

Small Business Innovation Research (SBIR) & Small Business Technology Transfer (STTR)

Phase II Proposal Instructions

DARPA Small Business Programs Office
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Approved for Public Release, Distribution Unlimited



DARPA PHASE II PROPOSAL INSTRUCTIONS

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IMPORTANT NOTE REGARDING THESE INSTRUCTIONS

THESE INSTRUCTIONS ONLY APPLY TO PROPOSALS SUBMITTED IN RESPONSE TO A PHASE II PROPOSAL SUBMISSION NOTIFICATION. Please contact our office if you require Direct to Phase II instructions.

Offerors must follow all the instructions provided in the DoD Program Announcement from which their topic originates AND the supplementary DARPA instructions contained in this section. The section/paragraph numbering in these instructions is intended to correspond with the section/paragraph numbering of the latest DoD Program Announcement. Past DoD Instructions may be found here:

http://www.acq.osd.mil/osbp/sbir/solicitations/archives.shtml.

1.0 INTRODUCTION

DARPA's mission is to prevent technological surprise for the United States and to create technological surprise for its adversaries. The DARPA Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs are designed to provide small, high-tech businesses and academic institutions the opportunity to propose radical, innovative, high-risk approaches to address existing and emerging national security threats; thereby supporting DARPA's overall strategy to bridge the gap between fundamental discoveries and the provision of new military capabilities.

The responsibility for implementing DARPA's SBIR and STTR Programs rests with the Small Business Programs Office.

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
Attention: DIRO/SBPO
675 North Randolph Street
Arlington, VA 22203-2114
sbir@darpa.mil
http://www.darpa.mil/work-with-us/for-small-businesses

System Requirements

Use of the DARPA SBIR/STTR Information Portal (SSIP) is MANDATORY. The registered Corporate Official (CO) **MUST** authenticate into the SSIP (via the DARPA Extranet) to retrieve the selection decision notice, to request debriefings, and to upload reports (awarded contracts only). DARPA SBPO will automatically create an extranet account for new users and send the SSIP URL, authentication credentials, and login instructions AFTER the selection decision period has closed. DARPA extranet accounts will ONLY be created for the individual named as the CO on the Proposal Cover Sheet. Offerors may not request accounts for additional users at this time.

DARPA contractors who are not eligible to receive a Common Access Card (CAC) are required to obtain a digital certificate from an approved External Certification Authority (ECA) vendor.

- If the SBC has or will register for multiple ECAs, one of the registered ECA e-mail addresses MUST match the CO e-mail address (listed on the Proposal Cover Sheet).
- Additional information will be sent to small business concerns (SBCs) selected for contract award

WARNING: The Corporate Official (CO) e-mail address (from the Proposal Cover Sheet) will be used to create a DARPA Extranet account. The same e-mail MUST also be used for ECA registration. Consideration should be given to using the same CO and email address as the Phase I record to avoid having different log on credentials for the Phase I and Phase II proposals. Updates to Corporate Official e-mail after proposal submission may cause significant delays to communication retrieval and contract negotiation (if selected). Additional information in section 4.0.

3.0 **DEFINITIONS**

3.4 Export Control

The following will apply to all projects with military or dual-use applications that develop beyond fundamental research (basic and applied research ordinarily published and shared broadly within the scientific community):

- (1) The Contractor shall comply with all U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of (including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.
- (2) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person will have access to export-controlled technologies, including technical data or software.
- (3) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.
- (4) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

Please visit http://www.pmddtc.state.gov/regulations laws/itar.html for more detailed information regarding ITAR/EAR requirements.

3.5 Foreign National

Foreign Nationals (also known as Foreign Persons) means any person who is NOT:

- a. a citizen or national of the United States; or
- b. a lawful permanent resident; or
- c. a protected individual as defined by 8 U.S.C. § 1324b

ALL offerors proposing to use foreign nationals MUST follow Section 5.4. c. (8) of the DoD Program Announcement and disclose this information regardless of whether the topic is subject to ITAR restrictions. There are two ways to obtain U.S. citizenship: by birth or by naturalization. Additional information regarding U.S. citizenship is available at http://travel.state.gov/content/travel/en/legal-considerations/us-citizenship-laws-policies.html. Definitions for "lawful permanent resident" and "protected individual" are available under section 3.5 of the DoD instructions.

