



## Missile Defense Agency: Phase II STTR Proposals Small Business Technology Transfer (STTR) Program

### Proposal Instructions

**September 24, 2009 (09:00 EDT), Deadline to Submit**

#### Phase II Proposal Instructions

Phase II Proposal Submission to MDA is by Invitation Only:

The Missile Defense Agency (MDA) Small Business Technology Transfer (STTR) Program invited firms to submit a complete Phase II Proposal based on Phase I award results. MDA will allow until 09:00 AM EDT on Thursday, September 24, 2009 for submission of the complete Phase II Proposal via the DoD Electronic Submission Web Site ([www.dodsbir.net/submission](http://www.dodsbir.net/submission)). **MDA will not consider any Phase II Proposals submitted after 9am EDT on 24 September 2009.**

1) Electronically submit the following documents via the DoD Electronic Submission Web Site ([www.dodsbir.net/submission](http://www.dodsbir.net/submission)).

- Cover Sheets
- Cost Proposal: The cost proposal shall be submitted using the DoD Electronic Submission Web Site Cost Proposal page, with detailed backup included in the Technical Proposal. There will be no exceptions allowed.
- Company Commercialization Report
- Technical proposal (including appendices)
- In addition, each Phase II proposal must contain a two-page commercialization strategy as part of the technical proposal, addressing the following questions:
  1. What is the first product that this technology will go into?
  2. Who will be your customers, and what is your estimate of the market size?
  3. How much money will you need to bring the technology to market, and how will you raise that money?
  4. Does your company contain marketing expertise and, if not, how do you intend to bring that expertise into the company?
  5. Who are your competitors, and what is your price and/or quality advantage over your competitors?

The commercialization strategy must also include a schedule showing the quantitative commercialization results from the Phase II project that your company expects to report in its Company Commercialization Report Updates one year after the start of Phase II, at the completion of Phase II, and after the completion of Phase II (i.e., amount of additional investment, sales revenue, etc. - see section 5.4 of the current DoD solicitation).

MDA will not accept any Phase II proposal not submitted in its entirety via the DoD submission site. Be sure to include your Phase I Proposal Number in the appropriate field of the Cover Sheet.

Please follow upload instructions provided by DoD. If you are unfamiliar with use of the submission site, you may contact the DoD help desk at 866-724-7457 for assistance. It may also be beneficial to watch the tutorial available at: <http://www.dodsbir.net/tutorial/>

2) LOCK YOUR PROPOSAL. Once submitted, your proposal is locked from further changes and will display "Locked" under the Action/ Status column on the of the proposal grid. If you have any questions, please contact the DoD Help Desk (866-724-7457). Proposals that have not been locked by the submitter, will automatically be locked by MDA at 9am EDT on 24 September 2009. Proposals that are manually locked will receive a "courtesy call" from the MDA Program Management Office to verify whether or not there was an intention to submit. Please plan to submit early, and on time to avoid mistakes.

3) Submit your proposal package to MDA.

Please Note: An invitation to submit is not an authorization to incur any costs nor is it a commitment to enter into negotiations on a potential STTR award. Phase II proposals will be subject to a technical review process similar to Phase I. Final decisions will be made by MDA based upon the scientific and technical evaluations using the criteria listed in Section 4.3 of the DoD solicitation. MDA is not responsible for any monies expended by the proposer before award of a contract.

### **Suggested Phase II Proposal Format** **(From Section 3.7 of the DoD Solicitation)**

A Phase II proposal can be submitted only by a Phase I awardee and only in response to a request from the agency. Classified proposals are not accepted under the DoD SBIR/STTR Programs. Follow Phase II proposal instructions described in Section 3.0 of the program solicitation at [www.dodsbir.net/solicitation](http://www.dodsbir.net/solicitation) and Component-specific instructions provided in the Phase II invitation. Each Phase II proposal must contain a Proposal Cover Sheet, technical proposal, cost proposal and a Company Commercialization Report submitted through the DoD Electronic Submission Web Site by the deadline specified in the invitation. Below is a general outline.

