are referred to as the “Phase I-Phase II” Transition Rate benchmarks in the Policy Directive. Section 5165 also requires agencies to establish benchmarks to measure the success of Phase I
awardees in receiving Phase III awards. These standards are referred to as the “Commercialization Rate” benchmarks in the Policy Directive.

STTR agencies must establish the Phase I-Phase II benchmark rate and have received SBA approval for the rate by October 1, 2012. Agencies must establish the Commercialization Rate and have received SBA approval for the rate by October 1, 2013. Any subsequent changes in the benchmarks must be approved by SBA.

Once established, agencies will only apply these benchmarks to those Phase I applicants that have received more than 20 Phase I awards or more than 15 Phase II awards over the prior 5 fiscal years (excluding the most recently completed two fiscal years). However, at the agency’s option, it may apply the benchmark to a Phase I applicant that has received more than 20 Phase I awards over the prior 10 or 15 fiscal years (excluding the most recently completed fiscal year) or has received more than 15 Phase II awards over the prior 10 or 15 fiscal years (excluding the most recently completed two fiscal years).

With the Phase I-Phase II Transition Rate, each agency must establish the minimum number of Phase II awards a small business must have received for a given number of Phase I awards over the preceding 5, 10, or 15 fiscal years (excluding the most recently completed fiscal year). For example, an agency may state that its Phase I-Phase II Transition Rate requires an STTR Phase I applicant to have received at least one Phase II award for every five Phase I awards received in the prior 10 fiscal years. Another agency could state that its Phase I-Phase II Transition Rate requires an STTR Phase I applicant to have received at least one Phase II award for every ten Phase I awards received in the prior 5 fiscal years. Agencies will set the benchmark as appropriate for the specific agency’s STTR Program, taking into consideration the fact that Phase I is
intended to explore high-risk, early-stage research and therefore many Phase I awards will not result in a Phase II award.

With the Commercialization Rate, each agency must establish the level of Phase III commercialization results a small business must have received from work performed under prior Phase II awards over the preceding 5, 10, or 15 fiscal years (excluding the most recently completed two fiscal years). Agencies have discretion to define this benchmark in a number of ways, including: in financial terms (e.g., dollar value of revenues and additional investment per dollar value of Phase II awards); in terms of the share of Phase II awards that have resulted in the introduction of a product to the market relative to the number of Phase II awards received; or by other means (e.g., a commercialization score or index). SBA is aware that some agencies currently have a commercialization benchmark they are using. The directive provides the agencies with the discretion to continue to use those benchmarks or establish new Commercialization Rates relevant to that agency.

We note that the Reauthorization Act refers to “the success of small business concerns with respect to the receipt of Phase III SBIR or STTR awards” when determining the Commercialization Rate benchmark. However, the SBA understands that the intent of this provision is to measure success at commercializing STTR technology not only in the Federal procurement market in the form of Phase III awards, but also in the private market place through sales or other means. Therefore, SBA has drafted the Policy Directive in a manner consistent with this understanding.

SBA will maintain a system that records all Phase I and Phase II awards and calculates these benchmark rates. The small business will be able to provide these rates to the STTR agency with its application. The Reauthorization Act requires that each
agency determine whether an STTR Phase I applicant meets both of these benchmarks. If the applicant does not meet both of the benchmarks, then by statute it is not eligible for the Phase I award and it is not eligible for any other STTR Phase I awards from that agency for a period of one year from the date it submitted the application to the agency and was determined ineligible for failure to meet the benchmark. That applicant, however, may be eligible for a Phase I award from a different agency if it meets that particular agency’s benchmarks. If the applicant does meet the particular agency’s benchmark rates, the agency will still evaluate the applicant’s commercial potential for the specific R&D in that application and base this evaluation on agency-specific criteria.

The purpose of this statutory provision is to ensure that STTR awardees are attempting to commercialize their R&D. SBA understands that not all Phase I awardees will receive Phase II awards due to many factors, such as the exploratory nature of Phase I awards, insufficient funding for Phase II awards, and changes in requirements for the agency. SBA has taken all of this into consideration when drafting these benchmark provisions, while also allowing agencies flexibility in setting the benchmarks.

2. Section 4(b) - Phase II Awards

SBA has amended this section of the directive, which addresses Phase II awards, to set forth two new statutory exceptions to the general rule that only STTR Phase I awardees may receive an STTR Phase II award. According to section 5104 of the Reauthorization Act, a Federal agency may now issue an STTR Phase II award to an SBIR Phase I awardee in order to further develop the work performed under the SBIR Phase I award.

SBA has also amended this section of the directive to state that agencies may not use an invitation, pre-screening, or pre-selection process for determining eligibility for a
Phase II award. Agencies must set forth a notice in each solicitation stating that all Phase III awardees are eligible to apply for a Phase II award and must provide specific guidance on how to apply. This amendment is required by section 5105 of the Reauthorization Act.

Finally, SBA amended this section to address section 5111 of the Reauthorization Act, concerning multiple Phase II awards. Specifically, agencies may now issue one additional, sequential Phase II award to continue the work of an initial Phase II award. Therefore, a small business may receive no more than two STTR Phase II awards for the same R&D project, and the awards must be made sequentially.

3. Section 4(c) - Phase III Award

SBA amended this section to address the specific statutory directive at section 5108 of the Reauthorization Act that agencies, to the greatest extent practicable, shall issue Phase III awards to the STTR awardee that developed the technology. Agencies may issue sole source Phase III awards to the STTR Phase I or Phase II awardee to meet this statutory requirement. At times, agencies have failed to use this authority, bypassed the small business that created the technology, and pursued the Phase III work with another business. Congress has expressed, again, and now in stronger terms, a clear intent for the agencies to issue Phase III awards to the STTR awardees that created the technology so that these small businesses can commercialize it.

SBA requests comments, however, on whether it should define “to the greatest extent practicable” with respect to when agencies shall issue these Phase III awards, and if so, how it should define the phrase. For example, if the agency elects not to issue a Phase III sole source award to the STTR Phase II awardee for follow-on Phase III work, then SBA requests comments on what other ways, if any, the agency could meet this
statutory requirement (e.g., whether STTR preference is an option within the context of a full and open competition).

E. Section 6 – Eligibility and Application (Proposal) Requirements

1. Section 6(a) - Eligibility Requirements

SBA amended this section of the directive to address the new statutory requirements concerning small businesses that are majority-owned by venture capital operating companies (VCOCs), hedge funds or private equity firms. Specifically, section 5107 of the Reauthorization Act states that businesses that are owned in majority part by VCOCs, private equity firms or hedge funds may be eligible to participate in the SBIR Program, under certain conditions.

First, SBA must amend its size regulations at 13 C.F.R. part 121, to address ownership, control, and affiliation for these businesses. SBA has issued a proposed rule addressing this issue, with a request for comments. While Section 5107 of the Reauthorization Act addresses only the SBIR program, SBA has proposed changing the ownership, control, and affiliation rules effecting SBCs that participate in both the SBIR and STTR programs. This was done to maintain conformity between the programs. The new ownership, control, and affiliation rules will not be in effect until a final rule is issued.

Second, if the agency elects to use this authority, it must submit a written determination letter to SBA, the Senate Committee on Small Business and Entrepreneurship, the House Committee on Small Business and the House Committee on Science, Space, and Technology. The agency must explain how awards to small business that are majority-owned by multiple VCOCs, hedge funds or private equity firms will induce similar and additional funding of small business innovations, contribute to the
mission of the agency, demonstrate a need for public research, and otherwise fulfill the capital needs of small businesses for SBIR (or STTR) projects.

Third, small businesses that are majority-owned by multiple VCOCs, hedge funds or private equity firms must register with the SBA prior to submitting an STTR application. Once SBA issues a final rule amending 13 C.F.R. part 121 concerning ownership and control of STTR applicants, the ownership and control rules will be in effect, and the registration will be available at www.SBIR.gov.

Finally, agencies electing to use this authority may only issue a certain percentage of their STTR awards to small businesses that are majority-owned by multiple VCOCs, hedge funds or private equity firms. The National Institute of Health (NIH), Department of Energy (DOE), and the National Science Foundation (NSF) may award not more than 25% of their SBIR funds to such small businesses. All other SBIR agencies may award not more than 15% of their SBIR funds to these small businesses. If the agency has not exceeded these maximum statutory percentages, the participating agencies may make awards to small businesses that are majority-owned by multiple VCOCs, hedge funds or private equity firms under the STTR Program. If an agency exceeds this maximum statutory percentage of awards, it must transfer this excess amount from its non-SBIR and non-STTR funds to the SBIR funds.

SBA considered amending the requirement concerning the principal investigator’s primary employment. Specifically, SBA considered further defining primary employment to mean that the principal investigator must perform at least 51% of his/her work (as opposed to the current requirement that they perform a minimum of one half), based on a 40-hour workweek, in the employ of either the research institution or small business. SBA seeks comments on whether this further clarification is needed.
2. Section 6(b) – Proposal Requirements

SBA amended this section to address the certification requirements at the time an SBC submits its proposal and at the time it receives an STTR award. Section 5143 of the Reauthorization Act requires each STTR awardee to certify that it is in compliance with the laws relating to the program. SBA’s Administrator is required to develop, in consultation with the Council of Inspectors General on Integrity and Efficiency, the procedures and requirements for this certification after providing notice of and an opportunity for public comment on such procedures and requirements. SBA requested public input on its certification requirements in the ownership and control proposed rule. SBA will consider further input received on this final directive.

In the directive, SBA explains that all applicants that are majority-owned by multiple VCOCs, hedge funds or private equity firms must submit a certification and register at www.SBIR.gov (once SBA issues a final regulation amending 13 C.F.R. part 121). The specifics relating to the certification and registration database are discussed later in Section 10.

Further, all STTR awardees must submit a certification at the time of award stating that it meets the size, ownership and other requirements of the STTR Program. The directive explains that agencies may request similar certifications prior to award, such as at the time of submission of the application. The specifics relating to the certification is discussed later in this notice.

In addition to the certification requirements, section 5132-5135 of the Reauthorization Act requires that STTR applicants and awardees provide to agencies certain information concerning their ownership, investors, and principal investigators, among other things. In an effort to streamline and simplify this data collection, SBA
requires that the small business provide this information to the databases available at www.SBIR.gov, rather than to each individual agency with each STTR application or award. The specifics relating to this certification and data collection are discussed below in Section 10.

F. Section 7 – STTR Funding Process

1. Section 7(c) – Selection of Awardees

Section 5126 of the Reauthorization Act requires agencies to make award decisions within a certain amount of time after the close of the solicitation. The purpose of this statutory amendment is to reduce the gap in time between submission of application and time of award, which is an important issue for many small businesses. For example, if an agency takes a long time to make an award, it may be difficult for the small business to retain its key personnel, such as the principal investigator.

The Reauthorization Act requires, and the directive explains, that NIH and NSF must issue a notice to each applicant as to whether it has been selected for an award within one year from the closing date of the solicitation. The directive states that NIH and NSF should then issue the actual award within 15 months of the closing date of the solicitation. All other agencies must issue a notice to each applicant as to whether it has been selected for an award within 90 calendar days from the closing date of the solicitation. The directive states that the agencies should then issue the actual award within 180 calendar days of the closing date of the solicitation.

If an agency will not be able to issue the notice within the statutorily required time, it must request an extension of time from SBA. The written request must specify the number of additional days needed to make the award decision and must be submitted to the SBA at least 10 business days prior to when the agency is required to issue the
award decision to the applicants. SBA explains in the Policy Directive that even if it grants an extension of time, the STTR agency still has the responsibility to work toward issuing quicker awards and meeting the statutory timeframes.

2. **Section 7(i) – Dollar Value of Awards**

SBA amended this section of the directive to implement section 5103 of the Reauthorization Act, which sets the maximum thresholds for Phase I and Phase II awards at $150,000 and $1,000,000, respectively. SBA will adjust these amounts every year for inflation and will post the adjusted numbers on www.SBIR.gov.

Section 5103 of the Reauthorization Act also states that agencies may exceed these thresholds by no more than 50%, unless the agency requests and is granted a waiver from SBA. SBA has amended the directive to set forth this new statutory requirement. In addition, as stated in the directive, when submitting a request for a waiver to exceed the award guidelines, the waiver must be for a specific topic, and not for the agency as a whole. SBA notes that the Reauthorization Act only permits a waiver by topic. Further, the directive explains that when seeking the waiver, the agency must provide evidence showing that the limitations on the award size will interfere with its mission and that the research costs for the topic area differ significantly from other areas, among other things.

G. **Section 8 – Terms of Agreement Under STTR Awards**

As discussed above, section 5143 of the Reauthorization Act requires each applicant that applies for and each small business that receives STTR funding to certify that it is in compliance with the laws relating to the program. Section 5143 specifically states that such certifications may cover the life cycle of the funding agreement.

As a result, SBA has amended this section of the directive to state that for Phase I awards, agencies must require that awardees submit a certification as to whether they are
in compliance with specific STTR Program requirements at the time of final payment or disbursement. For Phase II awards, agencies must require that awardees submit a certification as to whether they are in compliance with specific STTR Program requirements prior to receiving more than 50% of the total award amount and prior to final payment or disbursement. The directive provides the agencies with the discretion to request additional certifications throughout the life cycle of the award since SBA is aware that some agencies request certification at the time of each payment.

SBA notes that these certifications are in addition to, and different in content from the certification required at the time of award. SBA requests comments on the certification requirements, including whether additional certifications should be required to prevent fraud, waste and abuse.

H. Section 9 – Responsibilities of STTR Participating Agencies and Departments

1. Section 9(c) – Discretionary Technical Assistance

The Small Business Act currently permits agencies to contract with vendors who provide technical assistance to STTR awardees. Section 5121 of the Reauthorization Act amended this current requirement to permit agencies to contract with vendors for a period of up to 5 years. In addition, the Reauthorization Act states that the contract with the vendor cannot be based upon the total number of Phase I or Phase II awards. The contract, however, may be based on the total amount of awards for which actual technical assistance was provided. The directive addresses these new requirements.

The Reauthorization Act permits an agency to provide technical assistance to an STTR awardee in an amount up to $5,000 per year (previously the limit had been $4,000 per award). This amount is in addition to the award amount.
The Reauthorization Act also permits the small business to elect to acquire the technical assistance services itself. Some believe that allowing a small business to obtain such services itself may create conflicts or potential abuses. To negate these concerns, SBA has required that the applicant must request to do so in its STTR application, and must demonstrate that the individual or entity selected can provide the specific technical services needed. If the awardee demonstrates this requirement sufficiently, the Reauthorization Act states that the agency must permit the awardee to acquire the needed technical assistance itself, as an allowable cost. SBA has incorporated these new statutory authorities into the directive. SBA welcomes comments on this amendment and other ways it can limit potential abuses of the technical assistance allowance.

2. Section 9(d) – Interagency Actions

SBA amended the directive to address section 5104 of the Reauthorization Act, which requires that when one agency issues an STTR Phase II award to an STTR Phase I awardee of another agency, both agencies must issue a written determination that the topics of the awards are the same. The agencies must submit this report to SBA.

3. Section 9(e) – Limitation on Use of Funds

Section 5141 of the Reauthorization Act creates a pilot program that permits agencies to use SBIR funds for certain administrative purposes. Prior to this amendment, agencies were not permitted to use SBIR funds for any purpose other than awards and technical assistance to small businesses.

SBA has amended the SBIR Policy Directive to state that beginning on October 1, 2012, and ending on September 30, 2015, and upon establishment by SBA of the agency-specific performance criteria, SBA shall allow agencies to use no more than 3% of their SBIR funds for one or more specific activities. Specifically, the funding is to be used to
assist with the substantial expansion in commercialization reporting; fraud, waste and abuse prevention; expanded reporting requirements; and other new activities required by the STTR Program. The administrative funds are not to be used to replace the agency’s current administrative funding for the STTR Program (e.g., pay for current personnel) but to supplement the agency’s current administrative funding (e.g., pay for new personnel to assist solely with STTR funding agreements) and cover the costs of new program initiatives.

The Reauthorization Act requires agencies to use some of these funds to increase participation by socially and economically disadvantaged small businesses (SDBs) and women-owned small businesses (WOSBs) in the STTR Program, and small businesses in states with a historically low level of participation in the program. The agency may request a waiver of this statutory requirement by submitting a written statement explaining why there is a sufficient need for the waiver, and that the outreach objectives of the agency are already being met. The directive addresses this requirement.

The Reauthorization Act states that agencies may not use the SBIR funds for any of these administrative purposes until SBA establishes performance criteria to measure the benefits of using the funds and to ultimately determine whether the pilot program should be continued, discontinued, or made permanent. The Policy Directive explains that in order to help SBA establish the agency-specific performance criteria, each agency must submit an annual work plan to SBA at least 30 calendar days prior to the start of a fiscal year. The work plan must set forth a prioritized list of initiatives to be supported in alignment with reporting requirements, the estimated amounts to be spent on each initiative, milestones for implementing the initiatives, the expected results to be achieved, and the assessment metrics for each initiative. The work plan must explain how these
initiatives are above and beyond the agency’s current practices and how they will enhance the program.

After review of the work plan, SBA will establish the performance metrics for that fiscal year by which use of these funds will be evaluated for that fiscal year. SBA will create a simplified template for agencies to use when creating their work plans. Agencies will submit work plans to SBA each fiscal year the pilot program is in operation.

The Policy Directive also explains that any activities relating to fraud, waste and abuse prevention in the work plan must be coordinated with the agency’s Office of Inspector General (OIG). If the agency allocates more than $50,000,000 to its SBIR Program for a fiscal year, some of these administrative funds may be used to cover the costs incurred by the OIG when the OIG performs fraud, waste and abuse activities for the agency’s STTR Program.

SBA also amended this section of the Policy Directive to address the new statutory requirement set forth in section 5109 of the Reauthorization Act that permits agencies to subcontract a portion of an STTR funding agreement to a Federal laboratory. Although agencies may permit small businesses to subcontract a portion of the work to the Federal laboratory without requesting a waiver from SBA, the agency cannot require a small business to subcontract a portion of the award to the laboratory.

4. Section 9(f) – Preventing Fraud, Waste, and Abuse

Section 5143 of the Reauthorization Act requires SBA to amend the Policy Directive to include measures to prevent fraud, waste and abuse in the STTR Program. SBA has amended the directive to define and provide examples of fraud, waste and abuse as it relates to the STTR Program. In addition, SBA has amended the directive to state
that each STTR agency must take certain measures to reduce fraud, waste and abuse in the program.

For example, at the recommendation of the Council for Inspectors General on Integrity and Efficiency, the SBA has included the requirement for certification by the small business during the life cycle of the funding agreement. As discussed above, this means that in addition to requiring a certification at the time of award, agencies must request certifications by the small business concern during certain points in time of a Phase I and Phase II funding agreement to ensure that the awardee is in compliance with the program’s requirements.

The directive explains that agencies must also take other measures to reduce fraud, waste and abuse, such as: (1) including on their website and in each solicitation any telephone hotline number or web-based method for reporting fraud, waste, and abuse; (2) designating at least one individual to serve as the liaison between the STTR Program, OIG and the agency’s Suspension and Debarment Official (SDO); (3) including on the agency’s website successful prosecutions of fraud, waste and abuse in the STTR Program (relating to any STTR agency); and (4) creating or ensuring there is a system to enforce accountability (e.g., creating templates for referrals to the OIG or SDO), among other things. In addition, the directive requires the agencies to work with their specific OIG, who will help establish fraud detection indicators. For example, one agency, acting in concert with its OIG, uses a commercial software that searches for redundancy or plagiarism in the applications submitted. This is one form of a fraud detection indicator.

SBA welcomes comments on other ways agencies may reduce fraud, waste and abuse in the program.

5. **Section 9(g) – Interagency Policy Committee**
Section 5124 of the Reauthorization Act instructs the Office of Science and Technology Policy (OSTP) to create the Interagency Policy Committee, comprised of OSTP, the SBIR and STTR participating agencies and SBA. The purpose of this committee is to review issues relating to the STTR program, such as commercialization assistance, and make recommendations on ways to improve the program. SBA has amended the directive to address this new committee.

6. Section 9(h) – National Academy of Science Report

Section 5137 of the Reauthorization Act requires the National Academy of Sciences (NAS) to conduct a comprehensive study of how the STTR program has stimulated technological innovation. NAS must consult with and consider the views of SBA, as well as other interested parties, when drafting the report. In addition, the statute requires certain agencies, in consultation with SBA, to enter into an agreement with NAS in furtherance of the report. SBA has amended the Policy Directive to address this new requirement, since NAS will be issuing the report not later than 4 years after December 31, 2011 and then every subsequent four years. Details about the study are set forth in Appendix X.

1. Section 10 – Agency and STTR Applicant/Awardee Reporting Requirements

SBA has amended this section of the Policy Directive to address the reporting requirements for both the STTR participating agencies and STTR applicants, many of which are newly imposed by various parts of the Reauthorization Act. In an effort to streamline and standardize the various reporting requirements, SBA will be gathering this information at one source – www.SBIR.gov. Both applicants and agencies will be able to provide the statutorily required information into one or more specific databases,
collectively referred to as Tech-Net. These requirements will be phased in over a period of time according to a plan that is complementary to but not part of the Policy Directive.

SBA published a notice in the Federal Register, 77 FR 16313, on March 20, 2012, explaining this data collection and seeking comments. One of the comments expressed concern that SBA was unnecessarily seeking information from small businesses. This is not the case. The Reauthorization Act sets forth a number of data requests SBA and the STTR agencies are required to collect from small businesses. This data collection is intended to ensure that only those small businesses that meet the requirements of the program receive an STTR award and to enable assessment of the program.

SBA has sought to reduce any burdens this data collection may have on small businesses. Because SBA will be collecting the data at one location, small business and agencies will only have to input certain information once, and then update as necessary. For example, when a small business inputs information for the Company Registry, some of the information will populate some fields in other databases, such as the Commercialization Database. Likewise, if an agency provides awardee information in the Awardee database, some of information will populate the Annual Report Database.

The seven databases addressed in the directive are the: (1) Solicitations; (2) Company Registry; (3) Application Information; (4) Award Information; (5) Commercialization; (6) Annual Report; and (7) Other Reports Databases. SBA currently has some of these databases ready for operation with the needed data fields and anticipates a phased implementation for the remaining databases and data fields.

The directive explains that the Solicitations Database will collect all solicitations and topic information from the participating STTR agencies. It will serve as the primary source for small businesses searching for STTR solicitations. Agencies must therefore
update this database within 5 business days after a solicitation’s open date. SBA will have a Master Schedule showing all agency solicitation open and close dates.

The Company Registry will house company information on all STTR applicants. It will contain information on SBC applicants that are majority-owned by multiple VCOCs, hedge funds or private equity firms, which by statute are required to register in an SBA database prior to submitting an SBIR or STTR application. This database will also house the registration information for those SBCs that receive an award as a result of the Civilian Agency Commercialization Readiness Pilot Program. All potential STTR applicants will be required to register in the Company Registry prior to submitting an STTR application.

SBA believes it is important to maintain such a Company Registry for several reasons. First, in order to prevent fraud, waste and abuse it would be best to house the data in one place so that the company must register itself and use that same registration (same name and identifying number) for each application. In addition, at the time the company registers, SBA intends to have online information relating to eligibility to ensure that the business understands the requirements of the program. Second, certain information on applicants is required by statute and therefore it would be best to have the applicant enter the data once (and update as needed), instead of each time it submits an application to an agency. Third, this registration is no different than others used in Federal contracting, such as the Central Contractor Registration (CCR). There are numerous small businesses that are registered in CCR and it does not appear to be a burden or difficult for small businesses to register their information into a central database in order to receive a contracting benefit afforded small businesses.
The directive also explains that the Application Information Database will contain information concerning each STTR application, which will be uploaded by an agency at least quarterly. Some of the information inputted by the STTR applicant into the Company Registry will filter to this database. Other information, such as the contact information for the Federal employee reviewing the applications and making awards, will need to be inputted by the agency. This database will also contain information required by section 5135 of the Reauthorization Act, including information relating to the names of key individuals that will carry out the project and the percentage of effort the individual will contribute to the project.

The Award Information Database will store information about each STTR awardee and must be updated by the agency quarterly. Award data is generally reviewable and searchable by the public. Some of the information collected from the Company Registry and Application Information Database will filter to this database.

The Commercialization Database will store commercialization information for SBCs that have received STTR awards. This includes information relating to revenue from the sale of new products or services resulting from the R&D conducted under a Phase II award and any business or subsidiary established for the commercial application of a product or services for which an STTR award is made, among other things. The information contained in this database will be used by SBCs and agencies to determine whether the SBC meets the agency’s commercialization benchmarks, discussed above, and for program evaluation purposes. SBCs may provide the information to the SBA’s database directly or to the agency, which will collect it and upload it to SBA’s database.

The Annual Report Database will include all of the information required by the Small Business Act, including the new requirements set forth in the Reauthorization Act
regarding the Annual Report that SBA submits to Congress. SBA receives the information for the annual report from the various STTR agencies and departments. To reduce the burden on the agencies and departments, data from the other databases will filter to the Annual Report Database. Agencies must provide the other information for the annual report to SBA by March 15th each year.

Some of the information that agencies will be required to provide by March 15 includes new information required by the Reauthorization Act, such as an analysis of the various activities considered for inclusion in the Commercialization Program for civilian agencies set forth in section 12(c) of the directive and a description of the extent to which the agency is increasing outreach and awards to SDBs and WOSBs.

