

Proposal Checklist - NSF Phase I

Solicitation Name: NSF SBIR Phase I

Solicitation Number: NSF 23-515

Submission Date: 5 PM submitter's time on March 1, 2023; July 5, 2023; November 1, 2023

Proposal Development Checklist

Project Pitch

- **General Requirements**

- Project Pitch has been prepared according to and submitted through the online form found [here](#)

- Only one Project Pitch has been submitted;

- if notified that the project pitch is accepted, full proposal is being prepared
- if notified that the project pitch is not accepted, pitch document is being revised for the following submission window

- **Contact Information**

- All relevant information for the business and the relevant company officer who will serve as the main Point of Contact for the business has been provided

- **SBIR/STTR Topic**

- Most relevant SBIR/STTR topic that best fits your project's technology area has been selected

- See their list of topic areas and explanations of innovation under that area at the following [link](#)

- **Research and Development (or Technological Innovation)**

- Section is 500 words or less

- Description has been provided of the technical innovation that would be the focus of a Phase I project, including a brief discussion of the origins of the innovation as well as an explanation as to why it meets the program's mandate to focus on supporting [research and development \(R&D\)](#) of unproven, high-impact innovations.

- **Technical Objectives and Challenges**

- Section is 500 words or less

- Description has been provided of the R&D or technical work to be done in a Phase I project, including a discussion of how and why the proposed work will help prove that the product or service is technically feasible and/or significantly reduce technical risk.

- Examples have been given of how this work could contribute to making the new product, service, or process commercially viable and impactful

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Explanation has been given of how the proposed work meets definition of R&D, rather than straightforward engineering or incremental product development tasks.

- **Commercial Focus**

Section is 250 words or less

Description has been provided of the profile of the intended customer and their unmet needs that will be the near-term commercial focus related to this technical project.

- **Company and Team**

Section is 250 words or less

Description has been provided of the background and current status of the submitting small business, including team members related to the technical and/or commercial efforts discussed in this Project Pitch.

Cover Sheet

- **General Requirements**

One and only one topic and subtopic have been designated

Primary Place of Performance has been entered

Budget and Duration Information has been completed in full and match stated requirements in solicitation

All offeror information and certifications have been completed in full and are accurate to proposer's knowledge

Project Summary

- **General Formatting**

Project Summary is a maximum of one page in length

Project Summary is written in third person

No proprietary information is included in the Project Summary

- To be valid, a heading must be on its own line with no other text on that line. The document must be converted to pdf format to be uploaded into <http://research.gov/>

- **Overview, Key Words, and Subtopic Name**

Potential outcomes of the proposed activity as regards a product, process, or service have been described

- **Intellectual Merit**

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Section begins with " This Small Business Innovation Research (or Small Business Technology Transfer) Phase I project. "

Section does not include proprietary information

Section describes the intellectual merit for the project as defined at https://www.nsf.gov/pubs/policydocs/pappguide/nsf13001/gpg_3.jsp

- **Broader/Commercial Impact**

Potential commercialization of the innovation has been discussed, including how the Phase I effort will lead to a sustainable business model

If applicable, broader societal impacts of the innovation have been discussed

Project Description

- **General Formatting**

Section is a minimum of 10 pages, maximum of 15 pages in length

Font has been set to one of the following limitations; Arial, Courier New, or Palatino Linotype at a font size of 10 points or larger or Times New Roman or Computer Modern fonts at a font size of 11 points or larger

Section headers have been used and sections have been named as designated in the solicitation

- **Elevator Pitch**

Section is a maximum of one page

The Motivation” is the first section, and describes the company's motivation for pursuing this project and the expected impact from the proposed technology, if successful

“The Customer” is the second section, and describes the expected customer of the innovation, including their needs and the market pain points being addressed

“The Value Proposition” is the third section, and describes the proposed benefits of the innovation and what makes it different from the competition

“The Innovation” is the fourth section, and succinctly describes the innovation

- **The Commercial Opportunity**

Section is recommended to be 1 – 3 pages

Various aspects of the market opportunity for the innovation have been described, such as the overall market for the innovation, how the market opportunity have been validated, the competition, and the risks

The commercialization approach of the innovation has been described and includes discussion on necessary resources and an expected timeline

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- **The Technical Solution**

- Section is recommended to be 2 – 4 pages
- The proposed solution and the technology has been fully described, including current stage of technology, key challenges and risks, and status of intellectual property protection

- **The Company/Team**

- Section is recommended to be 1 – 3 pages
- Key participants for the project have been described, including status of work by company founders, team background and experience, and prior transition of innovation to market
- Strategic vision for the company for the next five years has been described and how the proposed effort fits into these activities has been discussed
- If applicable, role of any subcontracts and/or consultants has been described including their expertise, affiliation, and expected contributions to the project

- **Intellectual Merits: Technical Discussion and R&D Plan**

- Section is a minimum of 5 pages (recommended 5 – 6)
- Innovation has been described in sufficient enough detail and technical depth that a knowledgeable reviewer can understand it's importance and benefit
- Key objectives to be accomplished during the Phase I effort have been listed and fully described, and critical milestones and timeline to accomplish those objectives has been provided

- **Broader Impacts**

- Section is recommended to be 1 – 3 pages
- The potential for broader societal and economic benefit has been addressed as outlined in the NSF Merit Review Broader Impacts Criteria

References Cited

- **General Formatting**

- If used in the proposal, a comprehensive listing of relevant references has been uploaded into the system
- If no references have been used, a statement bearing “No References Cited” has been uploaded into the system

Biographical Sketches

- **General Formatting**

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A biographical sketch has been provided for each individual designated as senior personnel, including Principal Investigator, bearing Education, Relevant Experience, and Products

- Offerors must use the template found [here](#).