4.0 PROPOSAL FUNDAMENTALS

4.2 Offeror Eligibility and Performance Requirements

Offerors must qualify as a small business at time of award for research or research and development and certify to this in the Cover Sheet section of the proposal. In addition, in SBIR Phase II, a minimum of one-half (50%) of the effort must be performed by the offeror. In STTR Phase II, a minimum of 40% of the effort must be carried out by the small business concern and a minimum of 30% of the effort performed by the research institution, as defined in Section 3.8.

The percentage of work is usually measured by both direct and indirect costs, although offerors planning to subcontract a significant fraction of their work should verify how it will be measured with their DoD Contracting Officer during contract negotiations.

SBIR ONLY: For both Phase I and II, the primary employment of the principal investigator must be with the small business concern 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. Primary employment with a small business concern precludes full-time employment at another organization. For both Phase I and Phase II, all research or research and development work must be performed by the small business concern and its subcontractors in the United States. Deviations from the requirements in this paragraph must be approved in writing by the Contracting Officer during contract negotiations.

STTR ONLY: For both Phase I and II, the principal investigator may be primarily employed with either the small business concern or the research institution. At the time of award of a Phase I or Phase II contract, the small business concern must 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. Primary employment means that more than one half (50%) of the employee's time is spent with the small business. Primary employment with a small business concern precludes full-time employment at another organization. For both Phase I and Phase II, all research or research and development work must be performed by the small business concern and its subcontractors in the United States. Deviations from the requirements in this paragraph must be approved in writing by the Contracting Officer during contract negotiations.

4.6 Classified Proposals

DARPA topics are unclassified; however, the subject matter may be considered to be a "critical technology" and therefore subject to Export Control Restrictions. See Export Control requirements in Section 3.3.

4.7/4.8 Human and/or Animal Use

Your topic may have been identified by the program manager as research involving Human and/or Animal Use. In accordance with DoD policy, human and/or animal subjects in research conducted or supported by DARPA shall be protected. Although these protocols were most likely not needed to carry out the Phase I, significant lead time is required to prepare the documentation and obtain approval in order to avoid delay of the PH II award. Please visit the links below to understand what is required to comply with human protocols and animal protocols:

Human Use PowerPoint Presentation: http://go.usa.gov/cBtYW Animal Use PowerPoint Presentation: http://go.usa.gov/cBtYd

Offerors proposing research involving human and/or animal use are encouraged to separate these tasks in the Technical Volume and Cost Volume in order to avoid potential delay of contract award.

4.10 Debriefing

DARPA will provide a debriefing to the offeror in accordance with Federal Acquisition Regulation (FAR) 15.505. The selection decision notice (reference 4.15 Notification of Proposal Status) contains instructions for requesting a proposal debriefing. Please also refer to section 4.10 of the DoD Program Announcement.

Notification of Proposal Receipt

Within 5 business days after the announcement closing, the individual named as the "Corporate Official" on the Proposal Cover Sheet will receive a separate e-mail from sbir@darpa.mil acknowledging receipt for each proposal received. Please make note of the topic number and proposal number for your records. The CO should add this address to their address book and whitelist to ensure all communications are received.

Notification of Proposal Status

The selection decision notice will be available no later than 90 days after proposal receipt. The individual named as the "Corporate Official" (CO) on the Proposal Cover Sheet will receive an email for each proposal submitted, from sbir@darpa.mil with instructions for retrieving their official notification from the SSIP. Please read each notification carefully and note the proposal number and topic number referenced. The CO must retrieve the letter from the SSIP 30 days from the date the e-mail is sent. After 30 days the CO must make a written request to sbir@darpa.mil for the selection decision notice. The request must explain why the offeror was unable to retrieve the selection decision notice from the SSIP within the original 30 day notification period. Selections are posted at https://sbir.defensebusiness.org/.

Refer to section 1.0 (System Requirements) for information regarding CO registration and DARPA extranet account creation.

4.11 Announcement Protests

Interested parties may have the right to protest this announcement by filing directly with the agency by serving the Contracting Officer (listed below) with the protest, or by filing with the Government Accountability Office (GAO). If the protest is filed with the GAO, a copy of the protest shall be received in the office designated below within one day of filing with the GAO. The protesting firm shall obtain written and dated acknowledgment of receipt of the protest.