The Other Reports Database will include information that is required by statute to be submitted, but does not fit into any of the other databases. For example, section 5110 of the Reauthorization Act requires agencies to provide SBA notice of any case or controversy before any Federal judicial or administrative tribunal concerning the STTR Program of the Federal agency. A case or controversy between a Federal or administrative tribunal would not include agency level protests of awards unless and until the protest is before a Federal court or administrative body. It would include litigation that is before a Federal or State court, or administrative tribunal such as the Government Accountability Office. Further, section 5161 of the Reauthorization Act requires that agencies provide an annual report to the SBA, the Senate Committee on Small Business and Entrepreneurship, the House Committee on Small Business, and the House Committee on Science, Space, and Technology on the SBIR and STTR Programs and the benefits of these programs to the United States. The statute requires the final report be posted online so it can be made available to the public. This section lists this and other
new reporting requirements, set forth in the Reauthorization Act, for the STTR agencies.

Finally, SBA has a new section in the directive that identifies all of the waivers that may be requested and submitted by an agency to SBA, and which are discussed in various other parts of the directive. The following waivers may be granted by SBA: (1) an extension for additional time between the solicitation closing date and notification of recommendation for award; (2) permission to exceed the award guidelines for Phase I and Phase II awards by more than 50% for a specific topic; and (3) permission to issue a funding agreement that includes a provision for subcontracting a portion of that agreement back to the issuing agency if there is no exception to this requirement in the directive.

J. Section 11 – Responsibilities of SBA

SBA has amended this section of the directive to incorporate some new responsibilities of SBA and to include many responsibilities and activities SBA has undertaken over the last several years with respect to the program. These areas of responsibility include: (1) policy, outreach, collection and publication of data; (2) monitoring implementation of the program and reporting to Congress; and (3) additional efforts to improve performance.

First and most obvious, is that SBA is responsible for establishing the policies and procedures for the program by publishing and updating the STTR Policy Directive and promulgating regulations. As discussed above, SBA is also responsible for issuing waivers.

SBA also conducts outreach to achieve a number of objectives including educating the public and the agencies about the STTR Program, highlighting successful SBC achievements, and maintaining www.SBIR.gov. Similarly, SBA must collect and
maintain program-wide data within the Tech-Net data system (available at www.SBIR.gov). This data includes information on all Phase I and II awards from across all STTR participating agencies, as well as Fiscal Year Annual Report data.

SBA also provides oversight and monitors the implementation of the STTR Program. This includes monitoring agency STTR funding allocations and program solicitation and awards as well as ensuring each participating agency has taken steps to maintain a fraud, waste and abuse prevention system to minimize adverse impact on the program.

SBA is also responsible for defining areas of performance consistent with statute (e.g., timelines for award, simplification of STTR application process) and defining metrics against that performance. SBA will therefore measure performance against goals set by the STTR agencies. The purpose of these performance metrics and goals is to evaluate and report on the progress achieved by the agencies in improving the STTR Program. SBA discusses in detail the performance metrics and goals in section 10(i) of the directive.

In addition to the above, SBA continuously seeks to improve the performance of the program and will make recommendations and modifications for such improvement. This may include sharing and recommending agency “best practices” and other program-wide initiatives.

All of these SBA responsibilities are set forth in section 11 of the directive.

K. Section 12 – Supporting Programs and Initiatives

This section of the policy directive sets forth various programs, including a new pilot program that seeks to enhance the commercialization efforts of small businesses. These programs also include the Federal and State Technology Partnership (FAST)
Program, the DoD Commercialization Program, the Civilian Agency Commercialization Readiness Pilot Program, and the Phase 0 Proof of Concept Partnership Pilot Program.

Section 5122 of the Reauthorization amended the DoD Commercialization Program by converting it from a pilot program into a permanent program. The purpose of this program is for DoD to accelerate the transition of technologies, products and services developed under the STTR Program to Phase III. The Reauthorization amended the program by creating an incentive requirement for any contract with a value of at least $100 million. For those contracts, DoD may establish goals for the transition of STTR technologies into the prime contractor’s subcontracting plan and require the prime to report the number and value of subcontracts entered into for Phase III work with a prior STTR awardee.

Section 5141 of the Reauthorization Act also amended the DoD Commercialization Program by stating that for FY 2013 through FY 2015, the Secretary of Defense and each Secretary of a military department may use no more than 3% of its SBIR funds for administration of this Commercialization Program. This means that the only SBIR funds that can be used for the administration of the DoD Commercialization Program must come from the Pilot to Allow for Funding of Administrative, Oversight, and Contract Processing Costs, discussed above. When that pilot program expires, which is the end of FY 2015, the statute provides that DoD may use not more than 1% of its SBIR funds available to DoD or the military departments to administer the Commercialization Program. Section 12 of the directive addresses this DoD program.

Section 12 of the directive also sets forth the new Civilian Agency Commercialization Readiness Pilot Program. This new program is authorized by section 5123 of the Reauthorization Act and terminates on September 30, 2017, unless otherwise
This Commercialization Readiness Pilot Program is different from the DoD Commercialization Program. Under this program, a civilian agency participating in the STTR Program may allocate not more than 10% of its STTR funds: (1) for follow-on awards to small businesses for technology development, testing, evaluation, and commercialization assistance for SBIR or STTR Phase II technologies; or (2) for awards to small businesses to support the progress of research, research and development, and commercialization conducted under the SBIR or STTR programs to Phase III.

Before establishing this pilot program, an STTR agency must submit a written application to SBA not later than 90 days before the first day of the fiscal year in which the pilot program is to be established. The written application must set forth a compelling reason that additional investment in SBIR or STTR technologies is necessary, including unusually high regulatory, systems integration, or other costs relating to development or manufacturing of identifiable, highly promising small business technologies or a class of such technologies expected to substantially advance the mission of the agency. SBA must make its determination regarding an application submitted not later than 30 days before the first day of the fiscal year for which the application is submitted and will publish its determination in the Federal Register. Under this pilot program, STTR agencies may make an award to a SBC up to three times the dollar amount generally established for Phase II awards under section 7(i)(1) of this directive. When making an award under this pilot program, the agency is required to consider whether the technology to be supported by the award is likely to be manufactured in the United States.

Section 5127 of the Reauthorization Act established the Phase 0 Proof of Concept...
Partnership Pilot Program, which terminates on September 30, 2017, unless otherwise extended. Section 5127 of the Reauthorization Act authorizes the Director of the National Institutes of Health (NIH) to use $5,000,000 of the funds allocated for the STTR Program, set forth in section 2(b) of this directive, to establish this pilot program to accelerate the creation of small businesses and the commercialization of research innovations from qualifying institutions. The Director of NIH may make grant awards of up to $1,000,000 per year, for up to 3 years, to qualifying institutions. Awards shall be made based on a competitive, merit-based process. Section 5127 provides criteria that the Director of NIH must consider in determining whether an applicant is a qualified institution. The qualifying institutions must use these funds to establish a Proof of Concept Partnership with NIH to administer grant awards to individual researchers. These grants should provide individual researchers with the initial investment and the resources to support the proof of concept work and commercialization mentoring necessary to translate promising research projects and technologies into a viable company. Section 5127 provides guidelines that the administrator of a Proof of Concept Partnership must follow in making grant awards to individual researchers. The administrator of a Proof of Concept Partnership must also make educational resources and guidance available to researchers attempting to commercialize innovations.

Section 5127 of the Reauthorization Act also limits the use of the pilot program’s funds. Specifically, section 5127 requires that the funds must not be used for basic research or to fund the acquisition of research equipment or supplies unrelated to commercialization activities. This section of the Reauthorization Act also specifically states that the pilot program’s funds can be used to evaluate the commercial potential of existing discoveries, including proof of concept research or prototype development; and
activities that contribute to determining a project’s commercialization path, to include technical validations, market research, clarifying intellectual property rights, and investigating commercial and business opportunities.

L. Appendix – Instructions for STTR Program Solicitation Preparation

SBA amended this section of the Policy Directive to address the certification requirements set forth in section 5143 of the Reauthorization Act. Specifically, section 5143 recommends that SBCs receiving an STTR award certify their eligibility for the program and award.

SBA has created three new certifications to be used by agencies. The first certification is for STTR applicants that are majority-owned by multiple VCOCs, hedge funds or private equity firms. The certification, to be submitted to the agency by the SBC with its application, states that the SBC has registered with the Company Registry Database and meets the statutory requirements for eligibility of such small businesses.

The second certification is required for all SBCs that receive an STTR award, although agencies may request that SBCs provide a certification at the time of application, as well. This certification addresses the ownership and control requirements for the program set forth in SBA’s regulations and the performance of work requirements for the small business and principal investigator. The certification also addresses whether all or a portion of the work under the project has been submitted to another agency for consideration of an award and whether the other agency has or has not funded the work. The purpose of this part of the certification is to ensure that two or more agencies do not fund the same or similar work.

The third certification is required for all STTR awardees that are working on an STTR award. This is referred to as the life cycle certification. It seeks to ensure that
once awarded the STTR funding agreement, the small business concern continues to meet
the program’s requirements (e.g., performing the required percentage of work, employing
the principal investigator). Agencies will set forth in the funding agreement those
specific points in time that the small business must submit the certification during the life
of the award.

Finally, this section of the directive also addresses the requirement in section
5140 of the Reauthorization Act that agencies request permission from SBCs to disclose
the title and abstract of the proposed project, as well as the name and other information of
the corporate official of the SBC, to appropriate local and state economic development
organizations, if the proposal does not result in an STTR award. Every applicant must
include this information in its proposal cover sheet.

M. Other Appendices

The remaining appendices generally set forth the data fields that will be used to
collect the information from SBCs and agencies for the various databases. This
information collection is further addressed in SBA’s Paperwork Reduction Act
submission.

IV. Request for Comments

SBA was required by the Reauthorization Act to publish the final directive within
a short timeframe. As a result, SBA was unable to gather public input prior to drafting
these provisions, although SBA did work with the various STTR participating agencies to
gather input and feedback on these provisions. SBA therefore requests comments on all
matters addressed relating to implementation of the Reauthorization Act. SBA will
review and consider all comments received to determine whether amendments are needed
to improve the general conduct of the STTR Program.
Notice of Final Policy Directive; Small Business Technology Transfer Program

To: The Small Business Technology Transfer Program Managers

Subject: SBIR/STTR Reauthorization Act of 2011 (Reauthorization Act)—Amendments to the Small Business Technology Transfer Program

1. **Purpose.** The purpose of this notice is to set forth a final STTR Policy Directive, which incorporates recent amendments made to the Small Business Act by the SBIR/STTR Reauthorization Act of 2011.

2. **Authority.** Section 9(p) of the Small Business Act (15 U.S.C. 638(p)) requires the Administrator of the U.S. Small Business Administration (SBA) to issue an STTR Program Policy Directive for the general conduct of the STTR Program. Further, section 5151 of the Reauthorization Act requires the SBA to issue a final directive, incorporating the Reauthorization Act’s amendments within 180 days after its enactment.

3. **Procurement Regulations.** It is recognized that the Federal Acquisition Regulations and agency supplemental regulations may need to be modified to conform to the requirements of the final Policy Directive. SBA's Administrator or designee must review and concur with any regulatory provisions that pertain to areas of SBA responsibility. SBA's Office of Technology coordinates such regulatory actions.

4. **Personnel Concerned.** This Policy Directive serves as guidance for all federal government personnel who are involved in the administration of the STTR Program, issuance and management of Funding Agreements or contracts pursuant to the STTR Program, and the establishment of goals for small business concerns in research or research and development acquisition or grants.

5. **Originator.** SBA's Office of Technology.
6. Date. The policy directive is effective on the date of publication in the Federal Register. Agencies are not required to, but can amend, an STTR solicitation that was issued on or before the date of this Policy Directive to address these new requirements. Further, public comment may be submitted for 60 days following publication in the Federal Register.

Authorized By:

Sean Greene,
Associate Administrator for the Office of Investment and Innovation Small Business Administration.

Dated: July 19, 2012

Karen G. Mills,
Administrator.

1. Purpose


3. Definitions

4. Competitively Phased Structure of the Program

5. Program Solicitation Process

6. Eligibility and Application (Proposal) Requirements

7. STTR Funding Process

8. Terms of Agreement for STTR Awards

9. Responsibilities of STTR Participating Agencies And Departments

10. Agency and STTR Applicant/Awardee Reporting Requirements

11. Responsibilities of SBA

12. Supporting Programs and Initiatives

Appendix I: Instructions for STTR Program Solicitation Preparation
Appendix II: Codes for Tech-Net Database
Appendix III: Solicitations Database
Appendix IV: Company Registry Database
Appendix V: Application Information Database
Appendix VI: Award Information Database
Appendix VII: Commercialization Database
Appendix VIII: Annual Report Database
Appendix IX: Performance Areas, Metrics and Goals
Appendix X: National Academy of Sciences Study

1. **Purpose**

   (a) Section 9(p) of the Small Business Act (Act) requires that the Small Business Administration (SBA) issue an STTR Program Policy Directive for the general conduct of the STTR Program within the Federal Government.

   (b) This Policy Directive fulfills SBA's statutory obligation to provide guidance to the participating Federal agencies for the general operation of the STTR Program. Additional or modified instructions may be issued by the SBA as a result of public comment or experience. With this directive, SBA fulfills the statutory requirement to simplify and standardize the program proposal, selection, contracting, compliance, and audit procedures for the STTR program to the extent practicable, while allowing the STTR agencies flexibility in the operation of their individual STTR Program. Wherever possible, SBA has attempted to reduce the paperwork and regulatory compliance burden on SBCs applying to and participating in the STTR program, while still meeting the statutory reporting and data collection requirements.

   (c) The statutory purpose of the STTR Program is to stimulate a partnership of
ideas and technologies between innovative small business concerns (SBCs) and Research Institutions through Federally-funded research or research and development (R/R&D).

By providing awards to SBCs for cooperative R/R&D efforts with Research Institutions, the STTR Program assists the small business and research communities by commercializing innovative technologies.

(d) Federal agencies participating in the STTR Program (STTR agencies) are obligated to follow the guidance provided by this Policy Directive. Each agency is required to review its rules, policies, and guidance on the STTR Program to ensure consistency with this Policy Directive and to make any necessary changes in accordance with each agency's normal procedures. This is consistent with the statutory authority provided to the SBA concerning the STTR Program.


(a) The Small Business Technology Transfer Program is codified at section 9 of the Small Business Act, 15 U.S.C. §638. The STTR Program is authorized until September 30, 2017, or as otherwise provided in law subsequent to that date.

(b) Each Federal agency with an extramural budget for R/R&D in excess of $1,000,000,000 must participate in the STTR Program and reserve the following minimum percentages of their R/R&D budgets for awards to small business concerns for R/R&D:

(1) not less than 0.3% of such budget in each of fiscal years 2004 through 2011;
(2) not less than 0.35% of such budget in fiscal years 2012 and 2013;
(3) not less than 0.40% of such budget in fiscal years 2014 and 2015; and
(4) not less than 0.45% of such budget in fiscal year 2016 and each fiscal year after.
A Federal agency may exceed these minimum percentages.

(c) In general, each STTR agency must make these awards for R/R&D through the following uniform, three-phase process:

(1) Phase I awards to determine, insofar as possible, the scientific and technical merit and feasibility of ideas that appear to have commercial potential.

(2) Phase II awards to further develop work from Phase I that meets particular program needs and exhibits potential for commercial application.

(3) Phase III awards where commercial applications of STTR-funded R/R&D are funded by non-Federal sources of capital; or where products, services or further research intended for use by the Federal Government are funded by follow-on non-STTR Federal Funding Agreements.

(d) STTR agencies must report to SBA on the calculation of the agency’s extramural budget within four months of enactment of each agency’s annual Appropriations Act.

(e) The Act explains that agencies are authorized and directed to cooperate with SBA in order to carry out and accomplish the purpose of the STTR Program. As a result, each STTR agency shall provide information to SBA in order for SBA to monitor and analyze each agency’s STTR Program and to report these findings annually to the Senate Committee on Small Business and Entrepreneurship and to the House Committees on Science and Small Business. For more information on the agency’s reporting requirements, including the frequency for specific reporting requirements, see section 10 of the Policy Directive.

(f) SBA establishes databases to collect and maintain, in a common format, information that is necessary to assist SBCs and assess the STTR Program.
(g) SBA implements the Federal and State Technology (FAST) Partnership Program to strengthen the technological competitiveness of SBCs, to the extent that FAST is authorized by law.

(h) The competition requirements of the Armed Services Procurement Act of 1947 (10 U.S.C. 2302 et seq.) and the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 3101 et seq.) must be read in conjunction with the procurement notice publication requirements of section 8(e) of the Small Business Act (15 U.S.C. §637(e)). The following notice publication requirements of section 8(e) of the Small Business Act apply to STTR agencies using contracts as an STTR funding agreement:

(1) Any Federal executive agency intending to solicit a proposal to award a Phase I contract for property or services valued above $25,000 must transmit a notice of the impending solicitation to the Governmentwide point of entry (GPE) for access by interested sources. See FAR 5.201. The GPE, located at https://www.fbo.gov, is the single point where Government business opportunities greater than $25,000, including synopses of proposed contract actions, solicitations, and associated information, can be accessed electronically by the public. In addition, an agency may not issue its solicitation for at least 15 days from the date of the publication of the GPE. The agency may not establish a deadline for submission of proposals in response to a solicitation earlier than 30 days after the date on which the solicitation was issued.

(2) The contracting officer must generally make available through the GPE those solicitations synopsized through the GPE, including specifications and other pertinent information determined necessary by the contracting officer. See FAR 5.102.

(3) Any executive agency awarding a contract for property or services valued at more than $25,000 must submit a synopsis of the award through the GPE if a subcontract
is likely to result from such contract. See FAR 5.301.

(4) The following are exemptions from the notice publication requirements:

(i) In the case of agencies intending to solicit Phase I proposals for contracts in excess of $25,000, the head of the agency may exempt a particular solicitation from the notice publication requirements if that official makes a written determination, after consulting with the Administrator of the Office of Federal Procurement Policy and the SBA Administrator, that it is inappropriate or unreasonable to publish a notice before issuing a solicitation.

(ii) The STTR Phase II award process.

(iii) The STTR Phase III award process.

3. Definitions


(b) Applicant. The organizational entity that qualifies as an SBC at all pertinent times and that submits a contract proposal or a grant application for a funding agreement under the STTR Program.

(c) Affiliate. This term has the same meaning as set forth in 13 CFR part 121—Small Business Size Regulations, §121.103, What is affiliation? (available at http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=03878acee7c064a02cac0d870e00ef43;rgn=div6;view=text;node=13%3A1.0.1.1.17.1;idno=13;cc=ecfr). Further information about SBA’s affiliation rules and a guide on affiliation is available at www.SBIR.gov and www.SBA.gov/size.

(d) Alaska Native-Serving Institution (ANSI). As defined by 20 U.S.C. 1059d, it is an institution of higher education that is an eligible institution that at the time of application, has an enrollment of undergraduate students that is at least 20 percent Alaska
Native students;

(c) **Awardee.** The organizational entity receiving an STTR Phase I, Phase II, or Phase III award.

(f) **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.

(g) **Cooperative Agreement.** A financial assistance mechanism used when substantial Federal programmatic involvement with the awardee during performance is anticipated by the issuing agency. The Cooperative Agreement contains the responsibilities and respective obligations of the parties.

(h) **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; 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.

(i) **Extramural Budget.** The sum of the total obligations for R/R&D minus amounts obligated for R/R&D activities by employees of a Federal agency in or through Government-owned, Government-operated facilities. For the Agency for International Development, the “extramural budget” must not include amounts obligated solely for general institutional support of international research centers or for grants to foreign countries. For the Department of Energy, the “extramural budget” must not include amounts obligated for atomic energy defense programs solely for weapons activities or
for naval reactor programs. (Also see section 7(i) of this Policy Directive for additional exemptions related to national security.)

(j) **Feasibility.** The practical extent to which a project can be performed successfully.

(k) **Federal Agency.** An executive agency as defined in 5 U.S.C. § 105, and a military department as defined in 5 U.S.C. 102 (Department of the Army, Department of the Navy, Department of the Air Force), except that it does not include any agency within the Intelligence Community as defined in Executive Order 12333, §3.4(f), or its successor orders.

(l) **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.

(m) **Funding Agreement.** Any contract, grant, or cooperative agreement entered into between any Federal agency and any SBC for the performance of experimental, developmental, or research work, including products or services, funded in whole or in part by the Federal Government.

(n) **Funding Agreement Officer.** A contracting officer, a grants officer, or a cooperative agreement officer.

(o) **Grant.** A financial assistance mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity. A grant is used whenever the Federal agency anticipates no substantial programmatic involvement with the awardee during performance.
(p) **Hispanic-Serving Institutions (HSI).** Pursuant to 20 U.S.C. 1101 (5), a non-profit institution that has at least 25% Hispanic full-time equivalent (FTE) enrollment, and of the Hispanic student enrollment at least 50% are low income.

(q) **Historically Black College or University (HBCU).** Pursuant to 20 U.S.C. 1061 (2), a black college or university that was established prior to 1964, whose principle mission was, and is, the education of Black Americans, and that is accredited by a nationally recognized agency or association determined by the Secretary of Education to be a reliable authority as to the quality of training offered or is, according to such an agency or association is making reasonable progress toward accreditation, with certain exceptions noted in statute.

(r) **Innovation.** 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.

(s) **Intellectual Property.** The separate and distinct types of intangible property that are referred to collectively as “intellectual property,” including but not limited to: (1) patents; (2) trademarks; (3) copyrights; (4) trade secrets; (5) STTR technical data (as defined in this section); (6) ideas; (7) designs; (8) know-how; (9) business; (10) technical and research methods; (11) other types of intangible business assets; (12) and all types of intangible assets either proposed or generated by an SBC as a result of its participation in the STTR Program.

(t) **Key Individual.** The principal investigator/project manager and any other person named as a “key” employee in a proposal submitted in response to a program solicitation.

(u) **Joint Venture.** See 13 C.F.R. §121.103(h).
(v) Native Hawaiian-Serving Institutions (NHSI). Pursuant to 20 U.S.C. 1059(d) is an institution of higher education which is an eligible institution under 20 U.S.C. 1058(b) at the time of application, and has an enrollment of undergraduate students that is at least 10 percent Native Hawaiian students.

(w) Principal Investigator/Project Manager. The one individual designated by the applicant to provide the scientific and technical direction to a project supported by the funding agreement.

(x) Program Solicitation. A formal solicitation for proposals issued by a Federal agency that notifies the small business community of its R/R&D needs and interests in broad and selected areas, as appropriate to the agency, and requests proposals from SBCs in response to these needs and interests. Announcements in the Federal Register or the GPE are not considered an STTR Program solicitation.

(y) Prototype. A model of something to be further developed, which includes designs, protocols, questionnaires, software, and devices.

(z) Research or Research and Development (R/R&D). Any activity that is:

1. A systematic, intensive study directed toward greater knowledge or understanding of the subject studied;

2. A systematic study directed specifically toward applying new knowledge to meet a recognized need; or

3. 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.

(aa) Research Institution. One that has a place of business located in the United States, which operates primarily within the United States or which makes a significant
contribution to the U.S. economy through payment of taxes or use of American products, materials or labor, and is:

(1) A non-profit institution as defined in section 4(5) of the Stevenson-Wydler Technology Innovation Act of 1980 (that is, an organization that is 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) and includes non-profit medical and surgical hospitals; or

(2) A Federally-funded R&D center as identified by the National Science Foundation in accordance with the Government-wide Federal Acquisition Regulation issued in accordance with section 35(c)(1) of the Office of Federal Procurement Policy Act (or any successor regulation thereto).

(bb) Small Business Concern. A concern that meets the requirements set forth in 13 C.F.R. §121.702 (available at http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=03878acee7c064a02cac0d870e00ef43;rgn=div8;view=text;node=13%3A1.0.1.1.17.1.273.45;idno=13;cc=ecfr).

(cc) Socially and Economically Disadvantaged SBC (SDB). See 13 CFR part 124, Subpart B.


(ee) STTR Participants. Business concerns that have received STTR awards or that have submitted STTR proposals/applications.

(ff) STTR Technical Data. All data generated during the performance of an STTR award.

(gg) STTR Technical Data Rights. The rights an STTR awardee obtains in data
generated during the performance of any STTR Phase I, Phase II, or Phase III award that an awardee delivers to the Government during or upon completion of a Federally-funded project, and to which the Government receives a license.

(hh) **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.

(ii) **Tribal-Serving Institution (TSI).** Those institutions defined under section 532 of the Equity in Educational Land-Grants Status Act of 1994 (7 U.SC. 301 note), any other institution that qualified for funding under the Tribally Controlled Community College Assistance Act of 1978, (25 U.S.C. 1801 et. seq.) which is also known as tribally controlled colleges or universities and the Navajo Community College Assistance Act of 1978, Pub. L. 95-471, Title II (25 U.S.C. 640a note).

(jj) **United States.** Means 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.

(kk) **Women-Owned SBC (WOSB).** An SBC that is at least 51% owned by one or more women, or in the case of any publicly owned business, at least 51% of the stock is owned by women, and women control the management and daily business operations.

4. **Competitively Phased Structure of the Program**

The STTR Program is a phased process, uniform throughout the Federal Government, of soliciting proposals and awarding funding agreements for R/R&D, production, services, or any combination, to meet stated agency needs or missions. Agencies must issue STTR awards pursuant to competitive and merit-based selection
procedures. Agencies may not use investment of venture capital or investment from hedge funds or private equity firms as a criterion for an STTR award. Although matching funds are not required for Phase I or Phase II awards, agencies may require a small business to have matching funds for certain special awards (e.g., to reduce the gap between a Phase II and Phase III award). In order to stimulate and foster scientific and technological innovation, including increasing commercialization of Federal R/R&D, the program must follow a uniform competitive process of the following three phases, unless an exception applies:

(a) **Phase I.** Phase I involves a solicitation of contract proposals or grant applications to conduct feasibility-related experimental or theoretical R/R&D related to described agency requirements. These requirements, as defined by agency topics contained in a solicitation, may be general or narrow in scope, depending on the needs of the agency. The object of this phase is to determine the scientific and technical merit and feasibility of the proposed effort and the quality of performance of the SBC with a relatively small agency investment before consideration of further Federal support in Phase II.