**Proposal Cover Sheets.** On the DoD Electronic Submission Web Site ([www.dodsbir.net/submission](http://www.dodsbir.net/submission)), prepare Phase II Proposal Cover Sheets, including a brief technical abstract of the proposed R&D project and a discussion of anticipated benefits and potential commercial applications. Once you save the coversheet, the system will assign a proposal number. You may edit the coversheet as often as necessary until the solicitation closes. Your cover sheets will count as the first two pages of your proposal no matter how they print out. 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.

**Technical Proposal.** Create a single file that covers the following items in the order given below. Begin your technical proposal on Page 3 (since the cover sheets are pages 1 and 2) and put your firm name, topic number, and proposal number in the header of each page. (The header may be included in the one inch margins.) The technical proposal file must be in Portable Document Format (PDF) for evaluation purposes. You can not upload the technical proposal to the DoD Submission site until you have created a coversheet and been assigned a proposal number. Perform a virus check before uploading the technical proposal file. If a virus is detected, it may cause rejection of the proposal. The technical proposal should be a single file, including graphics and attachments (and cost proposal if not using the Web Site's on-line cost proposal form). **Do not lock or encrypt the file you upload.**

- (1) **Significance of the Problem and Results of Phase I work.** Define the specific technical problem or opportunity addressed and its importance. Discuss the objective of the Phase I effort, the type of research conducted, findings or results of this research, and technical feasibility. (Begin on Page 3 of your proposal.)
- (2) **Phase II Technical Objectives.** Enumerate the specific objectives of the Phase II work, and describe the technical approach and methods to be used in meeting these objectives.
- (3) **Phase II Work Plan.** Provide an explicit, detailed description of the Phase II approach. If a Phase II option is required or allowed by the Component to which you are submitting, it should describe appropriate research activities which would commence at the end of the Phase II should the Component elect to exercise the option. The plan should indicate what is planned, how and where the work will be carried out, a schedule of major events, and the final product to be delivered. The methods planned to achieve each objective or task should be discussed explicitly and in detail. This section should be a substantial portion of the total proposal.
- (4) **Related Work.** Describe significant activities directly related to the proposed effort, including any conducted by the principal investigator, the proposing firm, consultants, or others. Describe how these activities interface with the proposed project and discuss any planned coordination with outside sources. The proposal must persuade reviewers of the proposer's awareness of the state-of-the-art in the specific topic. Describe previous work not directly related to the proposed

effort but similar. Provide the following: (1) short description, (2) client for which work was performed (including individual to be contacted and phone number), and (3) date of completion.

(5) **Relationship with Future Research or Research and Development.**

- (1) State the anticipated results of the proposed approach if the project is successful.
- (2) Discuss the significance of the Phase II effort in providing a foundation for Phase III research and development or commercialization effort.

(6) **Commercialization Strategy.** Each Phase II proposal must contain a two-page commercialization strategy as part of the technical proposal describing your company's strategy for commercializing this technology in DoD, other Federal Agencies, and/or private sector markets. Provide specific information on the market need the technology will address and the size of the market. In addition, address the following questions:

- (1) What is the first product that this technology will go into?
- (2) Who will be your customers, and what is your estimate of the market size?
- (3) How much money will you need to bring the technology to market, and how will you raise that money?
- (4) Does your company contain marketing expertise and, if not, how do you intend to bring that expertise into the company?
- (5) Who are your competitors, and what is your price and/or quality advantage over your competitors?

The commercialization strategy must also include a schedule showing the quantitative commercialization results from the Phase II project that your company expects to report in its Company Commercialization Report Updates one year after the start of Phase II, at the completion of Phase II, and after the completion of Phase II. Additional instructions regarding Phase II proposal preparation and submission are provided or made available by the DoD Components in the Phase II proposal invitation.