Agency protests regarding the announcement should be submitted to: SBIR/STTR Announcement Contracting Officer WHS/Acquisition Directorate 1155 Defense Pentagon Washington, DC 20301-1155 E-mail: james.l.colachis.civ@mail.mil

Agency protests regarding the selection decision should be submitted to: DARPA
Contracts Management Office (CMO)
675 N. Randolph Street
Arlington, VA 22203
E-mail: scott.ulrey@darpa.mil and sbir@darpa.mil

4.14 Phase II Award Information

- a. **Number of Phase II Awards**. The number of Phase II awards will depend upon the results of the Phase I efforts and the availability of funds. DARPA reserves the right to select and fund only those proposals considered to be of superior quality and highly relevant to the DARPA mission. As a result, DARPA may fund multiple proposals in a topic area, or it may not fund any proposals in a topic area.
- b. **Type of Funding Agreement**. DARPA Phase II awards are typically Cost-Plus-Fixed-Fee contracts.
 - Offerors that choose to collaborate with a University must highlight the research activities that are being performed by the University and verify that the work is FUNDAMENTAL RESEARCH.
 - Offerors are strongly encouraged to implement a government acceptable cost accounting system during
 the Phase I project to avoid delay in receiving a Phase II award. Phase II contractors MUST have an
 acceptable system to record and control costs, including procedures for job costing and time record
 keeping. Items such as overhead and G&A rates WILL require logical supporting documentation during
 the DCAA review process. Visit www.dcaa.mil and download the "Information for Contractors" guide
 for more information.
 - Offerors who do not have a cost accounting system that has been deemed adequate for determining accurate costs must provide the DCAA Pre-award Accounting System Adequacy Checklist in order to facilitate DCAA's completion of Standard Form (SF) 1408. The checklist

may be found at:

http://www.dcaa.mil/preaward_accounting_system_adequacy_checklist.html.

- Offerors that are unable to obtain a positive DCAA review of their accounting system may on a case-bycase basis, at the discretion of the Contracting Officer, be awarded a Firm Fixed Price Phase II contract or
 an Other Transaction (OT). For definition and information on Other Transactions for Prototype see the
 Fact Sheet and Other Transactions Guide for Prototype Projects at http://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program. While agreement type (fixed price or expenditure
 based) will be subject to negotiation, the use of fixed price milestones with a payment/funding schedule
 is preferred. Proprietary information must not be included as part of the milestones.
 - Offerors must indicate whether they qualify as a nontraditional Defense contractor, have teamed with a nontraditional Defense contractor, or are providing a one-third cost share for this effort. Provide information to support the claims.
 - Offerors must provide a detailed list of milestones including: description, completion criteria, due date, and payment/funding schedule (to include, if cost share is proposed, contractor and Government share amounts). Milestones must relate directly to accomplishment of technical metrics as defined in the announcement and/or the proposal.
- c. Average Dollar Value. The maximum value of a DARPA Phase II award is \$1,510,000 (13.1 announcement and beyond. If your topic is from an announcement PRIOR to 13.1, please contact sbir@darpa.mil to verify your funding threshold).
- d. **Timing**. The DoD goal for Phase II award is within 180 calendar days from the proposal receipt deadline. Phase II contract award may be delayed if the offeror does not have an adequate accounting system or fails to include sufficient documentation to support its cost proposal.

4.15 Questions/Information

- (1) Contact the **DARPA SBIR/STTR Help Desk** via email (sbir@darpa.mil) regarding general questions about these instructions, Phase II proposal preparation and other DARPA SBIR/STTR program-related areas.
- (2) Contact the **DoD SBIR/STTR Help Desk** regarding questions about the DoD SBIR/STTR Proposal Submission System. Help Desk hours are 9:00 a.m. to 6:00 p.m. ET, Monday through Friday:
 - Phone: 1-800-348-0787
 - E-mail Submission: sbirhelp@bytecubed.com

Communication with DARPA Program Managers (PM)

Phase I performers are advised to work closely with their DARPA PM in advance of Phase II proposal preparation. Performers should have a solid understanding of the feasibility of their approach and whether or not the work performed under Phase I is sufficient enough to warrant a potential Phase II. Questions regarding Phase II proposal preparation should be limited to specific information related to improving the understanding of DARPA requirements. Offerors may not ask for advice or guidance on solution or technical approach.