(1) Several different proposed solutions to a given problem may be funded.

(2) Proposals will be evaluated on a competitive basis. Agency criteria used to evaluate STTR proposals must give consideration to the scientific and technical merit and feasibility of the proposal along with its potential for commercialization. Considerations may also include program balance with respect to market or technological risk or critical agency requirements.

(3) **Agency benchmarks for progress towards commercialization.** Agencies must determine whether an applicant has met the agency’s benchmark requirements for
progress towards commercialization. For Phase I eligibility purposes, agencies will establish a threshold for the application of these benchmarks where they are applied only to Phase I applicants that have received more than 20 Phase I awards over the prior 5, 10 or 15 fiscal years (excluding the most recently completed fiscal year) or has received more than 15 Phase II awards over that period (excluding the most recently completed two fiscal years). Agencies must base these benchmarks on the SBC’s STTR awards across all STTR agencies.

(i) Agencies must apply two benchmark rates addressing an applicant’s progress towards commercialization – the Phase I-Phase II Transition Rate and the Commercialization Rate.

(A) The Phase I-Phase II Transition Rate benchmark sets the minimum required number of Phase II awards the applicant must have received for a given number of Phase I awards during a specified period.

(B) The Commercialization Rate benchmark sets the minimum Phase III commercialization results a Phase I applicant must have realized from its prior Phase II awards.

(ii) An applicant that does not meet either of these benchmarks at the time it submits its application to the agency is not eligible for that particular STTR Phase I award and any other new STTR Phase I awards (and any Phase II awards issued pursuant to paragraph (b)(1)(ii) below) of that agency for a period of one year from the date of the proposal or application submission. The agency must provide written notification of its determination and the one year restriction on Phase I awards to the applicant and to SBA. See section 9(b) for further information about how an agency establishes these benchmarks.
(iii) Establishing the Phase I-Phase II Transition Rate. Beginning October 1, 2012, each agency must establish an SBA-approved Phase I-Phase II Transition Rate benchmark. The agency must report any subsequent change in the benchmark rate to SBA for approval.

(A) The benchmark will establish the number of Phase II awards a small business concern must have received for a given number of Phase I awards over the prior 5, 10, or 15 fiscal years, excluding the most recently completed fiscal year. For example, if a SBC submits its application on January 2012, the agency may require that the SBC have received at least one Phase II award for every 10 Phase I awards it received during fiscal years 2001 through 2010.

(B) Agencies must set the benchmark as appropriate for their programs and industry sectors. When setting this benchmark, agencies should consider that Phase I is designed and intended to explore high-risk, early-stage research and, as a result, a significant share of Phase I awards will not result in a Phase II award.

(iv) Establishing the Commercialization Rate. Beginning October 1, 2013, each agency must establish an SBA-approved Commercialization Rate benchmark that establishes the level of Phase III commercialization results a SBC must have received from work it performed under prior Phase II awards, over the prior 5, 10 or 15 fiscal years, excluding the most recently completed two fiscal years. The agency must report any subsequent change in the benchmark rate to SBA for approval. Agencies may define this benchmark:

(A) in financial terms, such as by using the ratio of the dollar value of revenues and additional investment resulting from prior Phase II awards relative to the dollar value of the Phase II awards received over the prior 5, 10 or 15 fiscal years, excluding the most
recently completed two fiscal years; or

(B) in terms of the share of Phase II awards that have resulted in the introduction of a product to the market relative to the number of Phase II awards received over the prior 5, 10, or 15 fiscal years, excluding the most recently completed two fiscal years; or

(C) by other means such as using a commercialization scoring system that rates awardees on their past commercialization success.

(v) Agencies must submit these benchmarks to SBA for approval. SBA will publish the benchmark and seek public comment. The benchmark will become effective when SBA publishes the final, approved benchmark on www.SBIR.gov. If SBA approves a benchmark for a fiscal year, then the agency must report any subsequent change in the benchmark to SBA for approval.

(vi) SBA will maintain a system that records all Phase I and Phase II awards and calculates the Phase I-II Transition Rates for all Phase I awardees and the Commercialization Rates for all Phase II awardees. The small business will then be required to provide this information to the agency as part of its application.

(vii) If the applicant meets these benchmarks, the agency must still evaluate the commercial potential of the specific application and can base this evaluation on agency-specific criteria.

(4) Agencies may require the submission of a Phase II proposal as a deliverable item under Phase I.

(b) Phase II.

(1) The object of Phase II is to continue the R/R&D effort from the completed Phase I. Unless the exception set forth in paragraph (i) applies, only STTR Phase I awardees are eligible to participate in Phases II and III. This includes those awardees
identified via a “novated” or “successor in interest” or similarly-revised funding agreement, or those that have reorganized with the same key staff, regardless of whether they have been assigned a different tax identification number. Agencies may require the original awardee to relinquish its rights and interests in an STTR project in favor of another applicant as a condition for that applicant's eligibility to participate in the STTR Program for that project.

(i) A Federal agency may issue an STTR Phase II award to an SBIR Phase I awardee to further develop the work performed under the SBIR Phase I award. The agency must base its decision upon the results of work performed under the Phase I award and the scientific and technical merit, and commercial potential of the Phase II proposal. The SBIR Phase I awardee must meet the eligibility and program requirements of the STTR Program in order to receive the STTR Phase II award.

(2) Funding must be based upon the results of work performed under a Phase I award and the scientific and technical merit, feasibility and commercial potential of the Phase II proposal. Phase II awards may not necessarily complete the total research and development that may be required to satisfy commercial or Federal needs beyond the STTR Program. The Phase II funding agreement with the awardee may, at the discretion of the awarding agency, establish the procedures applicable to Phase III agreements. The Government is not obligated to fund any specific Phase II proposal.

(3) The STTR Phase II award decision process requires, among other things, consideration of a proposal's commercial potential. Commercial potential includes the potential to transition the technology to private sector applications, Government applications, or Government contractor applications. Commercial potential in a Phase II proposal may be evidenced by:
(i) the SBC’s record of successfully commercializing STTR or other research;

(ii) the existence of Phase II funding commitments from private sector or other non-STTR funding sources;

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

(iv) other indicators of commercial potential of the idea.

(4) Agencies may not use an invitation, pre-screening, or pre-selection process for eligibility for Phase II. Agencies must note in each solicitation that all Phase I awardees may apply for a Phase II award and provide guidance on the procedure for doing so.

(5) A Phase II awardee may receive one additional, sequential Phase II award to continue the work of an initial Phase II award.

(6) Agencies may issue Phase II awards for testing and evaluation of products, services, or technologies for use in technical weapons systems.

(c) Phase III. STTR Phase III refers to work that derives from, extends, or completes an effort made under prior STTR funding agreements, but is funded by sources other than the STTR Program. Phase III work is typically oriented towards commercialization of STTR research or technology.

(l) Each of the following types of activity constitutes STTR Phase III work:

(i) commercial application (including testing and evaluation of products, services or technologies for use in technical or weapons systems) of STTR-funded R/R&D financed by non-Federal sources of capital (Note: The guidance in this Policy Directive regarding STTR Phase III pertains to the non-STTR federally-funded work described in (ii) and (iii) below. It does not address private agreements an STTR firm may make in the commercialization of its technology, except for a subcontract to a Federal contract
that may be a Phase III);

(ii) STTR-derived products or services intended for use by the Federal Government, funded by non-STTR sources of Federal funding;

(iii) continuation of R/R&D that has been competitively selected using peer review or merit-based selection procedures, funded by non-STTR Federal funding sources.

(2) A Phase III award is, by its nature, an STTR award, has STTR status, and must be accorded STTR data rights. If an STTR awardee receives a funding agreement (whether competed, sole sourced or a subcontract) for work that derives from, extends, or completes efforts made under prior STTR funding agreements, then the funding agreement for the new work must have all STTR Phase III status and data rights.

(3) The competition for STTR Phase I and Phase II awards satisfies any competition requirement of the Armed Services Procurement Act, the Federal Property and Administrative Services Act, and the Competition in Contracting Act. Therefore, an agency that wishes to fund an STTR Phase III project is not required to conduct another competition in order to satisfy those statutory provisions. As a result, in conducting actions relative to a Phase III STTR award, it is sufficient to state for purposes of a Justification and Approval pursuant to FAR 6.302-5, that the project is an STTR Phase III award that is derived from, extends, or completes efforts performed under prior STTR funding agreements and is authorized under 10 U.S.C. 2304(b)(2) or 41 U.S.C. 3303(b).

(4) Phase III work may be for products, production, services, R/R&D, or any combination thereof.

(5) There is no limit on the number, duration, type, or dollar value of Phase III awards made to a business concern. There is no limit on the time that may elapse
between a Phase I or Phase II award and Phase III award, or between a Phase III award and any subsequent Phase III award. A Federal agency may enter into a Phase III STTR agreement at any time with a Phase II awardee. Similarly, a Federal agency may enter into a Phase III STTR agreement at any time with a Phase I awardee. A subcontract to a Federally-funded prime contract may be a Phase III award.

(6) The small business size limits for Phase I and Phase II awards do not apply to Phase III awards.

(7) To the greatest extent practicable, agencies or their Government-owned, contractor-operated facilities, Federally-funded research and development centers, or Government prime contractors that pursue R/R&D or production developed under the STTR Program, shall issue Phase III awards relating to technology, including sole source awards, to the STTR awardee that developed the technology. Agencies shall document how they provided this preference to the STTR awardee that developed the technology. In fact, the Act requires that SBA report all instances in which an agency pursues research, development, or production of a technology developed by an STTR awardee, with a business concern or entity other than the one that developed the STTR technology. (See section 4(c)(8) immediately below for agency notification to SBA prior to award of such a funding agreement and section 10(h)(4) regarding agency reporting of the issuance of such award.) SBA will report such instances, including those discovered independently by SBA, to Congress.

(8) Agencies, their Government-owned, contractor-operated facilities, or Federally-funded research and development centers, that intend to pursue R/R&D, production, services or any combination thereof of a technology developed under an STTR award, with an entity other than that STTR awardee, must notify SBA in writing.
prior to such an award. This notification must include, at a minimum:

(i) The reasons why the follow-on funding agreement with the STTR awardee is not practicable;

(ii) the identity of the entity with which the agency intends to make an award to perform research, development, or production; and

(iii) a description of the type of funding award under which the research, development, or production will be obtained. SBA may appeal an agency decision to pursue Phase III work with a business concern other than the STTR awardee that developed the technology to the head of the contracting activity. If SBA decides to appeal the decision, it must file a notice of intent to appeal with the funding agreement officer no later than 5 business days after receiving the agency's notice of intent to make award. Upon receipt of SBA's notice of intent to appeal, the funding agreement officer must suspend further action on the acquisition until the head of the contracting activity issues a written decision on the appeal. The funding agreement officer may proceed with award if he or she determines in writing that the award must be made to protect the public interest. The funding agreement officer must include a statement of the facts justifying that determination and provide a copy of its determination to SBA. Within 30 days of receiving SBA's appeal, the head of the contracting activity must render a written decision setting forth the basis of his or her determination. During this period, the agency should consult with SBA and review any case-specific information SBA believes to be pertinent.

5. **Program Solicitation Process**

(a) At least annually, each agency must issue a program solicitation that sets forth a substantial number of R/R&D topics and subtopic areas consistent with stated agency
needs or missions. Agencies may decide to issue joint solicitations. Both the list of topics and the description of the topics and subtopics must be sufficiently comprehensive to provide a wide range of opportunities for SBCs to participate in the agency R&D programs. Topics and subtopics must emphasize the need for proposals with advanced concepts to meet specific agency R/R&D needs. Each topic and subtopic must describe the needs in sufficient detail to assist in providing on-target responses, but cannot involve detailed specifications to prescribed solutions of the problems.

(b) The Act requires issuance of STTR Phase I Program solicitations in accordance with a Master Schedule coordinated between SBA and the STTR agency. The SBA office responsible for coordination is: Office of Technology, U.S. Small Business Administration, 409 Third Street, SW, Washington, DC 20416. Phone: (202) 205-6450. Fax: (202) 205-7754. E-mail: technology@sba.gov. Internet site: www.SBIR.gov.

(c) For maximum participation by interested SBCs, it is important that the planning, scheduling and coordination of agency program solicitation release dates be completed as early as practicable to coincide with the commencement of the fiscal year on October 1. Bunching of agency program solicitation release and closing dates may prohibit SBCs from preparation and timely submission of proposals for more than one STTR project. SBA's coordination of agency schedules minimizes the bunching of proposed release and closing dates. STTR agencies may elect to publish multiple program solicitations within a given fiscal year to facilitate in-house agency proposal review and evaluation scheduling.

(d) SBA will post an electronic Master Schedule of release dates of program solicitations with links to Internet web sites of agency solicitations. For more
(e) **Simplified, Standardized, and Timely STTR Program Solicitations**

(1) The Act requires “simplified, standardized and timely STTR solicitations” and for STTR agencies to use a “uniform process” minimizing the regulatory burden for SBCs. Therefore, the instructions in Appendix I to this Policy Directive purposely depart from normal Government solicitation format and requirements.

(2) Agencies must provide SBA's Office of Technology with an electronic version of each solicitation and any modifications no later than 5 days after the date of release of the solicitation or modification to the public. Agencies that issue program solicitations in electronic format only must provide the Internet site at which the program solicitation may be accessed no later than the date of posting at that site of the program solicitation.

(3) SBA does not intend that the STTR Program solicitation replace or be used as a substitute for unsolicited proposals for R/R&D awards to SBCs. In addition, the STTR Program solicitation procedures do not prohibit other agency R/R&D actions with SBCs that are carried on in accordance with applicable statutory or regulatory authorizations.

6. **Eligibility and Application (Proposal) Requirements**

(a) **Eligibility Requirements:**

(1) To receive STTR funds, each awardee of a STTR Phase I or Phase II award must qualify as an SBC at the time of award and at any other time set forth in SBA’s regulations at 13 C.F.R. §§121.701- 121.705. Each Phase I and Phase II awardee must submit a certification stating that it meets the size, ownership and other requirements of the STTR Program at the time of award, and at any other time set forth in SBA’s regulations at 13 C.F.R. §§ 121.701-705.

(2) NIH, Department of Energy and National Science Foundation may award not
more than 25% of the agency’s SBIR funds to SBCs that are owned in majority part by multiple venture capital operating companies, hedge funds, or private equity firms through competitive, merit-based procedures that are open to all eligible small business concerns. All other SBIR agencies may award not more than 15% of the agency’s SBIR funds to such SBCs. At their discretion, if the agency has not exceeded these maximum statutory percentages, the agency may make STTR awards to small businesses that are majority-owned by multiple VCOCs, hedge funds or private equity firms through competitive, merit-based procedures that are open to all eligible small business concerns under the STTR Program and using STTR funds. If an agency exceeds this maximum statutory percentage of awards, it must transfer this excess amount from its non-SBIR and non-STTR funds to the SBIR funds.

(i) Before permitting participation in the STTR program by SBCs that are owned in majority part by multiple venture capital operating companies, hedge funds, or private equity firms:

(A) SBA’s regulations at 13 C.F.R part 121 must set forth the eligibility criteria for STTR applicants that are owned in majority part by multiple venture capital operating companies, hedge funds, or private equity firms.

(B) The STTR agency must submit a written determination at least 30 calendar days before it begins making awards to SBCs that are owned in majority part by multiple venture capital operating companies, hedge funds, or private equity firms to SBA, the Senate Committee on Small Business and Entrepreneurship, the House Committee on Small Business and the House Committee on Science, Space, and Technology. The determination must be made by the head of the Federal agency or designee and explain how awards to SBCs that are owned in majority part by multiple venture capital operating
companies, hedge funds, or private equity firms will:

(I) induce additional venture capital, hedge fund, or private equity firm funding of small business innovations;

(II) substantially contribute to the mission of the Federal agency;

(III) address a demonstrated need for public research; and

(IV) otherwise fulfill the capital needs of small business concerns for additional financing for STTR projects.

(ii) The SBC that is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms must register with SBA in the Company Registry Database, at www.SBIR.gov, prior to the date it submits an application for an STTR award.

(iii) The SBC that is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms must submit a certification with its proposal stating, among other things, that it has registered with SBA.

(iv) Any agency that makes an award under this paragraph during a fiscal year shall collect and submit to SBA data relating to the number and dollar amount of Phase I awards, Phase II awards, and any other category of awards by the Federal agency under the STTR program during that fiscal year. See section 10 of the directive for the specific reporting requirements.

(3) For both Phase I and Phase II, not less than 40 percent of the R/R&D work must be performed by the SBC, and not less than 30 percent of the R/R&D work must be performed by the single, partnering Research Institution. Occasionally, deviations from these requirements may occur, and must be approved in writing by the funding agreement officer after consultation with the agency STTR Program Manager/Coordinator. An
agency can measure this research or analytical effort using the total contract dollars or labor hours, and must explain to the small business in the solicitation how it will be measured.

(4) For both Phase I and Phase II, the primary employment of the principal investigator must be with the SBC or the research institution at the time of award and during the conduct of the proposed project. Primary employment means that more than one-half of the principal investigator's time is spent in the employ of the SBC or the research institution. This precludes full-time employment with another organization aside from the SBC or the research institution. Occasionally, deviations from this requirement may occur, and must be approved in writing by the funding agreement officer after consultation with the agency STTR Program Manager/Coordinator. An SBC may replace the principal investigator on an STTR Phase I or Phase II award, subject to approval in writing by the funding agreement officer. For purposes of the STTR Program, personnel obtained through a Professional Employer Organization or other similar personnel leasing company may be considered employees of the awardee. This is consistent with SBA's size regulations, 13 CFR 121.106—Small Business Size Regulations.

(5) For both Phase I and Phase II, the R/R&D work must be performed in the United States. However, based on a rare and unique circumstance, agencies may approve a particular portion of the R/R&D work to be performed or obtained in a country outside of the United States, for example, if a supply or material or other item or project requirement is not available in the United States. The funding agreement officer must approve each such specific condition in writing.

(b) Proposal (Application) Requirements.
(1) Registration and Certifications for Proposal and Award.

(i) Each Phase I and Phase II applicant that is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms must register with SBA in the Company Registry Database at www.SBIR.gov and submit a certification with its STTR application to the STTR agency (see Appendix I for the required text of the certification).

(ii) Each applicant must register in SBA’s Company Registry Database (see Appendix IV) and submit a .pdf document of the registration with its application if the agency is otherwise unable to obtain this information via Tech-Net. The agency will notify the applicants in the STTR solicitation as to whether it must submit a .pdf document with the application.

(iii) Agencies may request the STTR applicant to submit a certification at the time of submission of the application or offer, which requires the applicant to state that it intends to meet the size, ownership and other requirements of the STTR Program at the time of award of the funding agreement, if recommended for award. See Appendix I for the required text of the certification.

(2) Commercialization Plan. A succinct commercialization plan must be included with each proposal for an STTR Phase II award moving toward commercialization. Elements of a commercialization plan will include the following, as applicable:

(i) Company information: Focused objectives/core competencies; specialization area(s); products with significant sales; and history of previous Federal and non-Federal funding, regulatory experience, and subsequent commercialization.

(ii) Customer and Competition: Clear description of key technology objectives, current competition, and advantages compared to competing products or services;
description of hurdles to acceptance of the innovation.

(iii) Market: Milestones, target dates, analyses of market size, and estimated market share after first year sales and after 5 years; explanation of plan to obtain market share.

(iv) Intellectual Property: Patent status, technology lead, trade secrets or other demonstration of a plan to achieve sufficient protection to realize the commercialization stage and attain at least a temporal competitive advantage.

(v) Financing: Plans for securing necessary funding in Phase III.

(vi) Assistance and mentoring: Plans for securing needed technical or business assistance through mentoring, partnering, or through arrangements with state assistance programs, SBDCs, Federally-funded research laboratories, Manufacturing Extension Partnership centers, or other assistance providers.

(3) Data Collection: Each Phase I and II applicant will be required to provide information in www.SBIR.gov (see Appendix IV) as well as the other information required by Appendices V-VI to the agency or www.SBIR.gov. Each SBC applying for a Phase II award is required to update the appropriate information in the database for any of its prior Phase II awards (see Appendix VI).

7. STTR Funding Process

Because the Act requires a “simplified, standardized funding process,” specific attention must be given to the following areas of STTR Program administration:

(a) Timely Receipt of Proposals. Program solicitations must establish proposal submission dates for Phase I and may establish proposal submission dates for Phase II. However, agencies may also negotiate mutually acceptable Phase II proposal submission dates with individual Phase I awardees.
(b) **Review of STTR Proposals.** SBA encourages STTR agencies to use their routine review processes for STTR proposals whether internal or external evaluation is used. A more limited review process may be used for Phase I due to the larger number of proposals anticipated. Where appropriate, “peer” reviews external to the agency are authorized by the Act. SBA cautions STTR agencies that all review procedures must be designed to minimize any possible conflict of interest as it pertains to applicant proprietary data. The standardized STTR solicitation advises potential applicants that proposals may be subject to an established external review process and that the applicant may include company designated proprietary information in its proposal.

(c) **Selection of Awardees.**

(1) **Time period for decision on proposals.**

(i) The National Institutes of Health (NIH) and the National Science Foundation (NSF) must issue a notice to an applicant for each proposal submitted stating whether it was recommended or not for an award no more than one year after the closing date of the solicitation. NIH and NSF agencies should also issue the award no more than 15 months after the closing date of the solicitation. Pursuant to paragraph (iii) below, NIH and NSF are encouraged to reduce these timeframes.

(ii) All other agencies must issue a notice to an applicant for each proposal submitted stating whether it was recommended or not for an award no more than 90 calendar days after the closing date of the solicitation. Agencies should issue the award no more than 180 calendar days after the closing date of the solicitation.

(iii) Agencies are encouraged to develop programs or measures to reduce the time periods between the close of an STTR Phase I solicitation/receipt of a Phase II application and notification to the applicant as well as issuance of the STTR Phase I and
Phase II awards. As appropriate, agencies should adopt accelerated proposal, evaluation, and selection procedures designed to address the gap in funding these competitive awards to meet or reduce the timeframes set forth above. With respect to Phase II awards, SBA recognizes that Phase II arrangements between the agency and applicant may require more detailed negotiation to establish terms acceptable to both parties; however, agencies must not sacrifice the R/R&D momentum created under Phase I by engaging in unnecessarily protracted Phase II proceedings.

(iv) Request for Waiver.

(A) If the agency determines that it requires additional time between the solicitation closing date and notification of recommendation for award, it must submit a written request for an extension to SBA. The written request must specify the number of additional calendar days needed to issue the notice for a specific applicant and the reasons for the extension. If an agency believes it will not meet the timeframes for an entire solicitation, the request for an extension must state how many awards will not meet the statutory timeframes, as well as the number of additional calendar days needed to issue the notice and the reasons for the extension. The written request must be submitted to the SBA at least 10 business days prior to when the agency must issue its notice to the applicant. Agencies must send their written request to: Office of Technology, U.S. Small Business Administration, 409 Third Street, SW, Washington, DC 20416. Phone: (202) 205-6450. Fax: (202) 205-7754. E-mail: technology@sba.gov.

(B) SBA will respond to the request for an extension within 5 business days, as practicable. SBA may authorize an agency to issue the notice up to 90 calendar days after the timeframes set forth in paragraphs (c)(1)(i) and (ii).

(C) Even if SBA grants an extension of time, the STTR agency is required to
develop programs or measures to reduce the timeframe between the close of an SBIR Phase I solicitation/receipt of a Phase II application and notification to the applicant as well as the time to the issuance of the Phase I and Phase II awards as set forth in paragraph (c)(1)(3) above.

(D) If an STTR agency does not receive an extension of time, it may still proceed with the award to the small business.

(2) Standardized solicitation.

(i) The standardized STTR Program solicitation must advise Phase I applicants that additional information may be requested by the awarding agency to evidence applicant responsibility for project completion and advise applicants of the proposal evaluation criteria for Phase I and Phase II.

(ii) The STTR agency will provide information to each Phase I awardee considered for a Phase II award regarding Phase II proposal submissions, reviews, and selections.

(d) Essentially Equivalent Work. STTR participants often submit duplicate or similar proposals to more than one soliciting agency when the work projects appear to involve similar topics or requirements, which are within the expertise and capability levels of the applicant. However, “essentially equivalent work” must not be funded in the STTR or other Federal programs, unless an exception to this rule applies. Agencies must verify with the applicant that this is the case by requiring them to certify at the time of award and during the lifecycle of the award that essentially equivalent work has not been funded by another Federal agency.

(e) Management of the STTR Project. The SBC, and not the single, partnering Research Institution, is to provide satisfactory evidence that it will exercise management
direction and control of the performance of the STTR funding agreement. Regardless of
the proportion of the work or funding allocated to each of the performers under the
funding agreement, the SBC is to be the primary party with overall responsibility for
performance of the project. All agreements between the SBC and the Research
Institution cooperating in the STTR funding agreement, or any business plans reflecting
agreements and responsibilities between the parties during performance of STTR Phase I
or Phase II funding agreement, or for the commercialization of the resulting technology,
should reflect the controlling position of the SBC.

(f) Cost Sharing. Cost sharing can serve the mutual interests of the STTR
agencies and certain STTR awardees by assuring the efficient use of available resources.
However, cost sharing on STTR projects is not required, although it may be encouraged.
Therefore, cost sharing cannot be an evaluation factor in the review of proposals. The
standardized STTR Program solicitation (Appendix I) will provide information to
prospective STTR applicants concerning cost sharing.