Each sketch is a maximum of 3 pages in length

Budgets

- **General Formatting**

Budget does not exceed \$275,000 for the Phase I proposal

No symbols or commas have been entered in the dollar amount fields

- **Senior Personnel**

PI has been budgeted for a minimum of one month per six months of performance to the proposed project

Each senior personnel has been listed by name and their time commitments (in calendar months) and the total dollar amount requested have been entered

- **Other Personnel**

Total number of additional general personnel has been listed including time commitments (in calendar months) and the total dollar amount requested

- **Fringe Benefits**

Only utilize this line for Fringe Benefits if your usual (established) accounting practices provide that fringe benefits be treated as direct costs

- **Equipment**

Equipment may not be purchased on a Phase I grant

- **Travel**

One domestic trip for two persons (the PI is required to attend) should be budgeted to attend a three-day conference in the Washington, DC area

A written statement acknowledging the attendance requirement at the mandatory grantee conference is provided on the Budget Justification page.

Describe the purpose of travel and acknowledge attendance at the Grantee Conference

- A reasonable budget estimate is \$2,000 per person to cover the conference registration fees and travel expenses

Any other requested travel has been itemized, including extent of travel and relation of the travel to the Phase I effort

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- Foreign Travel
 - No Foreign travel has been entered for a SBIR Phase I effort
- Participant Support Costs
 - No participant support costs have been entered for a SBIR Phase I effort
- **Materials and Supplies**
 - If requested, materials and supplies of less than \$5,000 per item have been individually listed
- **Consultant Services**
 - If applicable, total amount of award to all consultants should be entered
 - The consulting rate under this solicitation can be a maximum of \$1,000 per day (NSF defines a day as 8 hours)
 - Include a copy of the signed Letter of Commitment in the proposal's "Supplementary Documents" section
- **Computer Services**
 - If requested, computer services of less than \$5,000 in total costs have been entered
- **Subawards**
 - If applicable, total amount of award to all subcontracts should be entered
 - Subawards require a separate subaward budget and subaward budget justification, in the same format as the main budget.
- **Direct Costs: Other**
 - If requested, up to \$10,000 has been entered for specific purposes related to financials and accounting
 - Applicable services include; a) Hiring a certified public accountant (CPA) to prepare audited, compiled, or reviewed financial statements, b) Hiring a CPA to perform an initial financial viability assessment based on standard financial ratios so the awardee organization would have time to improve their financial position prior to submitting the Phase II proposal, c) Hiring a CPA to review the adequacy of the awardee's project cost accounting system, d) Purchasing a project cost accounting system
 - If requested, up to \$10,000 has been entered to cover costs related to NSF's "Beat-The-Odds Boot Camp" (\$20,000 if a subaward is involved)
 - More information about the Boot Camp can be found [here](#)
- **Indirect Costs**

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Items such as Overhead Rate, Fringe Benefits, and G&A have been entered in this section

- **Small Business Fee**

If requested, a rate of no more than 7% of total indirect and direct project costs has been entered

Budget Justification

- **General Formatting**

Details have been provided for any non-zero line item in the budget, including a description, cost estimates, and how those cost estimates were arrived at

Each item has been identified by the letter and number as according to the budget

Budget Justification is no more than 5 pages in length

- **Personnel**

For each personnel member, their names, titles, and a description of their responsibilities for the project has been provided

For each personnel member, their actual annual salary information and calculation that justifies the amounts requested has been provided

- **Fringe Benefits**

If applicable, all Fringe benefits items and the calculation used to arrive at the rate have been described

- **Domestic Travel**

For all travel aside from the Grantee Conference, number of trips, number of travelers, length and purpose of trip, and total expected costs have been provided

- **Materials and Supplies**

For items under \$5,000, an itemized list of the materials and supplies, with the quantity, unit cost, and total cost for each item has been provided

For items over \$5,000, a quote or pricing documentation has been included

- **Consultant Services**

If applicable, a copy of the signed Letter of Collaboration and a biographical sketch for each consultant has been provided in Supplementary Documents

- **Subawards**

If applicable, the scope and objective of the subaward have been entered

- Note: Subawards will have their own budget and budget justification that must be entered

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- **Indirect Costs**

- Provided the calculations that were used to arrive at the amount requested and briefly describe the major cost categories that are included as indirect costs

- **Small Business Fee**

- If requested, provide the calculation that was used to arrive at the rate

Current and Pending Support of Principal Investigator and Senior Personnel

- **General Formatting**

- For each senior personnel, information has been entered regarding; all current and pending support for ongoing projects and proposals (from any source), proposals submitted, and upcoming submissions

- The Phase I proposal being submitted must be entered as a “pending” proposal

- Step-by-step guide available [here](#)

Collaborators & Other Affiliations Information

- **General Formatting**

- The template available [here](#) has been completed in full for each senior personnel and uploaded into the system

Facilities, Equipment and Other Resources

- **General Formatting**

- The availability and location of significant equipment, instrumentation, computers, and physical facilities necessary to complete the portion of the research that is to be carried out by the proposing firm in Phase I has been described in full

Supplementary Documents

- **Data Management Plan**

- A Data Management Plan has been uploaded into the system

- Offerors may simply use the statement "All data generated in this SBIR Phase I project is considered proprietary." to meet this requirement

- **Mentoring Plan**

- If the budget includes subawards requesting funds for postdoctoral scholars a document describing the mentoring activities to be provided has been uploaded

- **Letters of Support**

- If applicable, no more than three Letters of Support have been uploaded into the system, and include affiliation and contact information for the signatory stakeholder

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Additional Single Copy Documents

- **Email invitation from NSF**

- A copy of the email invitation to submit full proposal from an NSF Program Director responding to a submitted Project Pitch

- Email converted to PDF