4.22 Discretionary Technical Assistance (DTA)

Offerors that are interested in proposing use of a vendor for technical assistance must complete the following:

- 1. Indicate in question 17, of the Proposal Cover Sheet, that you request DTA and input proposed cost of DTA (in space provided).
- 2. Provide a one-page description of the vendor you will use and the technical assistance you will receive. The description should be included as the LAST page of the Technical Volume. This description will not count against the 40-page limit of the Technical Volume and will NOT be evaluated.
- 3. Enter the total proposed DTA cost under the "Discretionary Technical Assistance" line along with a detailed cost breakdown under "Explanatory material relating to the cost proposal" via the online cost proposal. The proposed amount may not exceed \$5,000 per year and a total of \$10,000 per Phase II contract.

DTA requests must be explained in detail with the cost estimate. The cost cannot be subject to any profit or fee by the requesting firm. In addition, the DTA provider may not be the requesting firm itself, an affiliate or investor of the requesting firm, or a subcontractor or consultant of the requesting firm otherwise required as part of the paid portion of the research effort (e.g., research partner). Approval of technical assistance is not guaranteed and is subject to review of the Contracting Officer. Please see section 4.22 of the DoD Program Announcement instructions for additional information.

7.0 PHASE II PROPOSAL

7.1 Introduction

DoD SBIR/STTR Proposal Submission System (https://sbir.defensebusiness.org/) is designed to reduce the time and cost required to prepare a formal proposal. Carefully review the guidance on allowable content.

A complete Phase II proposal consists of four volumes:

Volume 1: Proposal Cover Sheet

Volume 2: Technical Volume

Technical Proposal (40 page maximum)

Volume 3: Cost Volume

Volume 4: Company Commercialization Report

The electronic submission site provides a structure for providing these four sections but the offeror must begin entering its proposal by providing information for the Proposal Cover Sheet. After the offeror saves the draft Proposal Cover Sheet, the system will assign a proposal number. Please make note of this proposal number and print it for future reference.

Remember to click the "Submit" button when you are done preparing your proposal. It is the offeror's responsibility to verify that the Technical Volume does not exceed the page limit.

7.2 Proposal Provisions

Phase II Option

DARPA has implemented the use of a Phase II Option that may be exercised at the DARPA Program Manager's discretion to continue funding Phase II activities that will further mature the technology for insertion into a larger DARPA Program, DoD Acquisition Program, other Federal agency, or commercialization into the private sector. The statement of work for the Phase II Option MUST be included with the Phase II Technical Volume and should describe Phase II activities, over a 12 month period, that may lead to the successful demonstration of a product or technology. The statement of work for the option counts toward the 40-page limit for the Phase II Technical Volume. If selected, the government may elect not to include the option in the negotiated contract.

7.3 How to Submit

Each Phase II proposal must be submitted through the DoD Electronic Submission Web site by the deadline specified in your notification letter (available on the DARPA SBIR/STTR Information Portal [SSIP]). Each proposal submission must contain a Proposal Cover Sheet, Technical Volume, Cost Volume, and a Company Commercialization Report.

7.4 Commercialization Strategy

DARPA is equally interested in dual use commercialization of SBIR/STTR project results to the U.S. military, the private sector market, or both, and expects explicit discussion of key activities to achieve this result in the commercialization strategy part of the proposal.

The Technical Volume of each Phase II proposal must include a commercialization strategy section. The Phase II commercialization strategy shall not exceed 5 pages, and will NOT count against the 40-page proposal limit. The commercialization strategy should include the following elements:

- 1. A summary of transition and commercialization activities conducted during Phase I, and the Technology Readiness Level (TRL) achieved. Discuss how the preliminary transition and commercialization path or paths may evolve during the Phase II project. Describe key proposed milestones anticipated during Phase II such as: prototype development, laboratory and systems testing, integration, testing in operational environment, and demonstrations.
- 2. Problem or Need Statement. Briefly describe the problem, need, or requirement, and its significance relevant to a Department of Defense application and/or a private sector application that the SBIR/STTR project results would address.
- 3. Description of Product(s) and/or System Application(s). Identify the commercial product(s) and/or DoD system(s), or system(s) under development, or potential new system(s) that this technology will be/or has the potential to be integrated. Identify the potential DoD end-users, Federal customers, and/or private sector customers who would likely use the technology.
- 4. Business Model(s)/Procurement Mechanism(s). Discuss business models, procurement mechanisms, and, as relevant, commercial investors or partners, and/or licensing/teaming agreements you plan to employ to sell into your targeted markets.
 - a. What is the business model you plan to adopt to generate revenue from your innovation?
 - b. Describe procurement mechanisms and potential private sector and federal partners you plan to employ to reach the targeted markets/customers.
 - c. If you plan to pursue a licensing model, what is your plan to identify potential licensees?
- 5. Market/Customer Sets/Value Proposition. Describe the market and customer sets you propose to target, their size, and their key reasons they would consider procuring the technology.
 - a. What is the current size of the broad market you plan to enter and the "niche" market opportunity you are addressing?
 - b. What are the growth trends for the market and the key trends in the industry that you are planning to target?
 - c. What features of your technology will allow you to provide a compelling value proposition?
 - d. Have you validated the significance of these features and if not, how do you plan to validate?
- 6. Competition Assessment. Describe the competition in these markets/customer sets and your anticipated advantage (e.g., function, performance, price, quality, etc.)
- 7. Funding Requirements. List your targeted funding sources (e.g., federal, state and local, private (internal, loan, angel, venture capital, etc.), estimated funding amount, and your proposed plan and schedule to secure this funding. Provide anticipated funding requirements both during and after Phase II required to:
 - mature the technology
 - mature the manufacturing processes, if applicable
 - test and evaluate the technology
 - receive required certifications
 - secure patents, or other protections of intellectual property
 - manufacture the technology to bring the technology to market for use in operational environments
 - market/sell technology to targeted customers
- 8. Sales Projections. Provide a schedule that outlines your anticipated sales projections and indicate when you anticipate breaking even.

- 9. Expertise/Qualifications of Team/Company Readiness. Describe the expertise and qualifications of your management, marketing/business development and technical team that will support the transition of the technology from the prototype to the commercial market and into government operational environments. Has this team previously taken similar products/services to market? If the present team does not have this needed expertise, how do you intend to obtain it? What is the financial history and health of your company (e.g., availability of cash, profitability, revenue growth, etc.)?
- 10. Anticipated Commercialization Results. Include a schedule showing the anticipated quantitative commercialization results from the Phase II project at 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.). After Phase II award, the company is required to report actual sales and investment data in its Company Commercialization Report (see Section 7.5.e) at least annually.
- 11. Advocacy Letters (OPTIONAL).* Feedback received from potential Commercial and/or DoD customers and other end-users regarding their interest in the technology to support their capability gaps. Advocacy letters that are faxed or e-mailed separately will NOT be accepted.
- 12. Letters of Intent/Commitment (OPTIONAL).* Relationships established, feedback received, support and commitment for the technology with one or more of the following: Commercial customer, DoD PM/PEO, a Defense Prime, or vendor/supplier to the Primes and/or other vendors/suppliers identified as having a potential role in the integration of the technology into fielded systems/products or those under development. Letters of Intent/Commitment that are faxed or e-mailed separately will NOT be accepted.

*Advocacy Letters and Letters of Intent/Commitment are optional, and should ONLY be submitted to substantiate any transition or commercialization claims made in the commercialization strategy. Please DO NOT submit these letters just for the sake of including them in your proposal. These letters DO NOT count against any page limit.

Please note: In accordance with section 3-209 of DOD 5500.7-R, Joint Ethics Regulation, letters from government personnel will NOT be considered during the evaluation process.

PHASE II PROPOSAL INSTRUCTIONS

Each PH II proposal must be submitted through the DoD SBIR/STTR Submission Web site by the deadline stated in the submission notification letter.