(g) Payment Schedules and Cost Principles.

(1) STTR awardees may be paid under an applicable, authorized progress
payment procedure or in accordance with a negotiated/definitive price and payment
schedule. Advance payments are optional and may be made under appropriate law. In
all cases, agencies must make payment to recipients under STTR funding agreements in
full, subject to audit, on or before the last day of the 12-month period beginning on the
date of completion of the funding agreement requirements.

(2) All STTR funding agreements must use, as appropriate, current cost principles
and procedures authorized for use by the STTR agencies. At the time of award, agencies
must inform each STTR awardee, to the extent possible, of the applicable Federal
regulations and procedures that refer to the costs that, generally, are allowable under funding agreements.

(3) Agencies must, to the extent possible, attempt to shorten the amount of time between the notice of an award under the STTR Program and the subsequent release of funding with respect to the award.

(h) Funding Agreement Types and Fee or Profit. Statutory requirements for uniformity and standardization require consistency in application of STTR Program provisions among STTR agencies. However, consistency must allow for flexibility by the various agencies in missions and needs as well as the wide variance in funds required to be devoted to STTR Programs in the agencies. The following instructions meet all of these requirements:

(1) Funding Agreement. The type of funding agreement (contract, grant, or cooperative agreement) is determined by the awarding agency, but must be consistent with 31 U.S.C. 6301-6308. Contracting agencies may issue STTR awards as fixed price contracts (including firm fixed price, fixed price incentive or fixed price level of effort contracts) or cost type contracts, consistent with the Federal Acquisition Regulations and agency supplemental acquisition regulations. In some cases, small businesses seek progress payments, which may be appropriate under fixed-price R&D contracts and are a form of contract financing for firm-fixed-price contracts. However, for certain agencies, in order to qualify for progress payments or an incentive type contract, the small business’s accounting system would have to be audited, which can delay award, unless the contractor has an already approved accounting system. Therefore STTR agencies should consider using partial payments methods or on a deliverable item basis or consider other available options to work with the STTR awardee.
(2) Fee or Profit. Except as expressly excluded or limited by statute, awarding agencies must provide for a reasonable fee or profit on STTR funding agreements, consistent with normal profit margins provided to profit-making firms for R/R&D work.

(i) Periods of Performance and Extensions.

(1) In keeping with the legislative intent to make a large number of relatively small awards, modification of funding agreements to extend periods of performance, to increase the scope of work, or to increase the dollar amount should be kept to a minimum, except for options in original Phase I or II awards.

(2) Phase I. Period of performance normally should not exceed 1 year. However, agencies may provide a longer performance period where appropriate for a particular project.

(3) Phase II. Period of performance under Phase II is a subject of negotiation between the awardee and the issuing agency. The duration of Phase II normally should not exceed 2 years. However, agencies may provide a longer performance period where appropriate for a particular project.

(j) Dollar Value of Awards.

(1) Generally, a Phase I award (including modifications) may not exceed $150,000 and a Phase II award (including modifications) may not exceed $1,000,000. Agencies may issue an award that exceeds the award guideline amounts by no more than 50%.

(2) SBA will adjust these amounts every year for inflation and will post these inflation adjustments at the end of the fiscal year or soon after on www.SBIR.gov. The adjusted guidelines are effective for all solicitations issued on or after the date of the adjustment and may be used by agencies to amend the solicitation and other program
literature. Agencies have the discretion to issue awards for less than the guidelines.

(3) There is no dollar limit associated with Phase III STTR awards.

(4) Agencies may request a waiver to exceed the award guideline amounts established in paragraph (j)(1) by more than 50% for a specific topic.

(5) Agencies must submit this request for a waiver to SBA prior to release of the solicitation, contract award, or modification to the award for the topic. The request for a waiver must explain and provide evidence that the limitations on award size will interfere with the ability of the agency to fulfill its research mission through the STTR Program; that the agency will minimize, to the maximum extent practicable, the number of awards that exceed the guidelines by more than 50% for the topic; and that research costs for the topic area differ significantly from those in other areas. After review of the agency’s justification, SBA may grant the waiver for the agency to exceed the award guidelines by more than 50% for a specific topic. SBA will issue a decision on the request within 10 business days. The waiver will be in effect for one fiscal year.

(6) Agencies must maintain information on all awards exceeding the guidelines set forth in paragraph (j)(1), including the amount of the award, a justification for exceeding the guidelines for each award, the identity and location of the awardee, whether the awardee has received any venture capital, hedge fund, or private equity firm investment, and whether the awardee is majority-owned by multiple VCOCs, hedge funds, or private equity firms.

(7) The award guidelines do not prevent an agency from funding STTR projects from other (non-STTR) agency funds. Non-STTR funds used on STTR efforts do not count toward the award guidelines set forth in (i)(1).

(j) National Security Exemption. The Act provides for exemptions related to the
simplified standardized funding process "* * * if national security or intelligence functions clearly would be jeopardized." This exemption should not be interpreted as a blanket exemption or a prohibition of STTR participation for acquisitions relating to national security or intelligence functions, except as specifically defined under section 9(e)(2) of the Act, 15 U.S.C. §638(e)(2). Agency technology managers directing R/R&D projects under the STTR Program, where the project subject matter may be affected by this exemption, must first make a determination on which, if any, of the standardized proceedings clearly place national security and intelligence functions in jeopardy, and then proceed with an acceptable modified process to complete the STTR action. SBA's STTR Program monitoring activities, except where prohibited by security considerations, must include a review of nonconforming STTR actions justified under this public law provision.

8. Terms of Agreement Under STTR Awards

(a) Proprietary Information Contained in Proposals. The standardized STTR Program solicitation will include provisions requiring the confidential treatment of any proprietary information to the extent permitted by law. Agencies will discourage SBCs from submitting information considered proprietary unless the information is deemed essential for proper evaluation of the proposal. The solicitation will require that all proprietary information be identified clearly and marked with a prescribed legend. Agencies may elect to require SBCs to limit proprietary information to that essential to the proposal and to have such information submitted on a separate page or pages keyed to the text. The Government, except for proposal review purposes, protects all proprietary information, regardless of type, submitted in a contract proposal or grant application for a funding agreement under the STTR Program, from disclosure.
(b) Rights in Data Developed Under STTR Funding Agreement. The Act provides for “retention by an SBC of the rights to data generated by the concern in the performance of an STTR award.”

(1) Each agency must refrain from disclosing STTR technical data outside the Government (except reviewers) and especially to competitors of the SBC, or from using the information to produce future technical procurement specifications that could harm the SBC that discovered and developed the innovation.

(2) STTR agencies must protect from disclosure and non-governmental use all STTR technical data developed from work performed under an STTR funding agreement for a period of not less than four years from delivery of the last deliverable under that agreement (either Phase I, Phase II, or Federally-funded STTR Phase III) unless, subject to paragraph (b)(3) of this section, the agency obtains permission to disclose such STTR technical data from the awardee or STTR applicant. Agencies are released from obligation to protect STTR data upon expiration of the protection period except that any such data that is also protected and referenced under a subsequent STTR award must remain protected through the protection period of that subsequent STTR award. For example, if a Phase III award is issued within or after the Phase II data rights protection period and the Phase III award refers to and protects data developed and protected under the Phase II award, then that data must continue to be protected through the Phase III protection period. Agencies have discretion to adopt a protection period longer than four years. The Government retains a royalty-free license for Government use of any technical data delivered under an STTR award, whether patented or not. This section does not apply to program evaluation.

(3) STTR technical data rights apply to all STTR awards, including subcontracts
to such awards, that fall within the statutory definition of Phase I, II, or III of the STTR Program, as described in section 4 of this Policy Directive. The scope and extent of the STTR technical data rights applicable to Federally-funded Phase III awards is identical to the STTR data rights applicable to Phases I and II STTR awards. The data rights protection period lapses only:

(i) Upon expiration of the protection period applicable to the STTR award; or

(ii) by agreement between the awardee and the agency.

(4) Agencies must insert the provisions of (b)(1), (2), and (3) immediately above as STTR data rights clauses into all STTR Phase I, Phase II, and Phase III awards. These data rights clauses are non-negotiable and must not be the subject of negotiations pertaining to an STTR Phase III award, or diminished or removed during award administration. An agency must not, in any way, make issuance of an STTR Phase III award conditional on data rights. If the STTR awardee wishes to transfer its STTR data rights to the awarding agency or to a third party, it must do so in writing under a separate agreement. A decision by the awardee to relinquish, transfer, or modify in any way its STTR data rights must be made without pressure or coercion by the agency or any other party. Following issuance of an STTR Phase III award, the awardee may enter into an agreement with the awarding agency to transfer or modify the data rights contained in that STTR Phase III award. Such a bilateral data rights agreement must be entered into only after the STTR Phase III award, which includes the appropriate STTR data rights clause, has been signed. SBA will report to the Congress any attempt or action by an agency to condition an STTR award on data rights, to exclude the appropriate data rights clause from the award, or to diminish such rights.

(c) Allocation of Rights.
(1) An SBC, before receiving an STTR award, must negotiate a written agreement between the SBC and the single, partnering Research Institution, allocating intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization. The SBC must submit this agreement to the awarding agency with the proposal. The SBC must certify in all proposals that the agreement is satisfactory to the SBC.

(2) The awarding agency may accept an existing agreement between the two parties if the SBC certifies its satisfaction with the agreement, and such agreement does not conflict with the interests of the Government. SBA will provide a model agreement that must be adopted by the agencies and used as guidance by the SBC in the development of an agreement with the Research Institution. The model agreement will direct the parties to, at a minimum:

(i) State specifically the degree of responsibility, and ownership of any product, process, or other invention or innovation resulting from the cooperative research. The degree of responsibility shall include responsibility for expenses and liability, and the degree of ownership shall also include the specific rights to revenues and profits.

(ii) State which party may obtain United States or foreign patents or otherwise protect any inventions resulting from the cooperative research.

(iii) State which party has the right to any continuation of research, including non-STTR follow-on awards.

(3) The Government will not normally be a party to any agreement between the SBC and the Research Institution. Nothing in the agreement is to conflict with any provisions setting forth the respective rights of the United States and the SBC with respect to intellectual property rights and with respect to any right to carry out follow-on
research.

(d) **Title Transfer Agency-Provided Property.** Under the Act, the Government may transfer title to property, provided by the STTR agency to the awardee or acquired by the awardee for the purpose of fulfilling the contract, where such transfer would be more cost effective than recovery of the property.

(e) **Continued Use of Government Equipment.** The Act directs that an agency allow an STTR awardee participating in the third phase of the STTR Program continued use, as a directed bailment, of any property transferred by the agency to the Phase II awardee. The Phase II awardee may use the property for a period of not less than 2 years, beginning on the initial date of the concern's participation in the third phase of the STTR Program.

(f) **Grant Authority.** The Act does not, in and of itself, convey grant authority. Each agency must secure grant authority in accordance with its normal procedures.

(g) **Conflicts of Interest.** SBA cautions STTR agencies that awards made to SBCs owned by or employing current or previous Federal Government employees may create conflicts of interest in violation of FAR Part 3 and the Ethics in Government Act of 1978, as amended. Each STTR agency should refer to the standards of conduct review procedures currently in effect for its agency to ensure that such conflicts of interest do not arise.

(h) **American-Made Equipment and Products.** Congress intends that the awardee of a funding agreement under the STTR Program should, when purchasing any equipment or a product with funds provided through the funding agreement, purchase only American-made equipment and products, to the extent possible, in keeping with the overall purposes of this program. Each STTR agency must provide to each awardee a
notice of this requirement.

(i) Certifications After Award and During Funding Agreement Lifecycle.

(1) A Phase I funding agreement must state that the awardee shall submit a new certification as to whether it is in compliance with specific STTR Program requirements at the time of final payment or disbursement.

(2) A Phase II funding agreement must state that the awardee shall submit a new certification as to whether it is in compliance with specific STTR Program requirements prior to receiving more than 50% of the total award amount and prior to final payment or disbursement.

(3) Agencies may also require additional certifications at other points in time during the life cycle of the funding agreement, such as at the time of each payment or disbursement.

(j) Updating SBIR.gov. Agencies must require each Phase II awardee to update the appropriate information on the award in the Commercialization Database upon completion of the last deliverable under the funding agreement. In addition, the awardee is requested to voluntarily update the appropriate information on that award in the database annually thereafter for a minimum period of 5 years.

9. Responsibilities of STTR Agencies and Departments

(a) General Responsibilities. The Act requires each agency participating in the STTR Program to:

(1) Unilaterally determine the categories of projects to be included in its STTR Program, giving consideration to maintaining a portfolio balance between exploratory projects of high technological risk and those with greater likelihood of success. Further, to the extent permitted by law, and in a manner consistent with the mission of that agency
and the purpose of the STTR program, each Federal agency must:

(i) give priority in the STTR program to manufacturing-related research and development in accordance with Executive Order 13329. In addition, agencies must develop an Action Plan for implementing Executive Order 13329, which identifies activities used to give priority in the STTR program to manufacturing-related research and development. These activities should include the provision of information on the Executive Order on the agency's STTR program website.

(ii) give priority to small business concerns that participate in or conduct energy efficiency or renewable energy system research and development projects.

(iii) give consideration to topics that further one or more critical technologies as identified by the National Critical Technologies panel (or its successor) in reports required under 42 U.S.C. 6683, or the Secretary of Defense in accordance with 10 U.S.C. 2522.

(2) Release STTR solicitations in accordance with the SBA master schedule.

(3) Unilaterally receive and evaluate proposals resulting from program solicitations, select awardees, issue funding agreements, and inform each awardee under such agreement, to the extent possible, of the expenses of the awardee that will be allowable under the funding agreement.

(4) Require a succinct commercialization plan with each proposal submitted for a Phase II award.

(5) Collect and maintain information from applicants and awardees and provide it to SBA to develop and maintain the database, as identified in section 11(e) of this Policy Directive.

(6) Administer its own STTR funding agreements or delegate such administration
to another agency.

(7) Include provisions in each STTR funding agreement setting forth the respective rights of the United States and the awardee with respect to intellectual property rights and with respect to any right to carry out follow-on research.

(8) Ensure that the rights in data developed under each Federally-funded STTR Phase I, Phase II, and Phase III award are protected properly.

(9) Make payments to awardees of STTR funding agreements on the basis of progress toward or completion of the funding agreement requirements and in all cases make payment to awardees 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.

(10) Provide an annual report on the STTR Program to SBA, as well as other information concerning the STTR Program. See section 10 of this Policy Directive for further information on the agency’s reporting requirements, including the frequency for specific reporting requirements.

(11) Include in its annual performance plan required by 31 U.S.C. 1115(a) and (b) a section on its STTR Program, and submit such section to the Senate Committee on Small Business and Entrepreneurship and to the House Committees on Science, Space and Technology and Small Business.

(12) Establish the agency’s benchmarks for progress towards commercialization. See section 4(a)(3) of the directive for further information.

(13) Adopt the model agreement to be developed by SBA for use in the STTR Program that allocates between SBCs and Research Institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or
commercialization.

(14) 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 that participate in STTR agreements:

(i) Are free from organizational conflicts of interests relative to the STTR Program;

(ii) 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

(iii) Use outside peer review as appropriate.

(15) Implement an outreach program to Research Institutions and SBCs for the purpose of enhancing its STTR Program, in conjunction with any such outreach done for purposes of the Small Business Innovation Research (SBIR) Program.

(b) Discretionary technical assistance to STTR awardees.

(1) Agencies may enter into agreements with vendors to provide technical assistance to STTR awardees, which may include 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. Each agency may select a vendor for a term not to exceed 5 years. The vendor must be selected using competitive and merit-based criteria.

(i) The purpose of this technical assistance is to assist STTR awardees in:

(A) making better technical decisions on STTR projects;

(B) solving technical problems that arise during STTR projects;

(C) minimizing technical risks associated with STTR projects; and
(D) commercializing the STTR product or process.

(ii) An agency may not enter into a contract with the vendor if the contract amount provided for technical assistance is based upon the total number of Phase I or Phase II awards but may enter into a contract with the vendor based upon the total amount of awards for which assistance is provided.

(2) Each agency may provide up to $5,000 of STTR funds for the technical assistance described above in (c)(1) per year for each Phase I award and each Phase II award. The amount will be in addition to the award and will count as part of the agency's STTR funding, unless the agency funds the technical assistance using non-STTR funds. The agency may not use STTR funds for technical assistance unless the vendor provides the services to the STTR awardee.

(3) An STTR applicant may acquire the technical assistance services set forth in (c)(1)(i) above itself and not through the vendor selected by the Federal agency. The applicant must request this authority from the Federal agency and demonstrate in its STTR application that the individual or entity selected can provide the specific technical services needed. If the awardee demonstrates this requirement sufficiently, the agency shall permit the awardee to acquire such technical assistance itself, in an amount up to $5,000, as an allowable cost of the STTR award. The per year amount will be in addition to the award and will count as part of the agency's STTR funding, unless the agency funds the technical assistance using non-STTR funds.

(c) Agencies must publish the information relating to timelines for awards of Phase I and Phase II funding agreements and performance start dates of the funding agreements in the agency’s Annual Report (See section 10(a) of the directive). Agencies will report this information to SBA for posting on www.SBIR.gov.
(d) **Interagency actions.**

(1) **Joint funding.** An STTR project may be financed by more than one Federal agency. Joint funding is not required but can be an effective arrangement for some projects.

(2) **Phase II awards.** An STTR Phase II award may be issued by a Federal agency other than the one that made the Phase I award. Prior to award, the head of the Federal agency for the Phase I and Phase II awards, or designee, must issue a written determination that the topics of the awards are the same. Both agencies must submit the report to the SBA.

(3) **Participation by WOSBs and SDBs in the STTR Program.** In order to meet statutory requirements for greater inclusion, SBA and the Federal participating agencies must conduct outreach efforts to find and place innovative WOSBs and SDBs in the STTR Program. These SBCs will be required to compete for STTR awards on the same basis as all other SBCs. However, STTR agencies are encouraged to work independently and cooperatively with SBA to develop methods to encourage qualified WOSBs and SDBs to participate in the STTR Program.

(e) **Limitation on use of funds.**

(1) Each STTR agency must expend the required minimum percent of its extramural budget on awards to SBCs. Agencies may not make available for the purpose of meeting the minimum percent an amount of its extramural budget for basic research that exceeds the minimum percent. Funding agreements with SBCs for R/R&D that result from competitive or single source selections other than an STTR Program must not be considered to meet any portion of the required minimum percent.

(2) An agency must not use any of its STTR budget for the purpose of funding
administrative costs of the program, including costs associated with program operations, employee salaries, and other associated expenses.

(3) Pilot to Allow for Funding of Administrative, Oversight, and Contract Processing Costs. Beginning on October 1, 2012 and ending on September 30, 2015, and upon establishment by SBA of the agency-specific performance criteria, SBA shall allow an SBIR Federal agency to use no more than 3% of its SBIR budget for one or more specific activities, which may be prioritized by the federal SBIR/STTR Interagency Policy Committee. The purpose of this pilot program is to assist with the substantial expansion in commercialization activities, prevention of fraud/waste/abuse, expansion of reporting requirements by agencies and other agency activities required for the SBIR and STTR Programs. Funding under this pilot is not intended to and must not replace current agency administrative funding in support of STTR activities. Rather, funding under this pilot program is intended to supplement such funds.

(i) A Federal agency may use this money to fund the following specific activities:

(A) SBIR and/or STTR program administration, which includes:

(I) internal oversight and quality control, such as verification of reports and invoices and cost reviews, and waste/fraud/abuse prevention (including targeted reviews of SBIR or STTR awardees that an agency determines are at risk for waste/fraud/abuse);

(II) carrying out any activities associated with the participation by small businesses that are majority-owned by multiple venture capital operating companies, hedge funds or private equity firms;

(III) contract processing costs relating to the SBIR or STTR program of that agency, which includes supplementing the current workforce to assist solely with SBIR or STTR funding agreements;
(IV) funding of additional personnel to work solely on the STTR Program of that agency, which includes assistance with application reviews; and

(V) funding for simplified and standardized program proposal, selection, contracting, compliance, and audit procedures for the STTR program, including the reduction of paperwork and data collection.

(B) STTR or SBIR Program-related outreach and related technical assistance initiatives not in effect prior to commencement of this pilot, except significant expansion or improvement of these initiatives, including:

(I) technical assistance site visits;

(II) personnel interviews; and

(III) national conferences.

(C) Commercialization initiatives not in effect prior to commencement of this pilot, except significant expansion or improvement of these initiatives.

(D) For DoD and the military departments, carrying out the Commercialization Readiness Program set forth in 12(b) of this directive, with emphasis on supporting new initiatives that address barriers in bringing STTR technologies to the marketplace, including intellectual property issues, sales cycle access issues, accelerated technology development issues, and other issues.

(ii) Agencies must use this money to attempt to increase participation by SDBs and WOSBs in the STTR Program, and small businesses in states with a historically low level of SBIR awards. The agency may submit a written request to SBA to waive this requirement. The request must explain why the waiver is necessary, demonstrate a sufficient need for the waiver, and explain that the outreach objectives of the agency are
being met and that there has been increased participation by small businesses in states
with a historically low level of SBIR awards.

(iii) SBA will establish performance criteria each fiscal year by which use of
these funds will be evaluated for that fiscal year. The performance criteria will be
metrics that measure the performance areas required by statute against the goals set by
the agencies in their work plans. The performance criteria will be based upon the work
plans submitted by each agency for a given fiscal year and will be agency-specific. SBA
will work with the STTR agencies in creating a simplified template for agencies to use
when making their work plans.

(iv) Each agency must submit its work plan to SBA at least 30 calendar days prior
to the start of each fiscal year for which the pilot program is in operation. Agency work
plans must include the following: a prioritized list of initiatives to be supported; the
estimated amounts to be spent on each initiative or the estimated percentage of
administrative funds to be allocated to each initiative; milestones for implementing the;
the expected results to be achieved; and the assessment metrics for each initiative. The
work plan must identify initiatives that are above and beyond current practice and which
enhance the agency’s STTR program.

(v) SBA will evaluate the work plan and provide initial comments within 15
calendar days of receipt of the plan. SBA’s objective in evaluating the work plan is to
ensure that overall, it provides for improvements to the STTR Program of that particular
agency. If SBA does not provide initial comments within 30 calendar days of receipt of
the plan, the work plan is deemed approved. If SBA does provide initial comments
within 30 calendar days, agencies must amend or supplement their work plan and
resubmit to SBA. Once SBA establishes the agency-specific performance criteria to
measure the benefits of the use of these funds under the work plan, the agency may begin using the STTR funds for the purposes set forth in the work plan. Agencies can adjust their work plans and spending throughout the fiscal year as needed, but must notify SBA of material changes in the plan.

(vi) Agencies must coordinate any activities in the work plan that relate to fraud, waste, and abuse prevention, targeted reviews of awardees, and implementation of oversight control and quality control measures (including verification of reports and invoices and cost reviews) with the agency’s Office of Inspector General (OIG). If the agency allocates more than $50,000,000 to its STTR Program for a fiscal year, the agency may share this funding with its OIG when the OIG performs the activities.

(vii) Agencies shall report to the Administrator on use of funds under this authority as part of the SBIR/STTR Annual Report. See section 10 generally and section 10(i).

(4) An agency must not issue an STTR funding agreement that includes a provision for subcontracting any portion of that agreement back to the issuing agency, to any other Federal Government agency, or to other units of the Federal Government, except as provided in paragraph (f)(5) of the STTR Policy Directive. SBA may issue a case-by-case waiver to this provision after review of an agency's written justification that includes the following information:

(i) An explanation of why the STTR research project requires the use of the Federal facility or personnel, including data that verifies the absence of non-Federal facilities or personnel capable of supporting the research effort.

(ii) Why the Agency will not and cannot fund the use of the Federal facility or personnel for the STTR project with non-STTR money.
(iii) The concurrence of the SBC's chief business official to use the federal facility or personnel.

(5) An agency may issue an STTR funding agreement to a small business concern that intends to enter into an agreement with a Federal laboratory to perform portions of the award or has entered into a cooperative research and development agreement (see 15 U.S.C. § 3710a(d)) with a Federal laboratory, only if there is compliance with the following.

(i) The agency may not require the small business concern enter into an agreement with any Federal laboratory to perform any portion of an STTR award, as a condition for an STTR award.

(ii) The agency may not issue an STTR award or approve an agreement between an STTR awardee and a Federal laboratory, if the small business concern will not meet the minimum performance of work requirements set forth in section 6(a)(4) of this directive.

(iii) The agency may not issue an STTR award or approve an agreement between an STTR awardee and a Federal laboratory that violates any STTR requirement set forth in statute or the STTR Policy Directive, including any STTR data rights protections.

(iv) The agency and Federal laboratory may not require any STTR awardee that has an agreement with a Federal laboratory to perform portions of the activities under the STTR award to provide advance payment to the Federal laboratory in an amount greater than the amount necessary to pay for 30 days of such activities.

(6) No agency, at its own discretion, may unilaterally cease participation in the STTR Program. R/R&D agency budgets may cause fluctuations and trends that must be reviewed in light of STTR Program purposes. An agency may be considered by SBA for
a phased withdrawal from participation in the STTR Program over a period of time sufficient in duration to minimize any adverse impact on SBCs. However, the SBA decision concerning such a withdrawal will be made on a case-by-case basis and will depend on significant changes to extramural R/R&D 3-year forecasts as found in the annual Budget of the United States Government and National Science Foundation breakdowns of total R/R&D obligations as published in the Federal Funds for Research and Development. Any withdrawal of an STTR agency from the STTR Program will be accomplished in a standardized and orderly manner in compliance with these statutorily mandated procedures.

