

INSTRUCTIONS FOR SUBMISSION OF PHASE II PROPOSALS

1. INTRODUCTION:

a. The **SMALL BUSINESS INNOVATION RESEARCH PROGRAM (SBIR)** and **SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)** Program Solicitations state that specific instructions for the preparation of Phase II proposals will be sent to all Phase I award winners. These instructions satisfy that requirement.

b. **A Phase II proposal may be submitted only by a Phase I awardee and only in response to a request from the DoD Component. The contractor must qualify as a small business at the time of the contemplated Phase II award.** This request may occur at any time when progress attained under Phase I is deemed sufficient to justify the effort to be proposed for Phase II. Therefore, it is possible (although highly unlikely) that a Phase II proposal could be requested very early in the Phase I effort.

c. As a general rule, it should be assumed that a minimum of three months of Phase I effort will occur before requesting submission of a Phase II proposal. A separate “letter request for proposal” will be issued to those Phase I awardees being considered for a Phase II award. It is highly unlikely that a proposal will be requested after completion of the Phase I contract. Any delay in Phase I performance, such as time extensions, lessens the likelihood of funding because of depletion of monies late in the cycle.

d. If asked, the contractor will be required to provide DoD with a report during Phase II, and each year for five years after completion of Phase II, detailing: (1) the revenue from sales of new products or non-R&D services resulting from the SBIR/STTR project, and (2) the sources and amounts of non-STTR, non-SBIR funding received from the Government and/or private sector sources to further develop the SBIR/STTR technology.

d. **Fast Track** interim funding and Phase II proposals must meet all submission and time requirements in **paragraph 4.5** of the Program Solicitation.

2. PROPOSAL SUBMISSION:

a. **When requested**, a Phase I awardee can (but is not required to) submit a Phase II proposal as a follow-on to the Phase I effort. The Phase II proposal should be submitted through the web site at <http://www.dodsbir.net/submission/SignIn.asp>.

Phase II is the principal research or research and development effort and is expected to produce a well-defined deliverable product or process.

The primary reason for this request should be that the technical progress or results for Phase I have shown sufficient promise to the solution of an important scientific or engineering problem and a more extensive research or research and development effort is desired. The measure of the Phase I success includes evaluations of the extent that Phase II results would have the potential to yield a product or process of continuing importance to DoD and/or the private sector. To increase the likelihood of receiving a request for a Phase II proposal, you should **keep the program manager, identified in Section G of the contract, informed with your Phase I progress and key results.**

b. Phase II proposals require a more comprehensive submittal in that the proposed effort must be outlined in detail and discuss all elements in paragraph 2.d. below. Phase II awards are made on the basis of results from the Phase I effort and the scientific and technical merit of the Phase II proposal. This will typically cover two to five person-years of effort over a period generally not to exceed 24 months (subject to negotiation). Phase II is the principal research or research and development effort and is expected to produce a well-defined deliverable product or process.

c. Phase II proposers who feel that their research or research and development has the potential to meet private sector market needs, in addition to meeting DoD objectives, are encouraged to obtain non-federal follow-on funding during Phase I to pursue Phase III commercial development. While Federal agencies may award Phase III follow-on contracts for products or processes which meet mission needs, SBIR/STTR funds are never used for Phase III efforts.

d. The Air Force/DoD is not obligated to make any awards under Phase II and is not responsible for any monies expended by the proposer before award of any contract.

e. One copy of the proposal must be an original signed by the principal investigator and an official empowered to commit the company. The other three copies may be photocopied.

3. PHASE II PROPOSAL PREPARATION INSTRUCTIONS AND REQUIREMENT:

a. Proposal Requirements:

(1) A Phase II proposal should provide sufficient information to persuade the Air Force that the proposed work represents an innovative approach to the investigation of an important scientific or engineering problem and is worthy of support under the stated evaluation criteria.

(2) The proposal should be self-contained and written with care and thoroughness. It must not be assumed that the evaluators are familiar with the company or company personnel. Each proposal should be reviewed carefully by the offeror to ensure inclusion of all data essential for evaluation.

(3) The quality of the scientific or technical content of the proposal will be the principal basis upon which proposals will be evaluated. The proposed research or research and development must be a logical continuation of Phase I efforts with the capability for technological innovation, new commercial products, processes, or services which benefit the government and/or the public.

(4) Special Requirement.