(7) **Key Personnel.** Identify key personnel who will be involved in the Phase II effort including information on directly related education and experience. A concise resume of the principal investigator, including a list of relevant publications (if any), must be included. All resumes count toward the page limitation. Identify any foreign nationals you expect to be involved on this project, country of origin and level of involvement.

(8) **Facilities/Equipment.** Describe available instrumentation and physical facilities necessary to carry out the Phase II effort. Items of equipment to be purchased (as detailed in the cost proposal) shall be justified under this section. Also state whether or not the facilities where the proposed work will be performed meet environmental laws and regulations of federal, state (name), and local Governments for, but not limited to, the following groupings: airborne emissions, waterborne effluents, external radiation levels, outdoor noise, solid and bulk waste disposal practices, and handling and storage of toxic and hazardous materials.

(9) **Subcontractors/Consultants.** **THE FOLLOWING PERTAINS TO SBIR ONLY:** Involvement of a university or other subcontractors or consultants in the project may be appropriate. If such involvement is intended, it should be described in detail and identified in the cost proposal. A minimum of one-half of the research and/or analytical work in Phase II, as measured by direct and indirect costs, must be carried out by the proposing firm, unless otherwise approved in writing by the contracting officer. No portion of a SBIR award may be subcontracted back to any Federal government agency, including Federally Funded Research and Development Centers (FFRDCs). SBA may issue a case-by-case waiver to this provision after review of the DoD component's written justification that includes the following information: (a) an explanation of why the SBIR 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; (b) why the Agency will not and can not fund the use of the Federal facility or personnel for the SBIR project with non-SBIR money; and (c) the concurrence of the small business concern's chief business official to use the Federal facility or personnel. Award is contingent on the sponsoring agency obtaining a waiver.

**MDA has amended these DoD instructions to clarify information FOR STTR:**

Involvement of other subcontractors or consultants in the project may be appropriate. If such involvement is intended, it should be described in detail and identified in the cost proposal. **A minimum of 40% of the research and/or analytical work in Phase II, as measured by direct and indirect costs, must be carried out by the proposing firm and a minimum of 30% must be performed by the Research Institution (RI),** unless otherwise approved in writing by the contracting officer. No portion of a STTR award may be subcontracted back to any Federal government agency. SBA may issue a case-by-case waiver to this provision after review of the DoD component's written justification that includes the following information: (a) 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; (b) why the Agency will not and can not fund the use of the Federal facility or personnel for the STTR project with non-STTR money; and (c) the concurrence of the small business concern's chief business official to use the Federal facility or personnel. Award is contingent on the sponsoring agency obtaining a waiver.

- (10) **Prior, Current, or Pending Support of 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 contracts or grants requiring essentially equivalent effort. If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award.

If a proposal submitted in response to this solicitation is substantially the same as another proposal that has been funded, is now being funded, or is pending with another Federal Agency or DoD Component or the same DoD Component, the proposer must so indicate on the Proposal Cover Sheet and provide the following information:

- (a) Name and address of the Federal Agency(s) or DoD Component to which a proposal was submitted, 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, will be submitted, or under which award is expected or has been received.
- (f) If award was received, state contract number.
- (g) Specify the applicable topics for each STTR proposal submitted or award received.

*Note: If this section does not apply, state in the proposal "No prior, current, or pending support for proposed work."*

**Cost Proposal.** Complete the cost proposal in the format shown in the [Cost Breakdown Guidance](#) using the on-line cost proposal form on the DoD Electronic Submission Web Site (with detailed backup included in the Technical Proposal). Some items in the [Cost Breakdown Guidance](#) may not apply to the proposed project. If such is the case, there is no need to provide information on each and every item. 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.

- (1) List all key personnel by name as well as by number of hours dedicated to the project as direct labor.
- (2) Special tooling and test equipment and material cost may be included. The inclusion of equipment and material will be carefully reviewed relative to need and appropriateness for the work proposed. The purchase of special tooling and test equipment must, in the opinion of the Contracting Officer, be advantageous to the Government and should be related directly to the specific topic. These may include such items as innovative instrumentation and/or automatic test equipment. Title to property furnished by the Government or acquired with Government funds will be vested with the DoD Component, unless it is determined that transfer of title to the contractor would be more cost effective than recovery of the equipment by the DoD Component.

