**Solicitation Name:** NASA SBIR/STTR FY 21 General Solicitation

**Solicitation Number:**

**Proposal Manager:** [Fill in]

**Submission Date:** January 8, 2021 by 5:00 p.m. ET

**Last Updated:** [Fill in]

**Legend:** Forms, Formatting

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragraph | Proposal Volume/Section, Page, Paragraph | Writing Assigned To | Notes Regarding Compliance | Due Date | Status |
| 1. General Requirements

A competitive proposal will clearly and concisely: (1) describe the proposed innovation relative to the state of the art; (2) address the scientific, technical, and commercial merit and feasibility of the proposed innovation, and its relevance and significance to NASA interests as described in section 9 of the solicitation; and (3) provide a preliminary strategy that addresses key technical, market and business factors pertinent to the successful development, demonstration of the proposed innovation, and its transition into products and services for NASA mission programs, the commercial aerospace industry, and other potential markets and customers. |
| 1. Format Requirements
 |
| Page Limitations | A Phase I technical proposal shall not exceed a total of 19 standard 8 1/2 x 11 inch (21.6 x 27.9 cm) pages. Proposals uploaded with more than 19 pages will prompt a warning that will prevent the completed proposal from being submitted. Each page shall be numbered consecutively at the bottom. Margins shall be 1.0 inch (2.5 cm). The additional forms required for proposal submission will not count against the 19-page limit.***Note: Technical proposal uploads with any page(s) going over the required page limit will not be accepted.*** |   |  |   |   |  |   |
| Required Contents | Each complete proposal package submitted shall contain the following items:1. Proposal Contact Information
2. Proposal Certifications, electronically endorsed.
3. Proposal Summary (must not contain proprietary data).
4. Proposal Budget (including letters of availability for facilities and subcontractors/consultants, if applicable)
5. Technical Proposal - 10 parts in the order specified in section 3.3.4 of solicitation, and not to exceed 19 pages **(both SBIR and STTR)**, including all graphics, with a table of contents.
6. Research Agreement between the SBC and RI **(STTR only)**.
7. Briefing Chart (must not contain proprietary data).
8. NASA Research License Application, only if TAV is being proposed.
9. I-Corps Opt-In Form
10. Technical and Business Assistance (TABA) request (optional)
11. Firm-Level Forms (completed once for all proposals submitted to a single solicitation)

a. Firm Certificationsb. Audit Informationc. Prior Awards Addendumd. Commercial Metrics Survey (CMS)1. Electronic Endorsement by the Small Business Official and Principle Investigator (PI).

*Note: Letters expressing general technical interest or letters of funding support commitments (for Phase I) are not required or desired and will not be considered during the review process. However, if submitted, such letter(s) will count against the page limit.**Note: The EHB will not allow the upload of relevant technical papers, product samples, videotapes, slides, or other ancillary items, and they will not be considered during the review process.* |   |  |   |   |  |   |
| Firm Level Forms | In addition to the above items, each offeror must submit the following firm level forms, which must be filled out once during each submission period and are applicable to all firm proposal submissions:1. Firm Certifications
2. Audit Information
3. Prior Awards Addendum
4. Commercial Metrics Survey

Previews of all forms and certifications are available via the NASA SBIR/STTR Firm Library, located at: <http://sbir.gsfc.nasa.gov/sbir/firm_library/index.html>. |   |  |   |   |  |   |
| Type Size | No type size smaller than 10 point shall be used for text or tables, except as legends on reduced drawings. Proposals prepared with smaller font sizes may be rejected without consideration.  |   |  |   |   |  |   |
| Header/Footer Requirements | Header must include firm name, proposal number and project title. Footer must include the page number and proprietary markings if applicable. Margins can be used for header/footer information. Margins shall be 1.0 inch (2.5 cm). |  |  |  |  |  |  |
| Classified Information | NASA does not accept proposals that contain classified information. |  |  |  |  |  |  |
| Project Title | The proposal project title shall be concise and descriptive of the proposed effort. The title should not use acronyms or words like "Development of" or "Study of." The NASA research subtopic title must not be used as the proposal title. |  |  |  |  |  |  |
| 1. Forms