(a) **STTR:** A minimum of 40 percent of the research and/or analytical effort must be performed by the proposing firm and a minimum of 30 percent performed by the research institution, unless otherwise approved by the Contracting Officer. At the time of award, the small business concern will have at least one employee in a management position whose primary employment is with the small business and who is not also employed by the research institution.

(b) **SBIR:** A minimum of one-half of the Phase II effort must be accomplished by the proposing firm, unless otherwise approved by the Contracting Officer. The primary employment (more than 50% of the time) of the principal investigator must be with the small business firm at the time of award and during contract performance.

b. Markings of Proprietary or Classified Proposal Information Mark Proprietary information with the appropriate legends as instructed in Section 5.6 of the Program Solicitation. Classified information shall be handled in accordance with the Industrial Security Manual for Safeguarding

Classified Information (DoD 5220.22M). **Do not include any classified or proprietary information on Cover Sheet and the Project Summary.**

c. General Content: The SBIR/STTR Program is designed to reduce the investment of time and cost of preparing a formal proposal. Phase II proposers must submit a direct, concise, and informative research or research and development proposal (no type smaller than 12 pitch or 11 point on standard 8-1/2" x 11" paper) which includes the Proposal Cover Sheet, Cost Proposal, a Company Commercialization Report, and a two page commercialization strategy (see paragraph 3.7 of the DoD Solicitation), as well as any required enclosures and attachments. The maximum length for the proposal, including all attachments, enclosures, forms, reports, summaries and appendices is **75 pages**. Promotional and non-project related discussion is discouraged and will not be considered in proposal evaluation. In the interest of equity, unnecessary attachments, appendices, or references will not be considered in proposal evaluation. The space allocated to each will depend on the problem chosen and the principal investigator's approach.

d. Proposal Format: All pages must be consecutively numbered. Phase I results or anticipated results must be referenced as necessary and if useful.

(1) Proposal Cover Sheet: Prepare this Cover Sheet as instructed on the password-protected DoD Electronic Submission Web Site (<http://www.dodsbir.net/submission>), including a brief technical abstract of the proposed \$&D project and a discussion of anticipated benefits and potential commercial applications. If your proposal is selected for award, the technical abstract and discussion of anticipated benefits will be publicly released on the Internet; therefore, do not include proprietary or classified information in these sections. Print out a hard copy of the Proposal Cover Sheet from the Web Site and include it, with the appropriate signatures, as the first two pages of your proposal.

(2) Identification and Significance of the Problem or Opportunity. Define the specific technical problem or opportunity addressed in Phase I and its relationship to Phase II (begin on page 3 of your proposal).

(3) Phase II Technical Objectives. Enumerate the specific objectives of the Phase II work, including any results from Phase I which clearly relate to the objectives. An assessment of likely success and of potential commercial application should be included for each objective.

(4) Phase II Work Plan. This section must provide an explicit, detailed description of the Phase II approach. The plan should indicate not only what is planned, but how and where the work will be carried out. The plan should also provide a schedule of major events and identify the final product to be delivered. Phase II efforts should attempt to accomplish the technical feasibility demonstrated in Phase I, including transition of results to the private sector. The methods to achieve each objective or task should be discussed explicitly and in detail.

This section should be the major portion of the total proposal and must clearly show an advancement in the appropriate for Phase II. Continuation of Phase I research (i.e., still attempting to determine the feasibility of an idea) is not appropriate for Phase II of the SBIR/STTR Program. If Phase I results have not demonstrated or indicated the feasibility for a proposed concept or innovation, no further research for that particular effort will be awarded and therefore pursued under Phase II.

(5) Related Work. Describe significant activities directly related to the proposed effort, including any conducted by the principal investigator, the proposing firm, consultants or others, and how it interfaces with the proposed project.

(6) Relationship with Future Research or Research and Development.

(a) State the anticipated results of the proposed approach if the project is successful specifically addressing any plan for Phase III work.

(b) Discuss the significance of the Phase II effort in providing a foundation for Phase II efforts.

(7) Potential Post Applications and Commercialization Strategy (2 Pages).

(a) Briefly describe whether and by what means proposed results appear to have potential commercial (private sector) application and/or potential use by the Federal Government.

(b) The commercialization strategy must address the following:

* What is the first product that this technology will go into?

* Who will be your customers, and what is your estimate of the market size?

* How much money will you need to bring the technology to market, and how will you raise that money?

* Does your company contain marketing expertise and, if not, how do you intend to bring that expertise into the company?

* Who are your competitors, and what is your price and/or quality advantage over your competitors?