- (3) Cost for travel funds must be justified and related to the needs of the project.
- (4) Cost sharing is permitted for proposals under this solicitation; however, cost sharing is not required nor will it be an evaluation factor in the consideration of a Phase II proposal.
- (5) A Phase II Option (if applicable) should be fully costed separately from the Phase II (base) approach. The on-line cost proposal form (if applicable) will count as one page no matter how it prints out. Additional cost proposal information may be required at the end of your technical proposal (See Component Invitation Instructions).

When a proposal is selected for award, the proposer should be prepared to submit further documentation to its DoD contracting officer to substantiate costs (e.g., a brief explanation of cost estimates for equipment, materials, and consultants or subcontractors). For more information about cost proposals and accounting standards, see the DCAA publication called "Information for Contractors" available at [www.dcaa.mil](http://www.dcaa.mil).

**Company Commercialization Report.** If your firm is submitting a Phase I or Phase II proposal, it is required to prepare a Company Commercialization Report through the password-protected DoD Electronic Submission Web Site ([www.dodsbir.net/submission](http://www.dodsbir.net/submission)). If you submit a proposal, you must submit a company commercialization report whether or not you have previously received SBIR or STTR awards. As instructed on the Web Site, list in the Report the quantitative commercialization results of your firm's prior Phase II projects, including the items such as sales revenue, additional investment, as well as other information relative to your firm's commercialization track record. All prior Phase II projects must be reported, regardless of whether the project has any commercialization to date. The Web Site will then compare these results to the historical averages for the DoD SBIR/STTR Programs to calculate a Commercialization Achievement Index (CAI) value. Only firms with four or more completed Phase II projects will receive a CAI score; otherwise the CAI is N/A. Firms with a CAI at the 15th percentile or below may receive no more than half of the evaluation points available for commercial potential criteria. This report need only be prepared once and submitted with all your proposals.

As noted on the Web Site, your firm may also, at its option, include at the end of the Report additional, explanatory material (no more than five pages) relating to the firm's record of commercializing its prior SBIR or STTR projects, such as: commercialization successes (in government and/or private sector markets) that are not fully captured in the quantitative results (e.g. commercialization resulting from your firm's prior Phase I projects); any mitigating factors that could account for low commercialization; and recent changes in the firm's organization or personnel designed to increase the firm's commercialization success. The Company Commercialization Report and additional explanatory material (if any) will not be counted toward the page limit for Phase II proposals. A Report showing that a firm has received no prior Phase II awards will not affect the firm's ability to obtain an STTR award.

#### **Remember to...**

- Use a type size no smaller than a 10-point font on standard 8 ½ " x 11" paper with one inch margins for the technical proposal. Two-column format is not allowed.
- The header on each page of your technical proposal should contain your company name, topic number, and proposal number assigned by the Web Site when you created your Phase II Cover Sheet. (The header may be included in the one-inch margins.)
- Number all pages of your proposal consecutively. The Cover Sheets are pages 1 and 2. The technical proposal begins on page 3.
- The proposal cost adheres to the Component criteria specified and the cost on the cover sheets matches the cost on the cost proposal.
- The Project Abstract and other content provided on the Cover Sheets contains NO proprietary information. Mark proprietary information within the technical proposal.
- Limit your proposal to 50 pages. The Company Commercialization Report, cost proposal and coversheets are excluded from the page count.

- In the interest of equity, pages in excess 50pages (including attachments, appendices, or references, but excluding Company Commercialization Report, cost proposal and coversheets) will not be considered for review or award. Additional information on Universal Resource Locator (URL) links, computer disks, CDs, DVDs, video tapes or any other medium will not be accepted or considered in the proposal evaluation.

Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 U.S.C. Sec 1001), punishable by a fine of up to \$10,000, up to five years in prison, or both.