(7) Federal agencies not otherwise required to participate in the STTR Program may participate on a voluntary basis. Federal agencies seeking to participate in the STTR Program must first submit their written requests to SBA. Voluntary participation requires the written approval of SBA.

(f) Preventing Fraud, Waste, and Abuse.

(1) Agencies shall evaluate risks of fraud, waste, and abuse in each application, monitor and administer STTR awards, and create and implement policies and procedures to prevent fraud, waste and abuse in the STTR Program. To capitalize on OIG expertise in this area, agencies must consult with their OIG when creating such policies and procedures. Fraud includes any false representation about a material fact or any intentional deception designed to deprive the United States unlawfully of something of value or to secure from the United States a benefit, privilege, allowance, or consideration to which an individual or business is not entitled. Waste includes extravagant, careless, or needless expenditure of Government funds, or the consumption of Government property, that results from deficient practices, systems, controls, or decisions. Abuse
includes any intentional or improper use of Government resources, such as misuse of rank, position, or authority or resources. Examples of fraud, waste, and abuse relating to the STTR Program include, but are not limited to:

(i) misrepresentations or material, factual omissions to obtain, or otherwise receive funding under, an STTR award;

(ii) misrepresentations of the use of funds expended, work done, results achieved, or compliance with program requirements under an STTR award;

(iii) misuse or conversion of STTR award funds, including any use of award funds while not in full compliance with STTR Program requirements, or failure to pay taxes due on misused or converted STTR award funds;

(iv) fabrication, falsification, or plagiarism in applying for, carrying out, or reporting results from an STTR award;

(v) failure to comply with applicable federal costs principles governing an award;

(vi) extravagant, careless, or needless spending;

(vii) self-dealing, such as making a sub-award to an entity in which the PI has a financial interest;

(viii) acceptance by agency personnel of bribes or gifts in exchange for grant or contract awards or other conflicts of interest that prevents the Government from getting the best value; and

(ix) lack of monitoring, or follow-up if questions arise, by agency personnel to ensure that awardee meets all required eligibility requirements, provides all required certifications, performs in accordance with the terms and conditions of the award, and performs all work proposed in the application.

(2) At a minimum, agencies must:
(i) Require certifications from the STTR awardee at the time of award, as well as after award and during the funding agreement lifecycle (see section 8(h) and Appendix I for more information);

(ii) Include on their respective STTR webpage and in each solicitation, information explaining how an individual can report fraud, waste and abuse as provided by the agency’s OIG (e.g., include the fraud hotline number or web-based reporting method for the agency’s OIG);

(iii) Designate at least one individual in the agency to, at a minimum, serve as the liaison for the STTR Program, the OIG and the agency’s Suspension and Debarment Official (SDO) and ensure that inquiries regarding fraud, waste and abuse are referred to the OIG and, if applicable, the SDO.

(iv) Include on their respective STTR webpage information concerning successful prosecutions of fraud, waste and abuse in the SBIR or STTR programs.

(v) Establish a written policy requiring all personnel involved with the STTR Program to notify the OIG if anyone suspects fraud, waste, and/or abuse and ensure the policy is communicated to all STTR personnel.

(vi) Create or ensure there is an adequate system to enforce accountability (through suspension and debarment, fraud referrals or other efforts to deter wrongdoing and promote integrity) by developing separate standardized templates for a referral made to the OIG for fraud, waste, and abuse or the SDO for other matters, and a process for tracking such referrals.

(vii) Ensure compliance with the eligibility requirements of the program and the terms of the STTR funding agreement.

(viii) Work with the agency’s OIG with regard to its efforts to establish fraud
detection indicators, coordinate the sharing of information between Federal agencies, and improve education and training to STTR Program officials, applicants and awardees;

(ix) Develop policies and procedures to avoid funding essentially equivalent work already funded by another agency, which could include: searching Tech-Net prior to award for the applicant (if a joint venture, search for each party to the joint venture), key individuals of the applicant, and similar abstracts; using plagiarism or other software; checking the SBC’s certification prior to award and funding and documenting the funding agreement file that such certification evidenced the SBC has not already received funding for essentially equivalent work; reviewing other agency’s policies and procedures for best practices; and reviewing other R&D programs for policies and procedures and best practices related to this issue; and

(x) Consider enhanced reporting requirements during the funding agreement.

(g) **Interagency Policy Committee.** The Director of the Office of Science and Technology Policy (OSTP) will establish an Interagency SBIR/STTR Policy Committee, which will include representatives from Federal agencies with an SBIR or an STTR program and the SBA. The Interagency SBIR/STTR Policy Committee shall review the following issues (but may review additional issues) and make policy recommendations on ways to improve program effectiveness and efficiency:

1. The SBIR.gov databases described in section 9(k) of the Small Business Act (15 U.S.C. 638(k));
2. Federal agency flexibility in establishing Phase I and II award sizes, including appropriate criteria for exercising such flexibility;
3. Commercialization assistance best practices of Federal agencies with significant potential to be employed by other agencies and the appropriate steps to
achieve that leverage, as well as proposals for new initiatives to address funding gaps that business concerns face after Phase II but before commercialization;

(4) The need for a standard evaluation framework to enable systematic assessment of SBIR and STTR, including through improved tracking of awards and outcomes and development of performance measures for the SBIR Program and STTR program of each Federal agency; and

(5) Outreach and technical assistance activities that increase the participation of small businesses underrepresented in the SBIR and STTR programs, including the identification and sharing of best practices and the leveraging of resources in support of such activities across agencies.

(h) National Academy of Science Report. The National Academy of Sciences (NAS) shall conduct a study and issue a report on the SBIR and STTR programs.

(1) Prior to issuing the report, and to ensure that the concerns of small business are appropriately considered, NAS shall consult with and consider the views of SBA’s Office of Investment and Innovation and Office of Advocacy and other interested parties, including entities, organizations, and individuals actively engaged in enhancing or developing the technological capabilities of small business concerns.

(2) In addition, the head of each agency with a budget of more than $50,000,000 for its SBIR Program for fiscal year 1999 shall, in consultation with SBA, and not later than 6 months after December 31, 2011, cooperatively enter into an agreement with NAS in furtherance of the report. SBA and the agencies will work with the Interagency Policy Committee in determining the parameters of the study, including the specific areas of focus and priorities for the broad topics required by statute. The agreement will set forth these parameters, specific areas of focus and priorities.
(3) NAS shall transmit to SBA, heads of agencies entering into an agreement under this section, the Committee on Science, Space and Technology, the Committee on Small Business of the House of Representatives, and to the Committee on Small Business of the Senate a copy of the report, which includes the results and recommendations, not later than 4 years after December 31, 2011, and every subsequent four years.

10. **Agency and STTR Applicant/Awardee Reporting Requirements**

(a) **General.** The Small Business Act requires agencies to collect meaningful information from SBCs and to ensure that reporting requirements are streamlined to minimize the burden on small businesses.

(1) SBA is required to collect data from agencies and report to the Congress information regarding applications by and awards to SBCs by each Federal agency participating in the STTR program. STTR agencies and SBA will report data using standardized templates that are provided, maintained, and updated by SBA.

(2) The Act requires a “simplified, standardized and timely annual report” from each Federal agency participating in the STTR program (see section 3 for the definition of Federal agency), which is submitted to SBA. In addition, agencies are required to report certain items periodically throughout the year to SBA. Agencies may identify certain information, such as award data information, by the various components of each agency. SBA will collect reports electronically, to the extent possible. The reports will be uploaded to databases attached to Tech-Net – located at www.SBIR.gov. If the databases attached to Tech-Net are unavailable, then the report must be emailed to technology@sba.gov.

(3) To meet these requirements, the STTR program has the following key principles:
(i) Make updating data available electronically;

(ii) Centralize and share certain data through secure interfaces to which only authorized government personnel have access;

(iii) Have small business enter the data only once, if possible; and

(iv) Provide standardized procedures.

(b) Summary of STTR Databases.

(1) The Act requires that SBA coordinate the implementation of electronic databases at the STTR agencies, including the technical ability of the agencies to share the data. In addition, the Act requires the reporting of various data elements, which are clustered together in the following subsections:

(i) Solicitations Database (to include the Master Schedule); and

(ii) Tech-Net, which includes the following databases:

(A) Company Registry Database;

(B) Application Information Database;

(C) Award Information Database;

(D) Commercialization Database;

(E) Annual Report Database; and

(F) Other Reporting Requirements Database.

(2) The subsections below describe the data reporting requirements, including reporting mechanisms, the frequency of data collection and reporting, and whether this information is shared publicly or is protected and only available to authorized personnel. The table below summarizes the data collection requirements for each database; however, there may be some divergences at the individual data field level. Refer to Appendices III-IX for the detailed reporting requirements at the data field level. SBA notes that not all
of the information will be collected starting with fiscal year 2012. Rather, beginning in fiscal year 2012, SBA will begin a phased implementation of this data collection.

<table>
<thead>
<tr>
<th>Database</th>
<th>Reporting Mechanism</th>
<th>Collection/Reporting Frequency</th>
<th>Public/Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solicitations</td>
<td>Agency XML or manual upload to <a href="http://SBIR.gov">http://SBIR.gov</a></td>
<td>Within 5 business days of solicitation open date</td>
<td>Public</td>
</tr>
<tr>
<td>Company Registry</td>
<td>SBC reports data to Tech-Net. Agency receives .pdf from company</td>
<td>Register or reconfirm at time of application</td>
<td>Government only</td>
</tr>
<tr>
<td>Application</td>
<td>Agency provides XML or manual upload to Tech-Net</td>
<td>Quarterly</td>
<td>Government only</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Award Information</td>
<td>XML or manual upload to Tech-Net</td>
<td>Quarterly</td>
<td>Public</td>
</tr>
<tr>
<td>Commercialization</td>
<td>Agencies + companies report</td>
<td>Agencies update in real time</td>
<td>Government only</td>
</tr>
</tbody>
</table>
(3) STTR awardees will have user names and passwords assigned in order to access their respective awards information in the system. Award and commercialization data maintained in the database can be changed only by the awardee, SBA, or the awarding SBIR/STTR Federal agency.

(c) **Master Schedule & the Solicitations Database.**

(1) SBA will post an electronic Master Schedule of release dates of program solicitations with links to Internet web sites of agency solicitations on www.SBIR.gov.

(i) On or before August 1, each agency representative must notify SBA in writing or by e-mail of its proposed program solicitation release and proposal due dates for the next fiscal year. SBA and the agency representatives will coordinate the resolution of any conflicting agency solicitation dates by the second week of August. In all cases,
SBA will make final decisions. Agencies must notify SBA in writing of any subsequent changes in the solicitation release and close dates.

(ii) For those agencies that use both general topic and more specific subtopic designations in their STTR solicitations, the topic data should accurately describe the research solicited.

(iii) Agencies must post on their Internet web sites the following information regarding each program solicitation:

(A) list of topics upon which R/R&D proposals will be sought;

(B) Agency address, phone number, or email address from which STTR Program solicitations can be requested or obtained, especially through electronic means;

(C) names, addresses, and phone numbers of agency contact points where STTR-related inquiries may be directed;

(D) release date(s) of program solicitation(s);

(E) closing date(s) for receipt of proposals; and

(F) estimated number and average dollar amounts of Phase I awards to be made under the solicitation.

(2) SBA will manage a searchable public database that contains all solicitation and topic information from all SBIR/STTR agencies. Agencies are required to update the Solicitations Database, hosted on Tech-Net (available at www.SBIR.gov), within 5 business days of a solicitation’s open date for applications and/or submissions for SBCs. Refer to Appendix III: Solicitations Database for detailed reporting requirements. The main data requirements include:

(i) type of solicitation – SBIR/STTR;

(ii) Phase – I or II;
(iii) topic description;

(iv) sub-topic description;

(v) website for further information; and

(vi) applicable contact information per topic or sub-topic, where applicable and allowed by law.

(d) **Company Registry Database.**

(1) SBA will maintain and manage a company registry to track ownership and affiliation requirements for all companies applying to the STTR Program, including participants that are majority-owned by multiple VCOCs, private equity firms, or hedge funds.

(2) Each SBC applying for a Phase I or Phase II award must register on Tech-Net prior to submitting an application. The SBC will report and/or update ownership information to SBA prior to each STTR application submission. The SBC will also be able to view all of the ownership and affiliation requirements of the program on the registry site.

(3) Data collected in the Company Registry Database will not to be shared publicly. Refer to Appendix IV for details on specific data shared publicly.

(4) The SBC will save its information from the registration in a .pdf document and will append this document to the application submitted to a given agency unless the STTR agencies have a system in place where the information can be transmitted automatically from SBA’s database.

(5) Refer to Appendix IV for detailed reporting requirements. The main data requirements include:

(i) basic identifying information for the SBC;
(ii) the number of employees for the SBC;

(iii) whether the SBC has venture capital, hedge fund or private equity firm investment and if so, include:

(A) the percentage of ownership of the awardee held by the VCOC, hedge fund or private equity firm;

(B) the registration by the SBC of whether or not it is majority-owned by VCOCs, hedge funds, or private equity firms. Please note that this may be auto-populated through the individual calculations of investments in the SBC already submitted.

(iv) information on the affiliates of the SBC, including:

(A) the names of all affiliates of the SBC; and

(B) the number of employees of the affiliates;

(e) Application Information Database.

(1) SBA will manage an Application Information Database containing data from applications to the STTR program across agencies.

(2) Each agency must upload application data to the Application Database at Tech-Net at least quarterly.

(3) The data in the applicant database is only viewable to authorized government officials and not shared publicly.

(4) Refer to Appendix V for detailed reporting requirements. The main data requirements for each Phase I and Phase II application include:

(i) name, size, and location of the applicant, and the identifying number assigned;

(ii) name, location, responsible officer, and type for the Research Institution in the proposal;

(iii) an abstract and specific aims of the project;
(iv) name, title, contact information, and position in the small business of each key individual that will carry out the project;

(v) percentage of effort each key individual identified will contribute to the project; and

(vi) Federal agency to which the application is made and contact information for the person responsible for reviewing applications and making awards under the program.

(5) The Applicant Information Database connects and cross-checks information with the Company Registry and government personnel can see connected data.

(f) Award Information Database.

(1) SBA will manage a database to collect information from the agencies on awards made within the STTR program across agencies.

(2) Each agency must update the Award Information Database quarterly, if not more frequently.

(3) Most of the data available on the Award Information Database is viewable and searchable by the public on Tech-Net.

(4) Refer to Appendix VI for detailed reporting requirements. The main data requirements for each Phase I and Phase II award include:

(i) information similar to the Application Information Database – if not already collected;

(ii) name, size, location and the identifying number assigned to the small business concern;

(iii) name, location, responsible officer, and type for the Research Institution in the proposal;

(iv) an abstract and specific aims of the project;
(v) the name, title, contact information, and position in the small business of each key individual that will carry out the project;

(vi) the percentage of effort each key individual identified will contribute to the project;

(vii) the Federal agency making the award;

(viii) award amount;

(ix) principal investigator identifying information – including name, email address, and demographic information;

(x) more detailed information on location of company;

(xi) whether the SBC or the Research Institution initiated their collaboration on each assisted STTR project;

(xii) whether the SBC or the Research Institution originated any technology relating to the assisted STTR project;

(xiii) the length of time it took to negotiate any licensing agreement between the SBC and the Research Institution under each assisted STTR project;

(xiv) whether the awardee:

(A) has venture capital, hedge fund or private equity firm investment and if so, the amount of such investment received by SBC as of date of award and amount of additional capital awardee has invested in STTR technology;

(B) is a WOSB or has a woman as a principal investigator;

(C) is an SDB or has a socially and economically disadvantaged individual as a principal investigator;

(D) is owned by a faculty member or a student of an institution of higher education as defined in 20 U.S.C. § 1001); and
(E) has received the award as a result of the Commercialization Program – Pilot Program for Civilian Agencies set forth in §12(c) of the directive.

(xv) 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.

(5) The Award Information Database connects and cross-checks information with the Company Registry and Application Information Database, and government personnel can see connected data.

(g) Commercialization Database.

(1) The Commercialization Database will store information reported by awardees on the commercial activity resulting from their past STTR awards.

(2) SBA and STTR agencies will have two options to collect this information from SBCs. First, SBA may collect commercialization data directly from awardees into a central commercialization database. Alternatively, agencies may collect commercialization data from awardees, and then upload the data to the central commercialization database for real-time availability for SBA and other STTR agencies. The central commercialization database may be maintained by SBA or another Federal agency, as long as there is an interagency agreement addressing the database and stating, at a minimum, that all data in the database will be available in real-time to authorized Government personnel.

(3) STTR awardees are required to update this information on their prior Phase II awards in the Commercialization Database when submitting an application for an STTR Phase II award and upon completion of the last deliverable for that award.

(4) Commercialization data at the company level will not be shared publicly.
Aggregated data that maintains the confidentiality of companies may be reported in compliance with the statute.

(5) Refer to Appendix VII for detailed reporting requirements. The main data requirements include for every Phase II award:

(i) any business concern or subsidiary established for the commercial application of a product or service for which an STTR award is made;

(ii) total revenue resulting from the sale of new products or services, or licensing agreements resulting from the research conducted under each Phase II award;

(iii) additional investment received from any source, other than Phase I or Phase II awards, to further the research and development conducted under each Phase II award; and

(iv) how the proceeds from commercialization, marketing or sale of technology resulting from each STTR project were allocated (by percentage) between the SBC and the Research Institution;

(v) any narrative information that a Phase II awardee voluntarily submits to further describe the commercialization efforts of its awards and related research;

(6) The SBC may apportion sales or additional investment information relating to more than one Phase II award among those awards, if it notes the apportionment for each award. Companies are requested to update their records in this database on a voluntary basis for at least 5 years following the completion of award.

(7) Awardees will update their information and add project commercialization and sales data using their user names and passwords. SBA and STTR agencies will coordinate data collection to ensure that small businesses will not need to report the same data more than once.
(8) Note that the Award Information and Commercialization Databases will contain the data necessary for agencies to determine whether an applicant meets the agency’s benchmarks for progress towards commercialization.

(h) Annual Report.

(1) Agencies must submit their report to SBA on an annual basis and will report for the period ending September 30 of each fiscal year. The report is due to SBA by March 15 of each year. For example, the report for FY 2012 (October 1, 2011—September 30, 2012) must be submitted to SBA by March 15, 2013.

(2) SBA will provide a template for the Annual Report via Tech-Net to agencies to populate with the required information. SBA reserves the right to add further detail to the annual report data and performance metrics via the template beyond the information provided below and the appropriate appendix.

(3) After agencies submit the annual report to SBA, SBA will also calculate the required data, if the supporting data for that calculation has already been submitted to SBA (e.g., total STTR dollars obligated, the percentage of extramural budget allocated to STTR, number of awards exceeding the statutory thresholds). SBA will work with the agencies to resolve any data inconsistencies.

(4) The report must include the following:

(i) Agency total fiscal year, extramural R/R&D total obligations as reported to the National Science Foundation pursuant to the annual Budget of the United States Government.

(ii) STTR Program total fiscal year dollars derived by applying the statutory per centum to the agency's extramural R/R&D total obligations.

(iii) STTR Program fiscal year dollars obligated through STTR Program funding
agreements for Phase I and Phase II.

(iv) STTR Program fiscal year dollars obligated and number of awards through STTR Program funding for Phase I and Phase II further analyzed by type of Research Institution.

(v) Number of topics and subtopics contained in each program solicitation.

(vi) Number of proposals received by the agency for each topic and subtopic in each program solicitation.

(vii) For all applicants and awardees in the applicable fiscal year – where applicable, the name and address, solicitation topic and subtopic, solicitation number, project title, total dollar amount of funding agreement, and applicable demographic information. The agency is not required to re-submit applicant and award information in the annual report that it has already reported to SBA through Tech-Net as required under Appendices IV, V, and VI.

(viii) Justification for the award of any funding agreement exceeding the award guidelines set forth in section 7(h) of this directive, the amount of each award exceeding the guidelines, the identity and location of the awardee, whether the awardee has received any venture capital, hedge fund, or private equity firm investment, and whether the awardee is majority-owned by a venture capital operating company, hedge fund or private equity firm.

(ix) Justification for awards made under a topic or subtopic where the agency received only one proposal. Agencies must also provide the awardee's name and address, the topic or subtopic, and the dollar amount of award. Awardee information must be collected quarterly – in any case, but updated in the agency's annual reports.

(x) An accounting of Phase I awards made to SBCs that have received more than
15 Phase II awards from all agencies in the preceding 5 fiscal years. Each agency must report: name of awardee; Phase I funding agreement number and date of award; Phase I topic or subtopic title; amount and date of previous Phase II funding; and commercialization status for each prior Phase II award.

(xi) All instances in which an agency pursued R/R&D, services, production, or any combination of a technology developed by an STTR awardee and determined that it was not practicable to enter into a follow-on funding agreement with non-STTR funds with that concern. See section 9(a)(12) for minimum reporting requirements.

(xii) The number and dollar value of each STTR and non-STTR award (includes grants, contracts and cooperative agreements as well as any award issued under the Commercialization Program) over $10,000 and compare the number and amount of SBIR awards with awards to other than SBCs.

(xiii) Information relating to the pilot to allow for funding of administrative, oversight, and contract processing costs, including the money spent on each activity and any other information required in the approved work plan to measure the benefits of using these funds for the specific activities – especially, as it pertains to the goals outlined in the work plan. See section 9(e)(3) concerning the Pilot to Allow for Funding of Administrative, Oversight, and Contract Processing Costs.

(xiv) An analysis of the various activities considered for inclusion in the Commercialization Program – Pilot Program for Civilian Agencies set forth in section 12(c) of the directive and a statement of the reasons why each activity considered was included or not included.

(xv) A description and the extent to which the agency is increasing outreach and awards to SDBs and WOSBs.
(xvi) General information about the implementation of and compliance with the allocation of funds for awardees that are majority-owned by multiple VCOCs, hedge funds or private equity firms.

(xvii) A detailed description of any appeals filed on Phase III awards pursuant to section 4(c)(8) of the directive and notices of noncompliance with the policy directive filed by SBA.

(xviii) Information relating to each Phase III award made by that agency either as a prime or subcontract, including the name of the business receiving the Phase III award, the dollar amount, and the awarding agency or prime contractor.

(xix) An accounting of funds, initiatives, and outcomes under the commercialization programs set forth in section 12(b) & (c) of this directive.

(xx) By October 13, 2013, and then subsequently in each annual report, information relating to the agency’s enhancement of manufacturing activities, if the agency awards more than $50,000,000 under the SBIR and STTR Programs combined in a fiscal year. The report must include:

(A) a description of efforts undertaken by the agency to enhance U.S. manufacturing activities;

(B) a comprehensive description of the actions undertaken each year by the agency in carrying out the SBIR or STTR Programs to support Executive Order 13329 (relating to manufacturing):

(C) an assessment of the effectiveness of the actions taken at enhancing the R&D of U.S. manufacturing technologies and processes;

(D) a description of efforts by vendors selected to provide discretionary technical assistance to help SBIR and STTR business concerns manufacture in the U.S.; and
(E) recommendations from the agency’s SBIR and STTR program managers of additional actions to increase manufacturing activities in the U.S.

(5) Before the end of each fiscal year, each agency must submit a report to SBA on those SBCs that submitted an application and were found to not meet the agency’s benchmarks with respect to progress towards commercialization. This report must include the name and employer identification number of the SBC, the closing date of the solicitation to which it proposed, and the agency that issued the solicitation.

(6) The annual report also includes the performance metrics information set forth in the next section, Performance Metrics and Standards.

(i) Performance Areas, Metrics and Goals.

(1) As part of the agency’s work plans, which are submitted pursuant to section 9(e) of the directive, SBA will set performance criteria. The performance criteria will measure each agency’s accomplishments in meeting certain performance areas against the agency’s goals. The Small Business Act establishes broad performance areas for the program, including commercialization, streamlining, outreach, etc. The metrics used to measure the agency’s accomplishments in these performance areas will be set with input from the STTR agency. Agencies must report their progress on the performance criteria at the end of the fiscal year as part of their annual report.

(2) The metrics and performance areas will evolve over time and can be found at www.SBIR.gov. Examples of performance areas and metrics can be found at Appendix IX.

(j) Other Reporting Requirements.

(1) SBA will set forth a list of reports that agencies are required by statute to submit, in a table format, which will be available at www.SBIR.gov.
(2) The system will include a list of any individual or small business concern that has received an STTR award that has been convicted of a fraud-related crime involving STTR funds or found civilly liable for a fraud-related violation involving STTR funds.

(3) Agencies must submit to SBA's Administrator, not later than 4 months after the date of enactment of its annual Appropriations Act, a report describing the methodology used for calculating the amount of its extramural budget. The report must also include an itemization of each research program excluded from the calculation of its extramural budget and a brief explanation of why it is excluded.

(4) Agencies must provide notice to SBA of any case or controversy before any Federal judicial or administrative tribunal concerning the STTR Program of the Federal agency. This does not include agency level protests of awards unless and until the protest is before a Federal court or administrative body. The agency must provide notice to SBA within 15 business days of the agency’s written notification of the case or controversy.

(5) Agencies must provide notice of all instances in which an agency pursued research, development, production, or any such combination of a technology developed by an SBC using an award made under the STTR Program of that agency, where the agency determined that it was not practicable to enter into a follow-on non-STTR Program funding agreement with that concern. The agency must provide notice to SBA within 15 business days of the agency’s award. The report must include, at a minimum:

(i) the reasons why the follow-on funding agreement with the 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.

(6) Agencies must provide information supporting the agency’s achievement of the Interagency Policy Committee’s policy recommendations on ways to improve program effectiveness and efficiency. This includes qualitative and quantitative data as appropriate, which would measure the agency’s progress. The agency must provide this information to SBA at the end of each fiscal year.