- 1. After authenticating, choose "Phase II Proposal Preparation"
- 2. When asked to choose a Phase I proposal number, choose the Phase I which corresponds to the Phase II being proposed.

a. Proposal Cover Sheet (Volume One)

On the DoD SBIR/STTR Submission Web site, (https://sbir.defensebusiness.org/), prepare the Proposal Cover Sheet. The Cover Sheet must include a brief technical abstract, of no more than 200 words, that describes the proposed R&D project with a discussion of anticipated benefits and potential commercial applications. Do not include proprietary or classified information in the Proposal Cover Sheet. If your proposal is selected for award, the technical abstract and discussion of anticipated benefits will be publicly released on the Internet. Once the Cover Sheet is saved, the system will assign a proposal number. You may edit the Cover Sheet as often as necessary until you submit your proposal.

b. Technical Volume (Volume Two)

• Number all pages of your Technical Volume consecutively. Use no type smaller than 10-point on standard 8-1/2" x 11" paper with one inch margins. The header on each page of the Technical Volume should contain your company name, topic number, and proposal number assigned by the DoD

- SBIR/STTR Submission Web site when the Cover Sheet was created. The header may be included in the one-inch margin.
- DO NOT INCLUDE marketing material. Marketing material will NOT be evaluated and WILL be redacted.
- Maximum page length for technical proposal is 40 pages.
- The Technical Volume should begin on page 3 (coversheets are page 1 and 2) and cover the following items in the order given below.

VOLUME TWO: Technical Proposal

- (1) **Significance of the Problem.** 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.
- (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.
 - a) Phase II Statement of Work. The statement of work should provide an explicit, detailed description of the Phase II approach, 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.
 - b) Human/Animal Use: Offerors proposing research involving human and/or animal use are encouraged to separate these tasks in the technical proposal and cost proposal in order to avoid potential delay of contract award.
 - c) Phase II OPTION Statement of Work. The statement of work should provide an explicit, detailed description of the activities planned during the Phase II Option, if exercised. Include 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.
- (3) **Related Work.** Describe significant activities directly related to the proposed effort, including any conducted by the principal investigator, the offeror, 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 offeror'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.
- (4) Relationship with Future Research or Research and Development.
 - i. State the anticipated results of the proposed approach if the project is successful.
 - ii. Discuss the significance of the Phase II effort in providing a foundation for Phase III research and development or commercialization effort.
- (5) Commercialization Strategy. Each PH II proposal must contain a five-page commercialization strategy as part of the Technical Volume describing the offeror'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. See section 7.4 for required strategy elements.
- (6) 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.

- (7) 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.
- (8) Subcontactors/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 offeror, unless otherwise approved in writing by the Contracting Officer. SBIR efforts may include subcontracts with Federal Laboratories and Federally Funded Research and Development Centers (FFRDCs). A waiver is no longer required for the use of federal laboratories and FFRDCs; however, proposers must certify their use of such facilities on the Cover Sheet of the proposal. Subcontracts with other federal organizations are not permitted.

THE FOLLOWING PERTAINS TO STTR ONLY: 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 offeror and a minimum of 30% must be performed by the Research Institution (RI), unless otherwise approved in writing by the Contracting Officer. STTR efforts may include subcontracts with Federal Laboratories and Federally Funded Research and Development Centers (FFRDCs). A waiver is no longer required for the use of federal laboratories and FFRDCs; however, proposers must certify their use of such facilities on the Cover Sheet of the proposal. Subcontracts with other federal organizations are not permitted.

(9) 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 announcements, 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.

c. Cost Volume (Volume 3)

Offerors are REQUIRED to use the online Cost Volume (https://sbir.defensebusiness.org/) for the Phase II and Phase II Option costs. The Cost Volume (and supporting documentation) DOES NOT count toward the 40-page limit of the Technical Volume. Phase II awards and options are subject to the availability of funds.

The Phase II Cost Volume must not exceed the maximum dollar amount of \$1,000,000 (24 months) or \$1,010,000 if discretionary technical assistance services are proposed. Offerors proposing a Phase II Option must also submit a Phase II Option Cost Volume, not to exceed \$500,000 (12 months). Offerors are not to exceed the maximum dollar threshold stated in the announcement from which your Phase I award originated. Funding thresholds for prior announcements are located here:

http://www.acq.osd.mil/osbp/sbir/solicitations/archives.shtml.

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 DARPA to understand how the offeror plans to use the requested funds if the contract

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 announcement; however, cost sharing is not required nor will it be an evaluation factor in the consideration of a PH II proposal.
- 5. The costs for the base and option (if proposed) are clearly separate and identified in the cost volume.