(8) Key personnel. Identify key personnel who will be involved in the Phase II effort, including directly related education and experience. A resume of the principal investigator, including a list of publications (if any), must be included.

(9) Facilities/Equipment. Describe what instrumentation and physical facilities will be used to carry out the Phase II effort. In addition, address whether or not the facilities meet environmental laws and regulations for, but not limited to, airborne emissions, waterborne effluents, external radiation levels, outdoor noise, solid and bulk waste disposal practices, and handling and storage of toxic and hazardous materials.

(10) Subcontracts/Consultants. Involvement of university or other consultants in the project may be appropriate. If this is intended, it should be described in detail and included in the Cost Proposal.

Note: A minimum of 40 percent (STTR) and 50 percent (SBIR) of the Phase II analytical effort must be performed by the proposing small business concern. The STTR requires a minimum of 30 percent of the work to be performed by a research institution.

(11) Current and Pending Support. If a proposal substantially the same as the one submitted has been previously funded or is either funded by, pending with, or about to be submitted to another Federal agency or another DoD component or to the Air Force in a separate action, the proposer must provide the following information:

(a) The name and address of the agency(s) or DoD component to which a proposal was submitted or will be submitted, or from which an award is expected or has been received.

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

(c) Title of proposal.

- (d) Name and title of principal investigator for each proposal submitted or award received.
- (e) Title, number, and date of solicitation(s) under which the proposal was submitted or will be submitted, or under which an award is expected or has been received.
- (f) If award was received, state contract number.
- (g) Specify the applicable topics for each SBIR proposal submitted or award received.

If this is not applicable state *“No prior, current or pending support for proposed work”*

(12) Cost Proposal. Complete and submit your cost proposal together with supporting documentation and breakdowns following the applicable elements set forth in Reference A in the applicable DoD SBIR Solicitation <http://www.acq.osd.mil/sadbu/sbir/solicitations/solicit.htm>. Under the direct labor category, list all key personnel by name, as well as by number of hours dedicated to the project (see also the Cost Section of the DoD SBIR Program Solicitation). Submit a Certificate of Current Cost or Pricing Data only if and when directed by the contracting officer.

A Firm-fixed price, cost or cost-plus fixed fee Phase II proposal must be submitted in detail in the format indicated above. Some items therein may not apply to the proposed project each and every time. What matters is that enough information be provided to allow the DoD Component to understand how the proposer plans to use the requested funds if the contract is awarded. The contracting officer may consider other types of contract. A cost or cost-plus fixed fee type proposal is preferred for Phase II, unless previously discussed and/or otherwise indicated or agreed to by the government contracting officer who awarded Phase I. Phase II contracts may include a profit or fee.

(a) Special Tooling, Special Test Equipment and/or Material. Special tooling, special test equipment, and material costs may be included under Phase II. The inclusion of equipment and material will be carefully reviewed relative to need, cost and appropriateness for the work proposed. It is not the intention of the Government to directly fund the purchase of general purpose equipment.

The purchase of special tooling and test equipment must, in the opinion of the contracting officer, be advantageous to the Government and must be related directly to the specific effort. These may include such items as innovative instrumentation and/or specialized automatic test equipment. Title to property furnished by the Government or acquired with Government funds will vest with the DoD Component, unless it is determined that negotiation of the transfer of title to the contractor would be more cost effective than retention of title to the equipment by the DoD Component. You are encouraged to discuss any questions that you have relative to the proposing of Special Tooling, Test Equipment and/or Material with your Phase I Contracting Officer.

(b) Travel. Proposed travel and related costs must be justified and related to the needs of the project.

(c) Cost Sharing. Cost sharing is permitted; however, cost sharing is not required nor will it be an evaluation factor in the consideration of a proposal.

(13) Company Commercialization Report. As instructed in paragraph 3.4n of the DoD Solicitation, prepare the report through the password-protected DoD Electronic Submission Web Site (<http://dodsbir.net/submission>). Once you have completed the Report on the Web Site, print out a hard copy, sign and date it, and include it with your proposal. This report lists the name of the awarding agency, date of award, contract number, topic or subtopic, title, and award amount for each Phase I and Phase II project, and commercialization status for each Phase II. All Phase II

proposals must include a Company Commercialization Report. A Report showing that a firm has received no prior Phase II awards will not affect the firm's ability to obtain a Phase II award.