(7) Agencies must provide an annual report to SBA, Senate Committee on Small Business and Entrepreneurship, House Committee on Small Business, and the House Committee on Science, Space, and Technology on SBIR and STTR programs and the benefits of these programs to the United States. Prior to preparing the report, the agency shall develop metrics to evaluate the effectiveness and benefit to the United States of the SBIR and STTR programs. The metrics must be science-based and statistically driven, reflect the mission of the agency, and include factors relating to the economic impact of the programs. The report must describe in detail the agency’s annual evaluation of the programs using these metrics. The final report must be posted online so it can be made available to the public.

(8) NIH, DoD and the Department of Education must provide the written determination to SBA anytime it issues a Phase II award to a small business concern that did not receive a Phase I award for that R/R&D. The determination must be submitted prior to award.

(9) SBA will compile data and report to Congress on the Federal and State Technology (FAST) Partnership Program, described in section 12 of this Policy Directive. If required by the FAST grant, the grantees will report a comprehensive list of the companies that received assistance under FAST and if those companies received
SBIR or STTR awards and any information regarding mentors and Mentoring Networks, as required in the Federal and State Technology (FAST) Partnership Program.

(k) Further Clarification on Availability of SBC Information

(1) Unless stated otherwise, the information contained in the Company Registry Database, the Application Information Database, and the Commercialization Database are solely available to authorized government officials, with the approval of SBA. This includes Congress, GAO, agencies participating in the SBIR and the STTR Programs, Office of Management and Budget, OSTP, Office of Federal Procurement Policy, and other authorized persons who are subject to a nondisclosure agreement with the Federal Government covering the use of the databases. These databases are used for the purposes of evaluating and determining eligibility for the STTR Program, in accordance with Policy Directives issued by SBA. Pursuant to 15 U.S.C. §638(k)(4), certain information provided to those databases are privileged and confidential and not subject to disclosure pursuant to 5 U.S.C. §552 (Government Organization and Employees); nor must it be considered to be publication for purposes of 35 U.S.C. §102 (a) or (b).

Most of the information in the Award Information and Annual Reports Databases will be available to the public. Any information that will identify the confidential business information of a given small business concern will not be disclosed to the public. Those databases are available at Tech-Net and offer a vast array of user-friendly capabilities that are accessible by the public at no charge. The Award Information Database allows for the online submission of SBIR/STTR awards data from all STTR agencies. It also allows any end-user to perform keyword searches and create formatted reports of SBIR/STTR awards information, and for potential research partners to view research and development efforts that are ongoing in the SBIR and the STTR Programs, increasing the investment
opportunities of the SBIR/STTR SBCs in the high tech arena.

(1) Waivers.

(1) Agencies must request an extension for additional time between the solicitation closing date and notification of recommendation for award. SBA will respond to the request for an extension within 5 business days, as practicable. See section 7(c)(1) of the directive for further information.

(2) Agencies must request a waiver to exceed the award guidelines for Phase I and Phase II awards by more than 50% for a specific topic. See section 7(i)(4) of the directive for further information.

(3) Agencies must request a waiver to not use its SBIR funds, as part of the pilot allowing for the use of such funds for certain STTR-related costs, to attempt to increase participation by SDBs and WOSBs in the STTR Program, and small businesses in states with a historically low level of SBIR awards. See section 9(e)(3)(ii) of the directive for further information.

(4) Agencies must request a waiver to issue a funding agreement that includes a provision for subcontracting a portion of that agreement back to the issuing agency if there is no exception to this requirement in the directive. See section 9(e)(4) of the directive for further information.

11. Responsibilities of SBA

(a) Policy.

(1) SBA will establish policy and procedures for the program by publishing and updating the STTR Policy Directive and promulgating regulations. Policy clarification of any part or provision of the directive or regulations may be provided by SBA.

(2) It is essential that STTR agencies do not promulgate any policy, rule,
regulation, or interpretation that is inconsistent with the Act, this Policy Directive, or SBA’s regulations relating to the STTR Program. SBA's monitoring activity will include review of policies, rules, regulations, interpretations, and procedures generated to facilitate intra- and interagency STTR Program implementation.

(3) Waivers providing limited exceptions to certain policies can be found at section 10 of the directive.

(b) Outreach. SBA conducts outreach to achieve a number of objectives including:

(1) Educating the public about the STTR Program via conferences, seminars, and presentations;

(2) Highlighting the successes achieved in the program by publishing (via press releases and www.SBIR.gov) success stories, as well as hosting awards programs;

(3) Maintaining SBIR.gov, which is an online public information resource that provides comprehensive information regarding the STTR Program. This information includes: a listing of solicitation information on currently available STTR opportunities, award information on all Phase I and Phase II awards, summary annual award information for the whole program, and contact information for SBA and agency program managers.

(c) Collection and publication of program-wide data. SBA collects and maintains program-wide data within the Tech-Net data system. This data includes information on all Phase I and II awards from across all STTR agencies, as well as Fiscal Year Annual Report data. See section 10 of the directive for further information about reporting and data collection requirements.

(d) Monitoring implementation of the program and annually reporting to
SBA is responsible for providing oversight and monitoring the implementation of the STTR Program at the agency level. This monitoring includes:

1. **STTR Funding Allocations.** The magnitude and source of each STTR agency's annual allocation reserved for STTR awards are critical to the success of the STTR Program. The Act defines the STTR effort (R/R&D), the source of the funds for financing the STTR Program (extramural budget), and the percentage of such funds to be reserved for the STTR Program. The Act requires that SBA monitor these annual allocations.

2. **STTR Program Solicitation and Award Status.** The accomplishment of scheduled STTR events, such as STTR Program solicitation releases and the issuance of funding agreements is critical to meeting statutory mandates and to operating an effective, useful program. SBA monitors these and other operational features of the STTR Program and publishes information relating to notice of and application for awards under the STTR Program for each STTR agency at SBIR.Gov, or Tech-Net. SBA does not plan to monitor administration of the awards except in instances where SBA assistance is requested and is related to a specific STTR project or funding agreement.

3. **Follow-on Funding Commitments.** SBA will monitor whether follow-on non-Federal funding commitments obtained by Phase II awardees for Phase III were considered in the evaluation of Phase II proposals as required by the Act.

4. **Fraud, Waste, and Abuse (FWA).** SBA will ensure that each STTR agency has taken steps to maintain a FWA prevention system to minimize fraud, waste and abuse in the program.

5. **Performance Areas, Metrics, and Goals.** SBA is responsible for defining...
performance areas consistent with statute (e.g., reducing timelines for award, simplification) against which agencies will set goals. SBA will work with the agencies to set metrics, in order to measure an agency’s accomplishments of its goals against the defined performance areas. The purpose of these metrics and goals is to assist SBA in evaluating and reporting on the progress achieved by the agencies in improving the STTR Program. For further information on Performance Areas, Metrics and Goals see section 10(i).

(e) Additional efforts to improve the performance of the program. SBA, in its continuing effort to improve the program, will make recommendations for improvement within the framework of the Program Managers’ meetings. This may include recommending a “best practice” currently being utilized by an agency or business, or open discussion and feedback on a potential “best practice” for agency adoption. This may also involve program-wide initiatives.

(f) Other.

(1) Federal and State Technology Partnership (FAST) Program. SBA coordinates the FAST program. SBA develops the solicitation, reviews proposals, and oversees grant awards. FAST provides awardees with funding to assist in outreach, proposal preparation, and other technical assistance to developing innovation oriented SBCs.

(2) Critical Technologies. SBA will annually obtain available information on the current critical technologies from the National Critical Technologies panel (or its successor) and the Secretary of Defense and provide such information to the STTR agencies. SBA will request this information in June of each year. The data received will be submitted to each of the STTR agencies and will also be published in the September issue of the STTR Pre-Solicitation Announcement.
12. Supporting Programs and Initiatives

(a) Federal and State Technology Partnership Program. The purpose of the FAST Program is to strengthen the technological competitiveness of SBCs in the United States. Congress found that programs that foster economic development among small high-technology firms vary widely among the States. Thus, the purpose of the FAST Program is to improve the participation of small technology firms in the innovation and commercialization of new technology, thereby ensuring that the United States remains on the cutting-edge of research and development in the highly competitive arena of science and technology. SBA administers the FAST Program. Additional and detailed information regarding this program is available at www.SBIR.gov.

(b) Commercialization Readiness Program - DoD

(1) General. The Secretary of Defense and the Secretary of each military department is authorized to create and administer a “Commercialization Readiness Program” to accelerate the transition of technologies, products, and services developed under the SBIR or STTR Program to Phase III, including the acquisition process. The authority to create this Commercialization Readiness Program does not eliminate or replace any other SBIR or STTR program that enhances the insertion or transition of SBIR or STTR technologies. This includes any program in effect as of December 31, 2011.

(2) Identification of research programs for accelerated transition to acquisition process. The Secretary of each military department must identify research programs of the STTR Program that have the potential for rapid transitioning to Phase III and into the acquisition process and certify 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.

(3) **Limitation.** The Secretary of Defense shall identify research programs of the STTR Program that have the potential for rapid transitioning to Phase III and into the acquisition process after receiving this certification from each military department.

(4) **Funding.**

(i) Beginning with FY 2013 and ending in FY 2015, the Secretary of Defense and each Secretary of a military department is authorized to use its SBIR funds for administration of this program in accordance with the procedures and policies set forth in 9(e)(3) of this directive.

(ii) Beginning with FY 2016, the Secretary of Defense and Secretary of each military department is only authorized to use not more than an amount equal to 1% of its SBIR funds available to DoD or the military departments for payment of expenses incurred to administer the Commercialization Program. In accordance with the procedures and policies set forth in 9(e)(3) of this directive, these funds will be taken from the 3% administrative set-aside if the pilot program is extended. Such funds--

(A) shall not be subject to the limitations on the use of funds in 9(e)(2) of this directive; and

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

(5) **Contracts Valued at less than $1,000,000,000.** For any contract awarded by DoD valued at less than $1,000,000,000, the Secretary of Defense may:

(i) establish goals for the transition of Phase III technologies in subcontracting plans; and

(ii) require a prime contractor on such a contract to report the number and dollar amount of the contracts entered into by the prime contractor for Phase III STTR projects.
(6) The Secretary of Defense shall:

(i) set a goal to increase the number of STTR Phase II contracts that lead to technology transition into programs of record of fielded systems;

(ii) use incentives in effect as of December 31, 2011 or create new incentives to encourage agency program managers and prime contractors to meet the goal set forth in paragraph (6)(i) above; and

(iii) submit the following to SBA, as part of the annual report:

(A) the number and percentage of Phase II STTR contracts awarded by DoD that led to technology transition into programs of record or fielded systems;

(B) information on the status of each project that received funding through the Commercialization Program and the efforts to transition these projects into programs of record or fielded systems; and

(C) a description of each incentive that has been used by DoD and the effectiveness of the incentive with respect to meeting DoD’s goal to increase the number of STTR Phase II contracts that lead to technology transition into programs of record of fielded systems.

(c) Commercialization Program – Pilot Program for Civilian Agencies.

(1) General. The Commercialization Readiness Pilot Program permits the head of any Federal agency participating in the SBIR Program (except DoD) to allocate not more than 10% of its funds allocated to the SBIR and the STTR Program--

(i) for follow-on awards to small businesses for technology development, testing, evaluation, and commercialization assistance for SBIR and STTR Phase II technologies; or

(ii) for awards to small businesses to support the progress of research, research
and development, and commercialization conducted under the SBIR or STTR programs to Phase III.

(2) Application to SBA. Before establishing this pilot program, the agency must submit a written application to SBA not later than 90 days before the first day of the fiscal year in which the pilot program is to be established. The written application must set forth a compelling reason that additional investment in SBIR or STTR technologies is necessary, including unusually high regulatory, systems integration, or other costs relating to development or manufacturing of identifiable, highly promising small business technologies or a class of such technologies expected to substantially advance the mission of the agency.

(3) SBA’s Determination. SBA must make its determination regarding an application submitted under paragraph (2) above not later than 30 days before the first day of the fiscal year for which the application is submitted. SBA must also publish its determination in the Federal Register and make a copy of the determination and any related materials available to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business and the Committee on Science, Space, and Technology of the House of Representatives.

(4) Maximum Amount of Award. The STTR agency may not make an award to a small business concern under this pilot program in excess of 3 times the dollar amounts generally established for Phase II awards under section 7(i)(1) of this directive.

(5) Registration. Any small business concern that receives an award under this pilot program shall register with the SBA in the Company Registry Database.

(6) Award Criteria or Consideration. When making an award under this pilot program, the agency is required to consider whether the technology to be supported by
the award is likely to be manufactured in the United States.

(7) Termination of Authority. The authority to establish a pilot program under this section expires on September 30, 2017, unless otherwise extended.

(d) Phase 0 Proof of Concept Partnership Pilot Program.

(1) General. The Director of the National Institutes of Health (NIH) may use $5,000,000 of the funds allocated for the STTR Program set forth in section 2(b) of this directive for a Proof of Concept Partnership Pilot Program to accelerate the creation of small businesses and the commercialization of research innovations from qualifying institutions. A qualifying institution is a university or other Research Institution that participates in the NIH's STTR program. The Director shall award, through a competitive, merit-based process, grants to qualifying institutions in order to implement this program. These grants shall only be used to administer Proof of Concept Partnership awards.

(2) Awards to Qualifying Institutions.

(i) The Director may make awards to a qualifying institution for up to $1,000,000 per year for up to 3 years.

(ii) In determining which qualifying institutions will receive pilot program grants, the Director of NIH shall consider, in addition to any other criteria the Director determines necessary, the extent to which qualifying institutions--

(A) have an established and proven technology transfer or commercialization office and have a plan for engaging that office in the program's implementation;

(B) have demonstrated a commitment to local and regional economic development;

(C) are located in diverse geographies and are of diverse sizes;
can assemble project management boards comprised of industry, start-up, venture capital, technical, financial, and business experts;

(E) have an intellectual property rights strategy or office; and

(F) demonstrate a plan for sustainability beyond the duration of the funding award.

(3) **Proof of Concept Partnerships.** A qualifying institution selected by NIH shall establish a Proof of Concept Partnership with NIH to award grants to individual researchers. These grants should provide researchers with the initial investment and the resources to support the proof of concept work and commercialization mentoring needed to translate promising research projects and technologies into a viable company. This work may include technical validations, market research, clarifying intellectual property rights position and strategy, and investigating commercial or business opportunities.

(4) **Award Guidelines for Small Businesses.** The administrator of a Proof of Concept Partnership program shall award grants in accordance with the following guidelines:

(i) The Proof of Concept Partnership shall use a market-focused project management oversight process, including--

(A) a rigorous, diverse review board comprised of local experts in translational and proof of concept research, including industry, start-up, venture capital, technical, financial, and business experts and university technology transfer officials;

(B) technology validation milestones focused on market feasibility;

(C) simple reporting effective at redirecting projects; and

(D) the willingness to reallocate funding from failing projects to those with more potential.
(ii) The Proof of Concept Partnership shall not award more than $100,000 towards an individual proposal.

(5) Educational Resources and Guidance. The administrator of a Proof of Concept Partnership program shall make educational resources and guidance available to researchers attempting to commercialize their innovations.

(6) Limitations.

(i) The funds for the pilot program shall not be used for basic research or to fund the acquisition of research equipment or supplies unrelated to commercialization activities.

(ii) The funds for the pilot program can be used to evaluate the commercial potential of existing discoveries, including proof of concept research or prototype development; and activities that contribute to determining a project's commercialization path, to include technical validations, market research, clarifying intellectual property rights, and investigating commercial and business opportunities.

(7) Termination of Authority. The pilot program under this subsection shall terminate on September 30, 2017, unless otherwise extended.

Appendix I: Instructions for STTR Program Solicitation Preparation

a. General. Section 9(p) of the Small Business Act (15 U.S.C. 638(p)) requires “...simplified, standardized and timely STTR solicitations” and for STTR agencies to utilize a “uniform process” minimizing the regulatory burden of participation. Therefore, the following instructions purposely depart from normal Government solicitation formats and requirements. STTR solicitations must be prepared and issued as program solicitations in accordance with the following instructions.

b. Limitation in Size of Solicitation. In the interest of meeting the requirement
for simplified and standardized solicitations, while also recognizing that the Internet has become the main vehicle for distribution, each agency should structure its entire STTR solicitation to produce the least number of pages (electronic and printed), consistent with the procurement/assistance standing operating procedures and statutory requirements of the participating Federal agencies.

c. Format. STTR Program solicitations must be prepared in a simple, standardized, easy-to-read, and easy-to-understand format. It must include a cover sheet, a table of contents, and the following sections in the order listed.

1. Program Description
2. Certifications
3. Proposal Preparation Instructions and Requirements
4. Method of Selection and Evaluation Criteria
5. Considerations
6. Submission of Proposals
7. Scientific and Technical Information Sources
8. Submission Forms and Certifications
9. Research Topics
d. Cover Sheet.

The cover sheet of an STTR Program solicitation must clearly identify the solicitation as an STTR solicitation, identify the agency releasing the solicitation, specify date(s) on which contract proposals or grant applications (proposals) are due under the solicitation, and state the solicitation number or year.

Instructions for Preparation of STTR Program Solicitation

Sections 1 through 9
1. **Program Description.**

   (a) Summarize in narrative form the invitation to submit proposals and the objectives of the STTR Program.

   (b) Describe in narrative form the agency's STTR Program, including a description of the three phases. Note in your description whether the solicitation is for Phase I or Phase II proposals. Also note in each solicitation for Phase I that all awardees may apply for a Phase II award and provide guidance on the procedure for doing so.

   (c) Describe program eligibility:

   (d) List the name, address and telephone number of agency contacts for general information on the STTR Program solicitation.

   (e) Whenever terms are used that are unique to the STTR Program, a specific STTR solicitation or a portion of a solicitation, define them or refer them to a source for the definition. At a minimum, the definitions of “funding agreement,” “R/R&D,” “SBC,” “STTR technical data,” and STTR technical data rights” must be included.

   (f) Include information explaining how an individual can report fraud, waste and abuse (e.g. include the fraud hotline for the agency’s Office of Inspector General);

2. **Certifications.**

   (a) This section must include certifying forms required by legislation, regulation or standing operating procedures, to be submitted by the applicant to the contracting or granting agency. This would include certifying forms such as those for the protection of human and animal subjects.

   (b) This section must include any certifications required concerning size, ownership and other STTR Program requirements.

   (i) The agency must require any SBC that is majority-owned by multiple venture
capital operating companies, hedge funds, or private equity firms to submit the following certification with its STTR application:
Certification for Applicants that are Majority-Owned by Multiple Venture Capital Operating Companies, Hedge Fund or Private Equity Firms

Any small businesses that is majority-owned by multiple venture operating companies (VCOCs), hedge funds or private equity firms and are submitting an application for and STTR funding agreement must complete this certification prior to submitting an application. This includes checking all of the boxes and having an authorized officer of the applicant sign and date the certification each time it is requested.

Please read carefully the following certification statements. The Federal government relies on the information to determine whether the business is eligible for a Small Business Technology Transfer (STTR) Program award and meets the specific program requirements during the life of the funding agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, SBA regulations (13 C.F.R. Part 121), the STTR Policy Directive and also any statutory and regulatory provisions referenced in those authorities.

If the funding agreement officer believes that the business may not meet certain eligibility requirements at the time of award, they are required to file a size protest with the U.S. Small Business Administration (SBA), who will determine eligibility. At that time, SBA will request further clarification and supporting documentation in order to assist in the verification of any of the information provided as part of a protest. If the funding agreement officer believes, after award, that the business is not meeting certain funding agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal government, any action taken with respect to this certification does not affect the Government’s right to pursue criminal, civil or administrative remedies for incorrect or incomplete information given in the certification, each person signing this certification may be prosecuted if they have provided false information.

The undersigned has reviewed, verified and certifies that (all boxes must be checked):
(1) The applicant is NOT more than 50% owned by a single VCOC, hedge fund or private equity firm.
€Yes €No
(2) The applicant is more than 50% owned by multiple domestic business concerns that are VCOCs, hedge funds, or private equity firms.
€Yes €No
(3) I have registered with SBA at www.SBIR.gov as a business that is majority-owned by multiple VCOCs, hedge funds or private equity firms.
€Yes €No
I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.

I understand that the certifications in this document are continuing in nature. Each STTR funding agreement for which the small business submits an offer or application or receives an award constitutes a restatement and reaffirmation of these certifications.

I understand that I may not misrepresent status as small business to: 1) obtain a contract under the Small Business Act; or 2) obtain any benefit under a provision of Federal law that references the STTR Program.

I am an officer of the business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the STTR applicant or awardee, that the information provided in this certification, the application, and all other information submitted in connection with this application, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and nonprocurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (5) other administrative penalties including termination of SBIR/STTR awards.

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date__/<strong>/</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Name (First, Middle, Last)</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>Business Name</td>
<td></td>
</tr>
</tbody>
</table>
(ii) The agency may request the STTR applicant to submit a certification at the time of submission of the application or offer. The certification may require the applicant to state that it intends to meet the size, ownership and other requirements of the STTR Program at the time of award of the funding agreement, if selected for award.

(iii) The agency must request the STTR applicant to submit a certification at the time of award and at any other time set forth in SBA’s regulations at 13 C.F.R. §§121.701-121.705. The certification will require the applicant to state that it meets the size, ownership and other requirements of the STTR Program at the time of award of the funding agreement.

(iv) The agency must request the STTR awardee to submit certifications during funding agreement life cycle. A Phase I funding agreement must state that the awardee shall submit a new certification as to whether it qualifies as a SBC and that it is in compliance with specific STTR Program requirements at the time of final payment or disbursement. A Phase II funding agreement must state that the awardee shall submit a new certification as to whether it qualifies as a SBC and that it is in compliance with specific STTR Program requirements prior to receiving more than 50% of the total award amount and prior to final payment or disbursement.

(v) Agencies may require additional certifications at other points in time during the life cycle of the funding agreement, such as at the time of each payment or disbursement.

(c) The agency must use the following certification at the time of award and upon notification by SBA, must check www.SBIR.gov for updated certifications prepared by SBA:
STTR Funding Agreement Certification

All small businesses that are selected for award of an STTR funding agreement must complete this certification at the time of award and any other time set forth in the funding agreement that is prior to performance of work under this award. This includes checking all of the boxes and having an authorized officer of the awardee sign and date the certification each time it is requested.

Please read carefully the following certification statements. The Federal government relies on the information to determine whether the business is eligible for a Small Business Technology Transfer (STTR) Program award. A similar certification will be used to ensure continued compliance with specific program requirements during the life of the funding agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, SBA regulations (13 C.F.R. Part 121), the STTR Policy Directive and also any statutory and regulatory provisions referenced in those authorities.

If the funding agreement officer believes that the business may not meet certain eligibility requirements at the time of award, they are required to file a size protest with the U.S. Small Business Administration (SBA), who will determine eligibility. At that time, SBA will request further clarification and supporting documentation in order to assist in the verification of any of the information provided as part of a protest. If the funding agreement officer believes, after award, that the business is not meeting certain funding agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal government, any action taken with respect to this certification does not affect the Government’s right to pursue criminal, civil or administrative remedies for incorrect or incomplete information given in the certification. Each person signing this certification may be prosecuted if they have provided false information.

The undersigned has reviewed, verified and certifies that (all boxes must be checked):
(1) The business concern meets the ownership and control requirements set forth in 13 C.F.R. §121.702.
   ☑Yes ☐No
(2) If a corporation, all corporate documents (articles of incorporation and any amendments, articles of conversion, by-laws and amendments, shareholder meeting minutes showing director elections, shareholder meeting minutes showing officer elections, organizational meeting minutes, all issued stock certificates, stock ledger, buy-sell agreements, stock transfer agreements, voting agreements, and documents relating to
stock options, including the right to convert non-voting stock or debentures into voting stock) evidence that it meets the ownership and control requirements set forth in 13 C.F.R. §121.702.

Yes ☐ No ☐ N/A Explain why N/A: ____________________________

(3) If a partnership, the partnership agreement evidences that it meets the ownership and control requirements set forth in 13 C.F.R. §121.702.

Yes ☐ No ☐ N/A Explain why N/A: ____________________________

(4) If a limited liability company, the articles of organization and any amendments, and operating agreement and amendments, evidence that it meets the ownership and control requirements set forth in 13 C.F.R. §121.702.

Yes ☐ No ☐ N/A Explain why N/A: ____________________________

(5) The birth certificates, naturalization papers, or passports show that any individuals it relies upon to meet the eligibility requirements are U.S. citizens or permanent resident aliens in the United States.

Yes ☐ No ☐ N/A Explain why N/A: ____________________________

(6) It has no more than 500 employees, including the employees of its affiliates.

Yes ☐ No ☐

(7) SBA has not issued a size determination currently in effect finding that this business concern exceeds the 500 employee size standard.

Yes ☐ No ☐

(8) During the performance of the award, the principal investigator will spend more than one half of his/her time as an employee of the awardee or has requested and received a written deviation from this requirement from the funding agreement officer.

Yes ☐ No ☐ Deviation approved in writing by funding agreement officer: %

(9) All, essentially equivalent work, or a portion of the work proposed under this project (check the applicable line):

Has not ☐ Has ☐ been submitted for funding by another Federal agency.

Has ☐ been submitted for funding by another Federal agency but has not been funded under any other Federal grant, contract, subcontract or other transaction.

A portion has been funded by another grant, contract, or subcontract as described in detail in the proposal and approved in writing by the funding agreement officer.

(10) During the performance of award, it will perform the applicable percentage of work unless a deviation from this requirement is approved in writing by the funding agreement officer (check the applicable line and fill in if needed):

STTR Phase I: at least forty percent (40%) of the research.