If selected for award, the offeror should be prepared to submit further documentation to the 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 the Cost Volume and accounting standards, see the DCAA publication called "Information for Contractors" available at http://www.dcaa.mil/audit_process_overview.html.

d. Company Commercialization Report (CCR) (Volume 4)

All offerors are required to prepare a CCR through the DoD SBIR/STTR Submission Web Site (https://sbir.defensebusiness.org/). List in the CCR, the quantitative commercialization results of the offeror's prior Phase II projects, including the items such as sales revenue, additional investment, as well as other information relative to the offeror's commercialization track record. All prior Phase II projects must be reported, regardless of whether the project has any commercialization to date. The results are compared to the historical averages for the DoD SBIR or STTR Programs to calculate a Commercialization Achievement Index (CAI) value. Only offerors with four or more completed Phase II projects will receive a CAI score; otherwise the CAI is N/A. Offerors with a CAI at the 20th percentile or below may receive no more than half of the evaluation points available for commercial potential criteria. A score of N/A will not affect the offerors ability to be selected for an award.

Offerors may also include at the end of the Report additional, explanatory material (no more than five pages) relating to the offeror'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 the offeror's prior Phase I projects); any mitigating factors that could account for low commercialization; and recent changes in the offeror's organization or personnel designed to increase the offeror's commercialization success. The CCR and additional explanatory material (if any) will not be counted toward the page limit for PH II proposals.

Modifications or Withdrawal of Proposals

Modification

Late modifications of an otherwise scientifically successful proposal, which makes its terms more favorable to the Government, may be considered and may be accepted.

Withdrawal

Proposals may be withdrawn by written notice at any time. Proposals may be withdrawn in person by an offeror or his authorized representative, provided his identity is made known and he signs a receipt for the proposal.

PHASE II PROPOSAL CHECKLIST

Complete proposals must contain the following elements. Incomplete proposals will be rejected.

1.	Volume 1: Proposal Cover Sheets
	a. Completed and checked for accuracy.
	b. Costs for the base and option (if proposed) are clearly separate and identified on the Proposal Cover
	Sheet.
2.	Volume 2: Technical Volume
	a. Numbered all pages of the proposal consecutively. The Cover Sheets are pages 1 and 2. The
	Technical Volume begins on page 3.
	b. Font type is no smaller than 10-point on standard 8½" x 11" paper with one-inch margins. The
	header on each page of the Technical Volume contains the company name, topic number and proposal
	number assigned by the DoD SBIR/STTR Submission Web site when the Cover Sheet was created. The
	header may be included in the one-inch margin.
	Technical Proposal (40 page maximum)
	a. Does not exceed the page limits specified.
	b. The tasks for the base and option (if proposed) are clearly separate and identified in the
	Technical Proposal.
	c. If proposing DTA, one page description submitted in accordance with instructions in
	section 4.22.
	d. Follows requirements specified in Section 7
3.	Volume 3: Cost Volume
	a. Used the online Cost Volume.
	b. Used the "Explanatory Material Field" in the DoD Cost Volume worksheet to provide detailed
	subcontractor, material and travel costs.
	c. Proposed costs for the base and option are clearly separate and identified in the Cost Volume.
	d. Proposed cost for the base effort does not exceed \$1,000,000 or \$1,010,000 if DTA services are
	requested.
	e. Proposed DTA cost does not exceed \$5,000 per year and \$10,000 total, and is submitted in
	accordance with instructions in section 4.22.
	f. Proposed Option does not exceed \$500,000.
	g. Included the cost of each ECA to be purchased. Reimbursement is limited to a maximum of three
	ECAs per company. See section 11.0 for additional information.
1	Volume 4: Company Commercialization Report
4.	a. Completed and checked for accuracy. Follow requirements specified in section 5.4(e).
5	Submission
	a. Uploaded four completed volumes: Volume 1: Proposal Cover Sheet; Volume 2: Technical Volume;
	Volume 3: Cost Volume; and Volume 4: Company Commercialization Report electronically through the
	DoD submission site by the deadline stated in your PH II proposal submission notification letter.
	b. Reviewed your submission after upload to ensure that all pages have transferred correctly and do
	not contain unreadable characters. Contact the DoD Help Desk immediately with any problems (see
	section 4.15).
	c. Submitted your proposal before the deadline stated in your PH II proposal submission notification
	letter. DARPA will NOT accept proposals that have NOT been submitted by the stated deadline.