(14) Submission. Submit in accordance with Section 2 herein, and any instructions provided with the letter requesting a Phase II proposal.

e. General Requirements

1. All Phase II research or research and development must be performed by the small business concern in the United States (as defined in the DoD Solicitation from which the Phase I was awarded).
2. As in Phase I, the primary employment of the principal investigator for Phase II must be with the small business firm at the time of the award and during the conduct of the proposed effort. (Primary employment means that more than one half of the principal investigator's time is spent with the small business, and precludes full-time employment at another organization.)
3. The proposing firm must perform a minimum of one-half of the research or analytical work. See 3.d.1. above.
4. The small business must have the necessary systems (accounting/etc.) in place to receive the type contract contemplated by the Air Force. The failure to do so may result in your inability to receive a contract award. A Cost or Cost Plus Fixed Fee type contract will more than likely be designated.

4. METHOD OF SELECTION AND EVALUATION CRITERIA.

a. Introduction. Phase II proposals will be evaluated by knowledgeable scientists or engineers or other technical personnel. In the evaluation and handling of proposals, every effort will be made to protect the confidential information in the proposals and any evaluations. ***There is no commitment by the Air Force to make any awards or to be responsible for any monies expended by the proposer before award of a contract.*** Submission of a Phase II proposal constitutes acceptance of the review process and resulting evaluation.

b. Evaluation Criteria. The Phase II proposal will be evaluated for overall merit based upon the criteria below. Each item will receive approximately equal weight.

- (1) The soundness and technical merit of the proposed approach and its incremental progress toward topic or subtopic solution.
- (2) The qualifications of the proposed principal/key investigators, supporting staff and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.
- (3) The potential for commercial (government or private sector) application and the benefits expected to accrue from this commercialization.
 - (a) The small business concern's record of commercializing SBIR/STTR or other research;
 - (b) The existence of second phase funding commitments from private sector or non-SBIR/STTR funding sources;

- (c) The existence of third phase follow-on commitments for the subject of the research; or
- (d) The presence of other indicators of commercial potential of the idea, including the proposer's commercialization strategy.

c. Other Considerations

Fast Track Proposal will receive an expedited evaluation. See Instructions for Fast Track Proposal for more information.

The reasonableness of the proposed costs of the effort to be performed will be examined to determine those proposals that offer the best value to the Government. Where technical evaluations are essentially equal in merit, cost to the Government will be considered in determining the successful offeror(s). The right is reserved to include on-site evaluation of the Phase I effort by Government personnel in the review and determination of overall merit.

When several Phase II proposals are evaluated as being of approximately equal merit, proposals that demonstrate a commitment for non-Federal follow-on funding will receive extra consideration during the evaluation and funding processes. Final funding decisions are based on technical evaluations and other factors such as duplication with other research and development, program balance, and availability of funds.

5. CONTRACTUAL CONSIDERATIONS

a. Awards. For proposals that have been selected for contract award, a Government Contracting Officer will draw up an appropriate contract to be signed by both parties before work begins. Any necessary negotiations will be conducted between the offeror and the Government Contracting Officer. It should be noted that only a duly appointed Contracting Officer has the authority to enter into a contract on behalf of the Government.

Final decisions on Phase II proposals will be made based upon the scientific and technical evaluations and other factors (as indicated above), the possible duplication with other research and development, program balance, budget limitations, and the potential of a successful Phase II effort leading to a product of continuing interest to DoD.

b. Reports. Copies of the final report for the Phase II project must be submitted to the DoD Component in accordance with the negotiated delivery schedule. The final report will normally be due within 30 days after completion of the Phase II effort. The final report shall include a single-page project summary as the first page identifying the purpose of the work, a brief description of the work carried out, the finding or results, and potential applications of the effort, and further detailed in the award document. The summary may be published by the DoD and, therefore, must not contain proprietary or classified information. The balance of the report should indicate in detail the project objectives, work carried out, results obtained, and estimates of technical feasibility.

c. Payment Schedule. Per the DoD SBIR/STTR Solicitation from which your Phase I award was made.

d. Technical Data, Copyrights, and Patents. Per the DoD SBIR/STTR Program Solicitation from which your Phase I award was made.

e. **Marking of Proprietary or Classified Proposal Information.** The Phase II proposal submission shall adhere to the procedures as described herein and as set forth in the DoD SBIR/STTR Program Solicitation from which your Phase I award was made.

f. **Contractor Commitments.** The items shown in the DoD SBIR/STTR Program Solicitation from which your Phase I contract was awarded are also applicable and may be included in a Phase II contract.