STTR Phase II: at least forty percent (40%) of the research.
(11) During performance of award, the research/research and development will be performed in the United States unless a deviation is approved in writing by the funding agreement officer.
€ Yes € No € Waiver has been granted

(12) During performance of award, the research/research and development will be performed at my facilities with my employees, except as otherwise indicated in the STTR application and approved in the funding agreement.
€ Yes € No

(13) It has registered itself on SBA’s database as majority-owned by venture capital operating companies, hedge funds or private equity firms.
€ Yes € No € N/A Explain why N/A:____________________

(14) The small business concern has provided satisfactory evidence that it will exercise management direction and control of the performance of the STTR funding agreement.
Yes € No €

€ I will notify the Federal agency immediately if all or a portion of the work proposed is subsequently funded by another Federal agency.
€ I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.
€ I am an officer of the business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the business concern, that the information provided in this certification, the application, and all other information submitted in connection with this application, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and nonprocurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date__/<strong>/</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Name (First, Middle, Last)</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>Business Name</td>
<td></td>
</tr>
</tbody>
</table>
(d) The agency must use the following certification during the lifecycle of the funding agreement in accordance with subsection 8(h) of the directive and paragraph 2(b)(iv) of this Appendix and upon notification by SBA, must check www.SBIR.gov for updated certifications prepared by SBA:
All STTR Phase I and Phase II awardees must complete this certification at all times set forth in the funding agreement (see §8(h) of the STTR Policy Directive). This includes checking all of the boxes and having an authorized officer of the awardee sign and date the certification each time it is requested.

Please read carefully the following certification statements. The Federal government relies on the information to ensure compliance with specific program requirements during the life of the funding agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, the STTR Policy Directive, and also any statutory and regulatory provisions referenced in those authorities.

If the funding agreement officer believes that the business is not meeting certain funding agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal government, any action taken with respect to this certification does not affect the Government’s right to pursue criminal, civil or administrative remedies for incorrect or incomplete information given in the certification. Each person signing this certification may be prosecuted if they have provided false information.

The undersigned has reviewed, verified and certifies that (all boxes must be checked):
(1) The principal investigator spent more than one half of his/her time as an employee of the awardee or the awardee has requested and received a written deviation from this requirement from the funding agreement officer.

€Yes €No €Deviation approved in writing by funding agreement officer: _____%

(2) All, essentially equivalent work, or a portion of the work performed under this project (check the applicable line):
€ Has not been submitted for funding by another Federal agency.
€ Has been submitted for funding by another Federal agency but has not been funded under any other Federal grant, contract, subcontract or other transaction.
€ A portion has been funded by another grant, contract, or subcontract as described in detail in the proposal and approved in writing by the funding agreement officer.

(3) Upon completion of the award it will have performed the applicable percentage of work, unless a deviation from this requirement is approved in writing by the funding agreement officer (check the applicable line and fill in if needed):
STTR Phase I: at least forty percent (40%) of the research.
STTR Phase II: at least forty percent (40%) of the research.

Deviaton approved in writing by the funding agreement officer: %

(4) The small business concern, and not the single, partnering Research Institution, is exercising management direction and control of the performance of the STTR funding agreement.
Yes ☐  No ☐

(5) The work is completed and it has performed the applicable percentage of work, unless a deviation from this requirement is approved in writing by the funding agreement officer (check the applicable line and fill in if needed):
STTR Phase I: at least forty percent (40%) of the research.
STTR Phase II: at least forty percent (40%) of the research.
Deviaton approved in writing by the funding agreement officer: %
N/A because work is not completed

(6) The research/research and development is performed in the United States unless a deviation is approved in writing by the funding agreement officer.
Yes ☐  No ☐  Waiver has been granted

(7) The research/research and development is performed at my facilities with my employees, except as otherwise indicated in the STTR application and approved in the funding agreement.
Yes ☐  No ☐

I will notify the Federal agency immediately if all or a portion of the work proposed is subsequently funded by another Federal agency.

I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.

I am an officer of the business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the business concern, that the information provided in this certification, the application, and all other information submitted in connection with the award, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. §1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. §3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. §3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and nonprocurement transactions (FAR Subpart 9.4 or 2 C.F.R. part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.
<table>
<thead>
<tr>
<th>Signature</th>
<th>Date__/<strong>/</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Print Name (First, Middle, Last)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Business Name</strong></td>
<td></td>
</tr>
</tbody>
</table>
3. Proposal Preparation Instructions and Requirements. The purpose of this section is to inform the applicant on what to include in the proposal and to set forth limits on what may be included. This section of the proposal should also provide guidance to assist applicants, particularly those that may not have previous Government experience, in improving the quality and acceptance of proposals.

   (a) Limitations on Length of Proposal. Include at least the following information:

   (1) STTR Phase I proposals must not exceed a total of 25 pages, including cover page, budget, and all enclosures or attachments, unless stated otherwise in the agency solicitation. Pages should be of standard size (8 ½ inches by 11 inches or 21.6 centimeters by 27.9 centimeters) and should conform to the standard formatting instructions. Margins should be 1 inch or 2.6 centimeters and type at least 10 point font.

   (2) A notice that no additional attachments, appendices, or references beyond the 25-page limitation shall be considered in proposal evaluation (unless specifically solicited by an agency) and that proposals in excess of the page limitation shall not be considered for review or award.

   (b) Proposal Cover Sheet. Every applicant is required to provide a copy of its registration information printed from the Company Registry unless the information can be transmitted automatically to STTR agencies. Each applicant must also include at least the following information on the first page of proposals.

   (1) Agency and solicitation number or year.

   (2) Topic Number or Letter.

   (3) Subtopic Number or Letter.

   (4) Topic Area.

   (5) Project Title.
(6) Name and Complete Address of Firm.

(7) Disclosure permission (by statement or checkbox), such as follows, must be included at the discretion of the funding agency:

“Will you permit the Government to disclose the name, address, and telephone number of the corporate official of your concern, if your proposal does not result in an award, to appropriate local and State-level economic development organizations that may be interested in contacting you for further information? Yes – No –”

(8) Signature of a company official of the proposing SBC and that individual's typed name, title, address, telephone number, and date of signature.

(9) Signature of Principal Investigator or Project Manager within the proposing SBC and that individual's typed name, title, address, telephone number, and date of signature.

(10) Legend for proprietary information as described in the “Considerations” section of this program solicitation if appropriate. It may also be noted by asterisks in the margins on proposal pages.

(c) Data Collection Requirement.

(1) Each Phase I and Phase II applicant is required to provide information for SBA’s database (www.sbir.gov). The following are examples of the data to be entered by applicants into the database:

(i) Any business concern or subsidiary established for the commercial application of a product or service for which an STTR award is made.

(ii) Revenue from the sale of new products or services resulting from the research conducted under each Phase II award;

(iii) Additional investment from any source, other than Phase I or Phase II
awards, to further the research and development conducted under each Phase II award.

(iv) Update the information in the database for any prior Phase II award received by the SBC. The SBC may apportion sales or additional investment information relating to more than one Phase II award among those awards, if it notes the apportionment for each award.

(2) Each Phase II awardee is required to update the appropriate information on the award in the database upon completion of the last deliverable under the funding agreement and is requested to voluntarily update the information in the database annually thereafter for a minimum period of 5 years.

(d) **Abstract or Summary.** Applicants will be required to include a one-page project summary of the proposed R/R&D including at least the following:

   (1) Name and address of SBC.

   (2) Name and title of principal investigator or project manager.

   (3) Agency name, solicitation number, solicitation topic, and subtopic.

   (4) Title of project.

   (5) Technical abstract limited to two hundred words.

   (6) Summary of the anticipated results and implications of the approach (both Phases I and II) and the potential commercial applications of the research.

(e) **Technical Content.** STTR Program solicitations must require as a minimum the following to be included in proposals submitted thereunder:

   (1) **Identification and Significance of the Problem or Opportunity.** A clear statement of the specific technical problem or opportunity addressed.

   (2) **Phase I Technical Objectives.** State the specific objectives of the Phase I research and development effort, including the technical questions it will try to answer to
determine the feasibility of the proposed approach.

(3) Phase I Work Plan. Include a detailed description of the Phase I R/R&D plan. The plan should indicate what will be done, where it will be done, and how the R/R&D will be carried out. Phase I R/R&D should address the objectives and the questions cited in (e)(2) immediately above. The methods planned to achieve each objective or task should be discussed in detail.

(4) Related R/R&D. Describe significant R/R&D that is directly related to the proposal including any conducted by the project manager/principal investigator or by the proposing SBC. Describe how it relates to the proposed effort, and any planned coordination with outside sources. The applicant must persuade reviewers of his or her awareness of key, recent R/R&D conducted by others in the specific topic area.

(5) Key Individuals and Bibliography of Directly Related Work. Identify key individuals involved in Phase I including their directly-related education, experience, and bibliographic information. Where vitae are extensive, summaries that focus on the most relevant experience or publications are desired and may be necessary to meet proposal size limitation.

(6) Relationship with Future R/R&D.

(i) State the anticipated results of the proposed approach if the project is successful (Phase I and II).

(ii) Discuss the significance of the Phase I effort in providing a foundation for the Phase II R/R&D effort.

(7) Facilities. A detailed description, availability and location of instrumentation and physical facilities proposed for Phase I should be provided.

(8) Consultants. Involvement of consultants in the planning and research stages
of the project is permitted. If such involvement is intended, it should be described in detail.

(9) Potential Post Applications. Briefly describe:

(i) Whether and by what means the proposed project appears to have potential commercial application.

(ii) Whether and by what means the proposed project appears to have potential use by the Federal Government.

(10) Similar Proposals or Awards. WARNING—While it is permissible with proposal notification to submit identical proposals or proposals containing a significant amount of essentially equivalent work for consideration under numerous Federal program solicitations, it is unlawful to enter into funding agreements requiring essentially equivalent work. If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award. If an applicant elects to submit identical proposals or proposals containing a significant amount of essentially equivalent work under other Federal program solicitations, a statement must be included in each such proposal indicating:

(i) The name and address of the agencies to which proposals were submitted or from which awards were received.

(ii) Date of proposal submission or date of award.

(iii) Title, number, and date of solicitations under which proposals were submitted or awards received.

(iv) The specific applicable research topics for each proposal submitted or award received.

(v) Titles of research projects.
(vi) Name and title of principal investigator or project manager for each proposal submitted or award received.

(11) Prior STTR Phase II Awards. If the SBC has received more than 15 Phase II awards in the prior 5 fiscal years, the SBC must submit in its Phase I proposal: name of the awarding agency; date of award; funding agreement number; amount of award; topic or subtopic title; follow-on agreement amount; source and date of commitment; and current commercialization status for each Phase II award. (This required proposal information will not be counted toward the proposal pages limitation.)

(f) Cost Breakdown/Proposed Budget. The solicitation will require the submission of simplified cost or budget data.


(a) Standard Statement. Essentially the following statement must be included in all STTR Program solicitations:

“All Phase I and II proposals will be evaluated and judged on a competitive basis. Proposals will be initially screened to determine responsiveness. Proposals passing this initial screening will be technically evaluated by engineers or scientists to determine the most promising technical and scientific approaches. Each proposal will be judged on its own merit. The Agency is under no obligation to fund any proposal or any specific number of proposals in a given topic. It also may elect to fund several or none of the proposed approaches to the same topic or subtopic.”

(b) Evaluation Criteria.

(1) The STTR agency must develop a standardized method in its evaluation process that will consider, at a minimum, the following factors:

(i) The technical approach and the anticipated agency and commercial benefits
that may be derived from the research.

   (ii) The adequacy of the proposed effort and its relationship to the fulfillment of requirements of the research topic or subtopics.

   (iii) The soundness and technical merit of the proposed approach and its incremental progress toward topic or subtopic solution.

   (iv) Qualifications of the proposed principal/key investigators, supporting staff, and consultants.

   (v) Evaluations of proposals require, among other things, consideration of a proposal's commercial potential as evidenced by:

       (A) The SBC's record of 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.

(2) The factors in (b)(1) above and other appropriate evaluation criteria, if any, must be specified in the “Method of Selection” section of STTR Program solicitations.

(c) Peer Review. The program solicitation must indicate if the STTR agency contemplates that as a part of the STTR proposal evaluation, it will use external peer review.

(d) Release of Proposal Review Information. After final award decisions have been announced, the technical evaluations of the applicant's proposal may be provided to the applicant. The identity of the reviewer must not be disclosed.

5. Considerations. This section must include, as a minimum, the following
information:

(a) Awards. Indicate the estimated number and type of awards anticipated under the particular STTR Program solicitation in question, including:

(i) Approximate number of Phase I awards expected to be made.

(ii) Type of funding agreement, that is, contract, grant or cooperative agreement.

(iii) Whether fee or profit will be allowed.

(iv) Cost basis of funding agreement, for example, fixed-price, cost reimbursement, or cost-plus-fixed fee.

(v) Information on the approximate average dollar value of awards for Phase I and Phase II.

(b) Reports. Describe the frequency and nature of reports that will be required under Phase I funding agreements. Interim reports should be brief letter reports.

(c) Payment Schedule. Specify the method and frequency of progress and final payment under Phase I and II agreements.

(d) Innovations, Inventions and Patents.

(i) Proprietary Information. Essentially the following statement must be included in all STTR solicitations:

“Information contained in unsuccessful proposals will remain the property of the applicant. The Government may, however, retain copies of all proposals. Public release of information in any proposal submitted will be subject to existing statutory and regulatory requirements. If proprietary information is provided by an applicant in a proposal, which constitutes a trade secret, proprietary commercial or financial information, confidential personal information or data affecting the national security, it will be treated in confidence, to the extent permitted by law. This information must be
clearly marked by the applicant with the term ‘confidential proprietary information’ and the following legend must appear on the title page of the proposal: ‘These data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal. If a funding agreement is awarded to this applicant as a result of or in connection with the submission of these data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the funding agreement and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction are contained on pages —— of this proposal.’”

Any other legend may be unacceptable to the Government and may constitute grounds for removing the proposal from further consideration, without assuming any liability for inadvertent disclosure. The Government will limit dissemination of such information to within official channels.”

(ii) Alternative To Minimize Proprietary Information. Agencies may elect to instruct applicants to:

(A) Limit proprietary information to only that absolutely essential to their proposal.

(B) Provide proprietary information on a separate page with a numbering system to key it to the appropriate place in the proposal.

(iii) Rights in Data Developed Under STTR Funding Agreements. Agencies should insert essentially the following statement in their STTR Program solicitations to notify SBCs of the necessity to mark STTR technical data before delivering it to the Agency:
“To preserve the STTR data rights of the awardee, the legend (or statements) used in the STTR Data Rights clause included in the STTR award must be affixed to any submissions of technical data developed under that STTR award. If no Data Rights clause is included in the STTR award, the following legend, at a minimum, should be affixed to any data submissions under that award.

These STTR data are furnished with STTR rights under Funding Agreement No. —— (and subcontract No. —— if appropriate), Awardee Name ———————, Address, Expiration Period of STTR Data Rights ———————. The Government may not use, modify, reproduce, release, perform, display, or disclose technical data or computer software marked with this legend for (chose four (4) or five (5) years). After expiration of the (4- or 5-year period), the Government has a royalty-free license to use, and to authorize others to use on its behalf, these data for Government purposes, and is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties, except that any such data that is also protected and referenced under a subsequent STTR award shall remain protected through the protection period of that subsequent STTR award. Reproductions of these data or software must include this legend.”

(iv) Copyrights. Include an appropriate statement concerning copyrights and publications; for example:

“With prior written permission of the contracting officer, the awardee normally may copyright and publish (consistent with appropriate national security considerations, if any) material developed with (agency name) support. (Agency name) receives a royalty-free license for the Federal Government and requires that each publication contain an appropriate acknowledgement and disclaimer statement.”
(v) Patents. Include an appropriate statement concerning patents. For example:

“Small business concerns normally may retain the principal worldwide patent rights to any invention developed with Government support. In such circumstances, the Government receives a royalty-free license for Federal Government use, reserves the right to require the patent holder to license others in certain circumstances, and may require that anyone exclusively licenses to sell the invention in the United States must normally manufacture it domestically. To the extent authorized by 35 U.S.C. 205, the Government will not make public any information disclosing a Government-supported invention for a minimum 4-year period (that may be extended by subsequent STTR funding agreements) to allow the awardee a reasonable time to pursue a patent.”

(vi) Invention Reporting. Include requirements for reporting inventions. Include appropriate information concerning the reporting of inventions, for example:

“STTR awardees must report inventions to the awarding agency within 2 months of the inventor's report to the awardee. The reporting of inventions may be accomplished by submitting paper documentation, including fax.”

Note: Some agencies provide electronic reporting of inventions through the NIH iEdison Invention Reporting System (iEdison System). Use of the iEdison System satisfies all invention reporting requirements mandated by 37 CFR part 401, with particular emphasis on the Standard Patent Rights Clauses, 37 CFR 401.14. Access to the system is through a secure interactive Internet site, http://www.iedison.gov, to ensure that all information submitted is protected. All agencies are encouraged to use the Edison System. In addition to fulfilling reporting requirements, the Edison System notifies the user of future time sensitive deadlines with enough lead-time to avoid the possibility of loss of patent rights due to administrative oversight.
(e) **Cost-Sharing.** Include a statement essentially as follows:

Cost-sharing is permitted for proposals under this program solicitation; however, cost-sharing is not required. Cost-sharing will not be an evaluation factor in consideration of your Phase I proposal.

(f) **Profit or Fee.** Include a statement on the payment of profit or fee on awards made under the STTR Program solicitation.

(g) **Joint Ventures or Limited Partnerships.** Include essentially the following language:

Joint ventures and limited partnerships are eligible provided the entity created qualifies as a small business concern as defined in this program solicitation.

(h) **Research and Analytical Work.** Include essentially the following statement:

(1) “For both Phase I and Phase II, not less than 40 percent of the R/R&D work must be performed by the SBC, and not less than 30 percent of the R/R&D work must be performed by the single, partnering Research Institution, as defined in this solicitation.”

(i) **Awardee Commitments.** To meet the legislative requirement that STTR solicitations be simplified, standardized and uniform, clauses expected to be in or required to be included in STTR funding agreements must not be included in full or by reference in STTR Program solicitations. Rather, applicants must be advised that they will be required to make certain legal commitments at the time of execution of funding agreements resulting from STTR Program solicitations. Essentially, the following statement must be included in the “Considerations” section of STTR Program solicitations:

“Upon award of a funding agreement, the awardee will be required to make certain legal commitments through acceptance of numerous clauses in Phase I funding agreements.
The outline that follows is illustrative of the types of clauses to which the contractor would be committed. This list is not a complete list of clauses to be included in Phase I funding agreements, and is not the specific wording of such clauses. Copies of complete terms and conditions are available upon request.”

(j) Summary Statements. The following are illustrative of the type of summary statements to be included immediately following the statement in subparagraph (i). These statements are examples only and may vary depending upon the type of funding agreement used.

(1) Standards of Work. Work performed under the funding agreement must conform to high professional standards.

(2) Inspection. Work performed under the funding agreement is subject to Government inspection and evaluation at all times.

(3) Examination of Records. The Comptroller General (or a duly authorized representative) must have the right to examine any pertinent records of the awardee involving transactions related to this funding agreement.

(4) Default. The Government may terminate the funding agreement if the contractor fails to perform the work contracted.

(5) Termination for Convenience. The funding agreement may be terminated at any time by the Government if it deems termination to be in its best interest, in which case the awardee will be compensated for work performed and for reasonable termination costs.

(6) Disputes. Any dispute concerning the funding agreement that cannot be resolved by agreement must be decided by the contracting officer with right of appeal.

(7) Contract Work Hours. The awardee may not require an employee to work
more than 8 hours a day or 40 hours a week unless the employee is compensated accordingly (for example, overtime pay).

(8) **Equal Opportunity.** The awardee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

(9) **Affirmative Action for Veterans.** The awardee will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era.

(10) **Affirmative Action for Handicapped.** The awardee will not discriminate against any employee or applicant for employment because he or she is physically or mentally handicapped.

(11) **Officials Not To Benefit.** No Government official must benefit personally from the STTR funding agreement.

(12) **Covenant Against Contingent Fees.** No person or agency has been employed to solicit or secure the funding agreement upon an understanding for compensation except bona fide employees or commercial agencies maintained by the awardee for the purpose of securing business.

(13) **Gratuities.** The funding agreement may be terminated by the Government if any gratuities have been offered to any representative of the Government to secure the award.

(14) **Patent Infringement.** The awardee must report each notice or claim of patent infringement based on the performance of the funding agreement.

(15) **American Made Equipment and Products.** When purchasing equipment or a product under the STTR funding agreement, purchase only American-made items whenever possible.
(k) **Additional Information.** Information pertinent to an understanding of the administration requirements of STTR proposals and funding agreements not included elsewhere must be included in this section. As a minimum, statements essentially as follows must be included under “Additional Information” in STTR Program solicitations:

1. This program solicitation is intended for informational purposes and reflects current planning. If there is any inconsistency between the information contained herein and the terms of any resulting STTR funding agreement, the terms of the funding agreement are controlling.

2. Before award of an STTR funding agreement, the Government may request the applicant to submit certain organizational, management, personnel, and financial information to assure responsibility of the applicant.

3. The Government is not responsible for any monies expended by the applicant before award of any funding agreement.

4. This program solicitation is not an offer by the Government and does not obligate the Government to make any specific number of awards. Also, awards under the STTR Program are contingent upon the availability of funds.

5. The STTR Program is not a substitute for existing unsolicited proposal mechanisms. Unsolicited proposals must not be accepted under the STTR Program in either Phase I or Phase II.

6. If an award is made pursuant to a proposal submitted under this STTR Program solicitation, a representative of the contractor or grantee or party to a cooperative agreement will be required to certify that the concern has not previously been, nor is currently being, paid for essentially equivalent work by any Federal agency.

6. **Submission of Proposals.**
(a) This section must clearly specify the closing date on which all proposals are due to be received.

(b) This section must specify the number of copies of the proposal that are to be submitted.

(c) This section must clearly set forth the complete mailing and/or delivery address(es) where proposals are to be submitted.

(d) This section may include other instructions such as the following:

1. **Bindings.** Please do not use special bindings or covers. Staple the pages in the upper left corner of the cover sheet of each proposal.

2. **Packaging.** All copies of a proposal should be sent in the same package.

7. **Scientific and Technical Information Sources.** Wherever descriptions of research topics or subtopics include reference to publications, information on where such publications will normally be available must be included in a separate section of the solicitation entitled “Scientific and Technical Information Sources.”

8. **Research Topics.** Describe sufficiently the R/R&D topics and subtopics for which proposals are being solicited to inform the applicant of technical details of what is desired. Allow flexibility in order to obtain the greatest degree of creativity and innovation consistent with the overall objectives of the STTR Program.