8.0 PHASE II EVALUATION CRITERIA

Phase II proposals will be evaluated based on the criteria outlined below. Selections will be based on best value to the Government considering the following factors which are listed in descending order of importance:

- a. The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.
- b. 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.
- c. The potential for commercial (Government or private sector) application and the benefits expected to accrue from this commercialization.

Evaluators will base their conclusions only on information contained in the proposal. Do not assume that evaluators are acquainted with the offeror or key individuals or any referenced experiments. Relevant supporting data such as journal articles, literature, including Government publications, etc., should be contained or referenced in the proposal and will count toward the page limit. Where technical evaluations are essentially equal in merit, cost to the Government will be considered in determining the successful offeror.

The offeror's attention is directed to the fact that non-Government advisors to the Government may review and provide support in proposal evaluations during selection decision. Non-government advisors may have access to the offeror's proposals, may be utilized to review proposals, and may provide comments and recommendations to the Government's decision makers. These advisors will not establish final assessments of risk and will not rate or rank offeror's proposals. They are also expressly prohibited from competing for DARPA SBIR or STTR awards in the SBIR/STTR topics they review and/or provide comments on to the Government. All advisors are required to comply with procurement integrity laws and are required to sign Non-Disclosure Agreement and Rules of Conduct/Conflict of Interest statements. Non-Government technical consultants/experts will not have access to proposals that are labeled by their offerors as "Government Only."

Limitations on Funding

DARPA reserves the right to select and fund only those proposals considered to be of superior quality and highly relevant to the DARPA mission. As a result, DARPA may fund multiple proposals in a topic area, or it may not fund any proposals in a topic area. All awards are subject to the availability of funds.

11.0 CONTRACTUAL CONSIDERATIONS

External Certification Authority (ECA)

Offerors must include, in the Cost Volume, the proposed cost of each ECA to be purchased in order to be reimbursed. Reimbursement is limited to a maximum of three ECAs per company. The cost cannot be subject to any profit or fee by the requesting firm.

Offerors should consider purchasing the ECA subscription to cover the Phase II period of performance, to include the option year. Offerors will only be reimbursed for ECA costs once per subscription. Offerors that previously obtained a DoD-approved ECA may not be reimbursed under any potential SBIR/STTR Phase II contract. Likewise, offerors that are reimbursed for ECAs obtained as a requirement under an SBIR/STTR Phase II contract, may not be reimbursed again for the same ECA purchase under any subsequent government contract. Additional information regarding ECA requirement may be found in section 1.0, System Requirements.

Security Requirements

If a proposed effort is classified or classified information is involved, the offeror must have, or obtain, a security clearance in accordance with the Industry Security Manual for Safeguarding Classified Information (DOD 5220.22M).

Payment Schedule

Payment will be made in accordance with General Provisions FAR 523.216-7, Allowable Cost and Payments.

11.4 Patents

Include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal. If a patent application has been filed for an invention that your proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, you may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: (1) a representation that you own the invention, or (2) proof of possession of appropriate licensing rights in the invention. Please see section 11.4 of the DoD Program Announcement for additional information.

11.5 Intellectual Property Representations

Provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized under your proposal. Additionally, proposers shall provide a short summary for each item asserted with less than unlimited rights that describes the nature of the restriction and the intended use of the intellectual property in the conduct of the proposed research. Please see section 11.5 of the DoD Program Announcement for information regarding technical data rights.

11.1 (r) Publication Approval (Public Release)

National Security Decision Directive (NSDD) 189 established the national policy for controlling the flow of scientific, technical, and engineering information produced in federally funded fundamental research at colleges, universities, and laboratories. The directive defines fundamental research as follows: "Fundamental research' means basic and

applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons."

It is DARPA's goal to eliminate pre-publication review and other restrictions on fundamental research except in those exceptional cases when it is in the best interest of national security. Please visit http://www.darpa.mil/about-us/public-affairs for additional information and applicable publication approval procedures.

11.7 Phase II Reports

All DARPA SBIR and STTR awardees are required to submit reports in accordance with the Contract Data Requirements List – CDRL and any applicable Contract Line Item Number (CLIN) of the Phase II contract. Reports must be provided to the individuals identified in Exhibit A of the contract.

Reports are uploaded to the DARPA SBIR/STTR Information Portal (SSIP). See section "Retrieval of DARPA SBPO Notifications" on page 4 of these instructions.