9. **Submission Forms.** Multiple copies of proposal preparation forms necessary to the contracting and granting process may be required. This section may include Proposal Summary, Proposal Cover, Budget, Checklist, and other forms the sole purpose of which is to meet the mandate of law or regulation and simplify the submission of proposals.
Appendix II: Codes for Tech-Net Database

Program Codes

<table>
<thead>
<tr>
<th>Program</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIR</td>
<td>Small Business Innovation Research</td>
</tr>
<tr>
<td>STTR</td>
<td>Small Business Technology Transfer</td>
</tr>
<tr>
<td>BOTH</td>
<td>Both SBIR and STTR</td>
</tr>
</tbody>
</table>

Agency Codes

<table>
<thead>
<tr>
<th>Agency</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHS</td>
<td>Department of Homeland Security</td>
</tr>
<tr>
<td>DOC</td>
<td>Department of Commerce</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Energy</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>ED</td>
<td>Department of Education</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>HHS</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
</tr>
<tr>
<td>NSF</td>
<td>National Science Foundation</td>
</tr>
<tr>
<td>USDA</td>
<td>US Department of Agriculture</td>
</tr>
</tbody>
</table>

Branch Codes

DHS Branch Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>Science and Technology Directorate</td>
</tr>
<tr>
<td>DNDO</td>
<td>Domestic Nuclear Detection Office</td>
</tr>
</tbody>
</table>
## DOC Branch Codes

<table>
<thead>
<tr>
<th>Branch</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
</tr>
<tr>
<td>NIST</td>
<td>National Institute of Standards and Technology</td>
</tr>
</tbody>
</table>

## DoD Branch Codes

<table>
<thead>
<tr>
<th>Branch</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF</td>
<td>Department of the Air Force</td>
</tr>
<tr>
<td>ARMY</td>
<td>Department of the Army</td>
</tr>
<tr>
<td>CBD</td>
<td>Chemical and Biological Defense Program</td>
</tr>
<tr>
<td>DARP</td>
<td>Defense Advanced Research Projects Agency</td>
</tr>
<tr>
<td>DHP</td>
<td>Defense Health Program</td>
</tr>
<tr>
<td>DLA</td>
<td>Defense Logistics Agency</td>
</tr>
<tr>
<td>DMEA</td>
<td>Defense Microelectronics Activity</td>
</tr>
<tr>
<td>DTRA</td>
<td>Defense Threat Reduction Agency</td>
</tr>
<tr>
<td>MDA</td>
<td>Missile Defense Agency</td>
</tr>
<tr>
<td>NAVY</td>
<td>Department of the Navy</td>
</tr>
<tr>
<td>NGA</td>
<td>National Geospatial-Intelligence Agency</td>
</tr>
<tr>
<td>OSD</td>
<td>Office of the Secretary of Defense</td>
</tr>
<tr>
<td>SOCO</td>
<td>Special Operations Command</td>
</tr>
</tbody>
</table>

## DOE Branch Codes
### HHS Branch Codes

<table>
<thead>
<tr>
<th>Branch</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARPA</td>
<td>Advanced Research Projects Agency - Energy</td>
</tr>
<tr>
<td>DOE HQ</td>
<td>Department of Energy Headquarters</td>
</tr>
</tbody>
</table>

### Research Institution Type Codes

<table>
<thead>
<tr>
<th>TypeCode</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nonprofit College or University</td>
</tr>
<tr>
<td>2</td>
<td>Domestic Nonprofit Research Organization</td>
</tr>
<tr>
<td>3</td>
<td>Federally Funded R&amp;D Center (FFRDC)</td>
</tr>
</tbody>
</table>

### Research Institution School Categories

<table>
<thead>
<tr>
<th>SchoolCategory</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI</td>
<td>Alaskan Native Serving Institution</td>
</tr>
<tr>
<td>HBCU</td>
<td>Historically Black College or University</td>
</tr>
<tr>
<td>HSI</td>
<td>Hispanic Serving Institution</td>
</tr>
<tr>
<td>TCU</td>
<td>Tribal College or University</td>
</tr>
<tr>
<td>NHSI</td>
<td>Native Hawaiian Serving Institution</td>
</tr>
</tbody>
</table>
### Sales Codes

<table>
<thead>
<tr>
<th>Sales Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF</td>
<td>Sales to Federal or Prime Contractor</td>
</tr>
<tr>
<td>SO</td>
<td>Sales to Other</td>
</tr>
</tbody>
</table>

### Additional Funding Codes

<table>
<thead>
<tr>
<th>Additional Funding Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT</td>
<td>FastTrack</td>
</tr>
<tr>
<td>P2E</td>
<td>Phase II Enhancement</td>
</tr>
<tr>
<td>P1B</td>
<td>Phase IB</td>
</tr>
<tr>
<td>P2A</td>
<td>Phase IIA</td>
</tr>
<tr>
<td>P2B</td>
<td>Phase IIB</td>
</tr>
<tr>
<td>P2CC</td>
<td>Phase IIICC</td>
</tr>
<tr>
<td>P2REU</td>
<td>Phase II REU</td>
</tr>
<tr>
<td>P2RET</td>
<td>Phase II RET</td>
</tr>
<tr>
<td>P2RAHSS</td>
<td>Phase II RAHSS</td>
</tr>
<tr>
<td>P2TECP</td>
<td>Phase II TECPC</td>
</tr>
<tr>
<td>P2I/UCRC</td>
<td>Phase II I/UCRC Memberships</td>
</tr>
<tr>
<td>P2ERC</td>
<td>Phase II ERC Supplement</td>
</tr>
<tr>
<td>P2CostMatch</td>
<td>Phase II Cost Match</td>
</tr>
<tr>
<td>&lt;Investment Code&gt;</td>
<td>Meaning</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>IA</td>
<td>Investment from Angel Investors</td>
</tr>
<tr>
<td>IF</td>
<td>Investment from Federal or Prime Contractor</td>
</tr>
<tr>
<td>IO</td>
<td>Investment from Other</td>
</tr>
<tr>
<td>IS</td>
<td>Investment from the Small Business Concern itself</td>
</tr>
</tbody>
</table>
### Appendix III: Solicitations Database

<table>
<thead>
<tr>
<th>Solicitation Field Name</th>
<th>Reporting Mechanism</th>
<th>Agency interaction</th>
<th>Collection Frequency</th>
<th>Public Data (Y/N)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>solicitation program</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(4)</td>
</tr>
<tr>
<td>solicitation year</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>solicitation number</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(25)</td>
</tr>
<tr>
<td>solicitation release</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>solicitation open date</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>solicitation close date</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>solicitation title</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>longtext</td>
</tr>
<tr>
<td>solicitation body</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>longtext</td>
</tr>
<tr>
<td>solicitation phase</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>solicitation occurrence number</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>solicitation url</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(2048)</td>
</tr>
<tr>
<td>solicitation url title</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>solicitation url attributes</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>mediumtext</td>
</tr>
</tbody>
</table>
## Topic Level

<table>
<thead>
<tr>
<th>topic title</th>
<th>topic number</th>
<th>Agencies report on Tech-Net</th>
<th>Automatic or manual input</th>
<th>within 5 days of solicitation release date</th>
<th>Y</th>
<th>longtext</th>
</tr>
</thead>
<tbody>
<tr>
<td>associated solicitation</td>
<td>Agencies report on Tech-Net</td>
<td>Automatic or manual input</td>
<td>within 5 days of solicitation release date</td>
<td>Y</td>
<td>varchar(30)</td>
<td></td>
</tr>
</tbody>
</table>

### Appendix IV: Company Registry Database

<table>
<thead>
<tr>
<th>Company Registry Field name</th>
<th>Reporting Mechanism</th>
<th>Agency interaction</th>
<th>Collection Frequency</th>
<th>Public Data (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Tracking #</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>SBA Firm ID</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Company URL</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>HQ Address 1</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>HQ Address 2</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>HQ City</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>HQ Zip Code</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>HQ Zip Code +4</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>HQ State</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Company Name</td>
<td>Company reports data to SBA</td>
<td>Receiving pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------</td>
<td>----------------------------</td>
<td>---------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA. Also updated as a part of commercialization information</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Flag for External Funding</td>
<td>Company reports data to SBA</td>
<td>Receiving pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Investment Ownership Percentage</td>
<td>Company reports data to SBA</td>
<td>Receiving pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Majority-Owned by External Funding Firms</td>
<td>Company reports data to SBA</td>
<td>Receiving pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate Address 1</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate Address 2</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate City</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate Zip Code</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate Zip Code + 4</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Affiliate Number of Employees</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Additional Funding Type</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------</td>
<td>---------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Additional Funding Amount</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Investment Type [VC, Hedge, PE]</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Investment Firm Name</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Investment Not US-Based</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
<tr>
<td>Investment Amount</td>
<td>Company reports data to SBA</td>
<td>Receives pdf from Company</td>
<td>Register or reconfirm at time of application</td>
<td>N</td>
</tr>
</tbody>
</table>
## Appendix V: Application Information Database

<table>
<thead>
<tr>
<th>Application Info Field Name</th>
<th>Reporting Mechanism</th>
<th>Agency interaction</th>
<th>Collection Frequency</th>
<th>Public Data (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Program [SBIR/STTR]</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Agency Tracking #</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency creates this number for tracking – not submitted by SBC</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>SBA Firm ID</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Agency</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Solicitation Number</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Solicitation Topic Number</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Contact First Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Field</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Frequency</td>
<td>Notes</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>Contact Middle Name</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Contact Last Name</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Contact Title</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Contact Phone</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Contact Email</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Phase Number</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Solicitation Close Date</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Solicitation Year</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Company URL</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Solicitation Topic</td>
<td></td>
<td></td>
<td>Quarterly</td>
<td>N</td>
</tr>
<tr>
<td>Field</td>
<td>Data Format</td>
<td>Tech-Net Details</td>
<td>Agency Details</td>
<td>Frequency</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Address 1</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>Address 2</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>City</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>Zip Code</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>Zip Code +4</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>State</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>HubZone Certified</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>SDB</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>Women-Owned</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td></td>
<td>Quarterly</td>
</tr>
<tr>
<td>Category</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Women PI</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Socially and Economically</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Abravaged PI</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Student/Faculty Owned</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>FAST Assistance</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Allow EDO's to Have Contact Info</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Agency Contact First Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Agency Contact Middle Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Agency Contact Last Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Agency Contact Title</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Agency Contact Phone #</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Field Description</td>
<td>Action</td>
<td>Data Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Contact Email</td>
<td>XML or manual upload to</td>
<td>Quarterly N int(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Individual Percentage of Effort</td>
<td>XML or manual upload to</td>
<td>Quarterly N varchar(4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Aims</td>
<td>XML or manual upload to</td>
<td>Quarterly N varchar(50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abstract</td>
<td>XML or manual upload to</td>
<td>Quarterly N int(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Individual Name</td>
<td>XML or manual upload to</td>
<td>Quarterly N int(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Individual Position/Title</td>
<td>XML or manual upload to</td>
<td>Quarterly N int(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Individual Email</td>
<td>XML or manual upload to</td>
<td>Quarterly N varchar(20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Individual Phone</td>
<td>XML or manual upload to</td>
<td>Quarterly N varchar(25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIName</td>
<td>XML or manual upload to</td>
<td>60 days from time of solicitation close N varchar(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency collects data, provides to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Source</td>
<td>Description</td>
<td>Time Frame</td>
<td>Format</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>RIType</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>varchar(35)</td>
</tr>
<tr>
<td>RIAddress 1</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>varchar(40)</td>
</tr>
<tr>
<td>RIAddress 2</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>RICity</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>RIZip Code</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>int(11)</td>
</tr>
<tr>
<td>RIZip Code +4</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>RISate</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>int(11)</td>
</tr>
<tr>
<td>RI_Officer_First_Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>RI_Officer_Middle_Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>int(10)</td>
</tr>
<tr>
<td>RI_Officer_Last_Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>N</td>
</tr>
<tr>
<td>RI_Officer_Phone</td>
<td>Tech-Net provides to SBA solicitation close</td>
<td>XML or manual upload to Tech-Net Agency collects data, provides to SBA</td>
<td>60 days from time of solicitation close</td>
<td>N</td>
</tr>
</tbody>
</table>
Appendix VI: Award Information Database

<table>
<thead>
<tr>
<th>Award Field Name</th>
<th>Reporting Mechanism</th>
<th>Agency interaction</th>
<th>Collection Frequency</th>
<th>Public Data (Y/N)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>Phase II # [if 1st or 2nd]</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Contract # / Grant #</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>Amount</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>decimal(20,2)</td>
</tr>
<tr>
<td>SBC_Proceeds</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>RI_Proceeds</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>Third_Party_Proceeds</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>SttrInitiatedCollaboration</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

*Award data is inclusive of "Applicant" data fields*
<table>
<thead>
<tr>
<th>Field</th>
<th>Format</th>
<th>Agency collection</th>
<th>Frequency</th>
<th>Required</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>StrInitiatedTechnology</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>StrMonthstoAgreement</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Monthly</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>First Date of PoP</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>Notification of Selection Date</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>Award Title</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>longtext</td>
</tr>
<tr>
<td>Last Day of PoP</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(20)</td>
</tr>
<tr>
<td>Associated Applicant/Proposal #</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>int(10) unsigned</td>
</tr>
<tr>
<td>PI First Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(25)</td>
</tr>
<tr>
<td>Field</td>
<td>Data Collection Method</td>
<td>Agency</td>
<td>Frequency</td>
<td>Required</td>
<td>Data Type</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------</td>
<td>--------</td>
<td>-----------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>PI Middle Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(1)</td>
</tr>
<tr>
<td>PI Last Name</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(35)</td>
</tr>
<tr>
<td>PI Title</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(40)</td>
</tr>
<tr>
<td>PI Phone</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>PI Email</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>ITAR Controlled</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(1)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>longtext</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>varchar(1)</td>
</tr>
<tr>
<td>Comments [Free Text Field for Notes]</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>Quarterly</td>
<td>Y</td>
<td>longtext</td>
</tr>
<tr>
<td>Field</td>
<td>XML or Manual Upload to Tech-Net</td>
<td>Agency Collects Data, Provides to SBA</td>
<td>Frequency</td>
<td>Required?</td>
<td>Field Type</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------</td>
<td>--------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>CAGE #</td>
<td></td>
<td>Quarterly Y</td>
<td>varchar(5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DUNS #</td>
<td></td>
<td>Quarterly Y</td>
<td>varchar(9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EIN</td>
<td></td>
<td>Quarterly N</td>
<td>varchar(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RI_EIN</td>
<td></td>
<td>Monthly Y</td>
<td>varchar(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Award Amount Justification, if Limit Exceeded</td>
<td></td>
<td>Quarterly N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convicted or Civilly Liable Flag</td>
<td></td>
<td>At time of application N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL First Name</td>
<td></td>
<td>At time of application N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL Middle Name</td>
<td></td>
<td>At time of application N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL Last Name</td>
<td></td>
<td>At time of application N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL Company Associated</td>
<td>XML or manual upload to Tech-Net</td>
<td>Agency collects data, provides to SBA</td>
<td>At time of application</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------</td>
<td>------------------------</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix VII: Commercialization Database

<table>
<thead>
<tr>
<th>Commercialization Field Name</th>
<th>Reporting Mechanism</th>
<th>Agency interaction</th>
<th>Collection Frequency</th>
<th>Public Data (Y/N)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm Level Commercialization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Name</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(10) unsigned</td>
</tr>
<tr>
<td>Agency Tracking #</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(10) unsigned</td>
</tr>
<tr>
<td>SBA Firm ID</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(10) unsigned</td>
</tr>
<tr>
<td>IPO</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>YES/NO</td>
</tr>
<tr>
<td>IPO Value</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Field</td>
<td>Reporting Entities</td>
<td>Reporting Method</td>
<td>Data Availability</td>
<td>Data Type</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>IPO Amount</td>
<td>Agencies + companies</td>
<td>XML or manual upload</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>decimal(20,2)</td>
<td></td>
</tr>
<tr>
<td>IPO Year</td>
<td>Agencies + companies</td>
<td>XML or manual upload</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>int(11)</td>
<td></td>
</tr>
<tr>
<td>Merger/Acquired</td>
<td>Agencies + companies</td>
<td>XML or manual upload</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>YES/NO</td>
<td></td>
</tr>
<tr>
<td>M&amp;A Value</td>
<td>Agencies + companies</td>
<td>XML or manual upload</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>decimal(20,2)</td>
<td></td>
</tr>
<tr>
<td>M&amp;A Year</td>
<td>Agencies + companies</td>
<td>XML or manual upload</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>int(11)</td>
<td></td>
</tr>
<tr>
<td>Narrative</td>
<td>Agencies + companies</td>
<td>XML or manual upload</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>longtext</td>
<td></td>
</tr>
<tr>
<td>Comm Contact First Name</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>varchar(25)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>---</td>
<td>-----------</td>
</tr>
<tr>
<td>Comm Contact Middle Name</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>varchar(1)</td>
</tr>
<tr>
<td>Comm Contact Last Name</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>varchar(35)</td>
</tr>
<tr>
<td>Comm Contact Title</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>varchar(50)</td>
</tr>
<tr>
<td>Comm Contact Phone</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>Comm Contact Email</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>varchar(255)</td>
</tr>
<tr>
<td>Field</td>
<td>Reporting Agent</td>
<td>Data Submission Method</td>
<td>Updates</td>
<td>Precision</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>------------------------</td>
<td>---------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>Sales Amount</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N decimal(20,2)</td>
<td></td>
</tr>
<tr>
<td>SttrPercentSbc</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N int(11)</td>
<td></td>
</tr>
<tr>
<td>SttrPercentRi</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N int(11)</td>
<td></td>
</tr>
<tr>
<td>Investment Amount</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N decimal(20,2)</td>
<td></td>
</tr>
<tr>
<td>Patent #'s</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N int(11)</td>
<td></td>
</tr>
<tr>
<td>Number of Patents</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N decimal(10,2)</td>
<td></td>
</tr>
<tr>
<td>Investment Types</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Sales Type</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td><strong>Award Level Commercialization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Launched</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Names of Company Established for Product/Commercialization</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Sales Amount</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(10)</td>
</tr>
<tr>
<td>Investment Amount</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>1) In real time 2) SBC updates</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Patent #'s</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application</td>
<td>N</td>
<td>longtext</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------------</td>
<td>---</td>
<td>---------</td>
</tr>
<tr>
<td>Number of Patents</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Investment Types</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Sales Type</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Phase III Value</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application</td>
<td>N</td>
<td>int(10) unsigned</td>
</tr>
<tr>
<td>Phase III Launched/Implemented [CRP]</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
<tr>
<td>Phase III Narrative [CRP]</td>
<td>Agencies + companies report to Tech-Net</td>
<td>XML or manual upload to Tech-Net</td>
<td>prior to subsequent award application 1) In real time 2) SBC updates prior to subsequent award application</td>
<td>N</td>
<td>int(11)</td>
</tr>
</tbody>
</table>
## Appendix VIII: Annual Report Database

<table>
<thead>
<tr>
<th>Annual Report Field Name</th>
<th>Reporting Mechanism</th>
<th>Collection Frequency</th>
<th>Public Data</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>agency code</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td>int(11)</td>
</tr>
<tr>
<td>Program</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reporting unit</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>submitted by</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>phone number</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Extramural Budget</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency SBIR Budget</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Solicitations Released</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Research Topics in Solicitations</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Phase I Proposals Received</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Phase I Awards</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Phase I Dollars Awarded ($)</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Phase I Dollars to SBCs</td>
<td>XML or manual upload to Tech-Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Data Type</td>
<td>Frequency</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Dollars to RIs XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Dollars to RI - Universities XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Awards to RI – Universities XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Dollars to RI – FFRDCs XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Awards to RI – FFRDCs XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Dollars to RI – Non-Profit R&amp;D XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase I Awards to RI – Non-Profit R&amp;D XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Minority/Disadvantaged Phase I Awards XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Minority/Disadvantaged Phase I Dollars Awarded ($) XML or manual upload to Tech-Net</td>
<td>varchar(25)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>HUBZone Phase I Awards XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>HUBZone Phase I Dollars Awarded ($) XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>phase1 hubzone dollars obligated XML or manual upload to Tech-Net</td>
<td>varchar(25)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>phase1 manufacturing awards XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>phase1 manufacturing dollars obligated XML or manual upload to Tech-Net</td>
<td>varchar(25)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Number of Phase II Proposals Received XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Awards XML or manual upload to Tech-Net</td>
<td>int(6)</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Storage Method</td>
<td>Frequency</td>
<td>Length</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Dollars Awarded ($ )</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Dollars to SBCs</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Dollars to RIs</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Dollars to RI – Universities</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Awards to RI – Universities</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Dollars to RI – FFRDCs</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Awards to RI – FFRDCs</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Dollars to RI – Non-Profit R&amp;D</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Total Phase II Awards to RI – Non-Profit R&amp;D</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Minority/Disadvantaged Phase II Awards</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Minority/Disadvantaged Phase II Dollars Awarded ($)</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>HUBZone Phase II Awards</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>HUBZone Phase II Dollars Awarded ($)</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>phase2 hubzone dollars obligated</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>phase2 manufacturing awards</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>phase2 manufacturing dollars obligated</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Upload Method</td>
<td>Frequency</td>
<td>Display Type</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>--------------------------------</td>
<td>-----------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>new phase2 with dollars obligated</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y int(6)</td>
<td></td>
</tr>
<tr>
<td>new phase2 dollars obligated</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(25)</td>
<td></td>
</tr>
<tr>
<td>old phase2 with dollars obligated</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y int(6)</td>
<td></td>
</tr>
<tr>
<td>old phase2 dollars obligated</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(25)</td>
<td></td>
</tr>
<tr>
<td>number amount modified</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y int(6)</td>
<td></td>
</tr>
<tr>
<td>amount modified</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(25)</td>
<td></td>
</tr>
<tr>
<td>agency obligations</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(50)</td>
<td></td>
</tr>
<tr>
<td>phase1 success rate</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(3)</td>
<td></td>
</tr>
<tr>
<td>phase2 success rate</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(3)</td>
<td></td>
</tr>
<tr>
<td>overall success rate</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(3)</td>
<td></td>
</tr>
<tr>
<td>The percentage of new phase 1 awards where difference between Solicitation Close Date and Proposal Award Date is less than 180 days (ProposalAwardDate - SolicitationCloseDate)</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(3)</td>
<td></td>
</tr>
<tr>
<td>The average of the number of days between Solicitation Close Date and Proposal Award Date for all the new phase 1 awards (ProposalAwardDate - SolicitationCloseDate)</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(50)</td>
<td></td>
</tr>
<tr>
<td>The average of the number of days between the Contract End Date for the related phase 1 award and the</td>
<td>XML or manual upload to TechNet</td>
<td>Annually</td>
<td>Y varchar(50)</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Storage Method</td>
<td>Frequency</td>
<td>Data Type</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
<td>-----------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>Proposal Award Date for all the new phase 2 awards (P2 Proposal Award Date - P1 ContractEndDate)</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y varchar(50)</td>
<td></td>
</tr>
<tr>
<td>The average number of days between Proposal Selection Date and Proposal Award Date for all the new phase 2 awards (ProposalAwardDate - ProposalSelectionDate)</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y varchar(3)</td>
<td></td>
</tr>
<tr>
<td>The percentage of new phase 2 awards where the number of days between Proposal Selection Date and Proposal Award Date was less than 60 (ProposalAwardDate - ProposalSelectionDate)</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>text</td>
<td></td>
</tr>
<tr>
<td>sbcname changed</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>text</td>
<td></td>
</tr>
<tr>
<td>one proposal per solicitation</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>text</td>
<td></td>
</tr>
<tr>
<td>more than 15 awards</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>text</td>
<td></td>
</tr>
<tr>
<td>justification</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>text</td>
<td></td>
</tr>
<tr>
<td>submitted</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>timestamp</td>
<td></td>
</tr>
<tr>
<td>confirmed_by_uid</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>int(10) unsigned</td>
<td></td>
</tr>
<tr>
<td>Annual Report calculations based on above fields</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Dollars Obligated</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Percent of SBIR to Extramural Budget</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Deficit/Surplus</td>
<td>XML or manual upload to Tech-Net</td>
<td>Annually</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
Exceeding award size threshold of 150%
Award cross btwn SBIR and STTR programs
Additions to Annual Report tracking compliance grievance
grievance tracking for data rights
-track deficit/surplus of budgets, esp. VC, etc. backed
Track data at component level

XML or manual upload to Tech-Net
Annually Y
Annually Y
Annually Y
Annually Y

Appendix IX – Performance Areas, Metrics and Goals

(a) Examples of performance areas include:

(1) company and agency-level commercialization of awards (see commercialization section for detail);

(2) repeat-award winners;

(3) outreach to first time SBIR/STTR applicants, WOSBs, SDBs - including percentage of new applicants from those demographics that have applied to the agency, and other goals and metrics established by the agency and the interagency policy committee;

(4) shortening review and award timelines for small businesses (collected annually in annual report).

(b) Examples of metrics relating to timelines for awards of Phase I funding agreements and performance start dates of the funding agreements, include:
(1) The percentage of Phase I awards where the duration between the closing date of the solicitation and the first date of the period of performance on the funding agreement is less than 180 calendar days.

(2) The average duration of time between a Phase I solicitation closing date and the first day of the period of performance on the funding agreement.

(3) The percentage of Phase I awards where the duration between the closing date of the solicitation and the notification of recommendation of award is not more than one year for NIH or NSF and not more than 90 calendar days for all other agencies.

(4) The average duration of time between a Phase I solicitation closing date and the notification of recommendation for award.

(c) Examples of metrics relating to timelines for awards of Phase II funding agreements and performance start dates of the funding agreements, include:

(1) The percentage of Phase II awards where the duration between the closing date of the solicitation, or the applicable date for receiving the Phase II application, and the first date of the period of performance on the funding agreement is the less than 180 calendar days.

(2) The average duration of time between a Phase II solicitation closing date and the first day of the period of performance on the funding agreement.

(3) The percentage of Phase II awards where the duration between the closing date of the solicitation, or the applicable date for receiving the Phase II application, and the notification of recommendation of award is not more than one year for NIH or NSF and not more than 90 calendar days for all other agencies.

(4) The average duration of time between a Phase II solicitation closing date, or the applicable date for receiving the Phase II application, and the notification of
recommendation for award.

(5) The average duration of time between the end of the period of performance on a Phase I funding agreement and the closing date for a Phase II solicitation for the same work.

(6) The number of awardees for whom the Phase I process exceeded 6 months, starting from the closing date of the STTR solicitation to award of the funding agreement.

(7) Metrics with respect to each STTR agency’s adherence to Policy Directive and implementation.

(8) Metrics with respect to agencies’ measures to reduce fraud, waste and abuse within the STTR Program and coordination with the STTR agency’s OIG.

Appendix X – National Academy of Sciences Study

(a) The purpose of the study is to:

(1) Continue the most recent study relating to the following issues:

(i) a review of the value to the Federal research agencies of the research projects being conducted under the STTR Program, and of the quality of research being conducted by small businesses participating under the program, including a comparison of the value of projects conducted under the STTR Program to those funded by other Federal research and development expenditures;

(ii) to the extent practicable, an evaluation of the economic benefits achieved by the STTR Program, including the economic rate of return, and a comparison of the economic benefits, including the economic rate of return, achieved by the STTR Program with the economic benefits, including the economic rate of return, of other Federal research and development expenditures;

(iii) an evaluation of the noneconomic benefits achieved by the STTR Program
over the life of the program;

(iv) an analysis of whether Federal agencies, in fulfilling their procurement needs, are making sufficient effort to use small businesses that have completed a second phase award under the STTR Program; and

(2) Conduct a comprehensive study of how the STTR program has stimulated technological innovation and technology transfer, including--

(i) a review of the collaborations created between small businesses and Research Institutions, including an evaluation of the effectiveness of the program in stimulating new collaborations and any obstacles that may prevent or inhibit the creation of such collaborations;

(ii) an evaluation of the effectiveness of the program at transferring technology and capabilities developed through Federal funding;

(iii) to the extent practicable, an evaluation of the economic benefits achieved by the STTR program, including the economic rate of return;

(iv) an analysis of how Federal agencies are using small businesses that have completed Phase II under the STTR program to fulfill their procurement needs;

(v) an analysis of whether additional funds could be employed effectively by the STTR program; and

(vi) an assessment of the systems and minimum performance standards relating to commercialization success established under section 9(qq) of the Small Business Act;

(3) Make recommendations with respect to--

(ii) how to increase the use by the Federal Government in its programs and procurements of technology-oriented small businesses;

(iii) improvements to the STTR Program, if any are considered appropriate; and

(iv) how the STTR program can further stimulate technological innovation and technology transfer.

(4) Estimate the number of jobs created by the SBIR or STTR program of the agency, to the extent practicable.