All form submissions shall be completed electronically, and do not count towards the 19-page limit for the technical proposal. |
| Proposal Contact Information | A sample Contact Information form is provided in the NASA SBIR/STTR Firm Library <http://sbir.gsfc.nasa.gov/sbir/firm_library/index.html>. The offeror shall provide complete information for each contact person and submit the form as required in section 6.***Note: Contact Information is public information and may be disclosed.***  |   |  |   |   |  |   |
| Proposal Certifications | A sample Proposal Certifications form is provided in the NASA SBIR/STTR Firm Library <http://sbir.gsfc.nasa.gov/sbir/firm_library/index.html>. The offeror shall provide complete information for each item and submit the form as required in section 6.  |  |  |  |  |  |  |
| Proposal Summary | A sample Proposal Summary form is provided in the NASA SBIR/STTR Firm Library <http://sbir.gsfc.nasa.gov/sbir/firm_library/index.html>. The offeror shall provide complete information for each item and submit the form as required in section 6. ***Note: The Proposal Summary, including the Technical Abstract, is public information and may be disclosed. Do not include proprietary information in this form.***  |  |  |  |  |  |  |
| Proposal Budget  | A sample of the Proposal Budget form is provided in the NASA SBIR/STTR Firm Library <http://sbir.gsfc.nasa.gov/sbir/firm_library/index.html>. The offeror shall complete the Proposal Budget following the instructions provided with the sample form. The total requested funding for the Phase I effort shall not exceed $125,000. Contextual help is provided on the electronic budget form for additional explanation. Information shall be submitted to explain the offeror’s plans for use of the requested funds to enable NASA to determine whether the proposed price is fair and reasonable. ***Note: The government is not responsible for any monies expended by the firm before award of any contract.*** In addition, the following additional uploads, must be submitted in the Proposal Budget form, as applicable:**Proposal Requirements for Use of Federal Services, Facilities or Equipment:**In cases where an offeror seeks to use NASA or another federal department or agency services, equipment or facilities, the offeror shall provide the following: 1. Statement, signed by the appropriate government official at the effected federal department or agency, verifying that the resources should be available during the proposed period of performance.
2. Signed letter on company letterhead from the contractor’s Small Business Official explaining why the SBIR/STTR research project requires the use of federal services, equipment or facilities, including data that verifies the absence of non-federal facilities or personnel capable of supporting the research effort, a statement confirming that the facility proposed is not a federal laboratory, if applicable, and the associated cost estimate.

***Note: Use of federal laboratories/facilities for Phase I contracts is highly discouraged. Approval for use of federal facilities and labs, for a Phase I proposal, requires Program Executive approval during negotiations if selected for award.***See Part 8 of the Technical Proposal for additional information on use of federal facilities.**Use of Subcontractors and Consultants:**Subject to the restrictions set forth below, the SBC may establish business arrangements with other entities or individuals to participate in performance of the proposed R/R&D effort. Subcontractors' and consultants' work have the same place of performance restrictions as stated in section 1.5.2 of the solicitation. ***Note:***1. ***Offerors should list consultants by name and specify, for each, the number of hours and hourly costs.***
2. ***Breakdown of subcontractor budget should mirror the SBC’s own breakdown in the Proposal Budget form and include breakdowns of direct labor, other direct costs, profit, as well as indirect rate agreements.***
3. ***A signed letter of commitment is required for each subcontractor and/or consultant. For educational institutions, the letter must be from the institution’s Office of Sponsored Programs.***

**Travel in Phase I**Due to the intent and short period of performance of the Phase I contracts along with their limited budget, travel during the Phase I contract is highly discouraged unless it is required to successfully complete the proposed effort. If the purpose of the meeting cannot be accomplished via videoconference or teleconference, the offeror must provide rationale for the trip in the proposal budget form. All travel must be approved by the Contracting Officer and concurred by the Technical Monitor. |  |  |  |  |  |   |
| 1. Technical Proposal

This part of the submission should not contain any budget data and must consist of all ten (10) parts listed below in the given order. All ten parts of the technical proposal must be numbered and titled. Parts that are not applicable must be included and marked “Not Applicable.” A proposal omitting any part will be considered non-responsive to this solicitation and may be rejected during administrative screening. The required table of contents is provided below:Phase I Table of ContentsPart 1: Table of Contents……………………………………………………………………………….………Page XPart 2: Identification and Significance of the InnovationPart 3: Technical ObjectivesPart 4: Work PlanPart 5: Related R/R&DPart 6: Key Personnel and Bibliography of Directly Related WorkPart 7: The Market Opportunity Part 8: Facilities/Equipment Part 9: Subcontracts and ConsultantsPart 10: Related, Essentially Equivalent and Duplicate Proposals and Awards |
| Table of Contents | *Suggested Page Limit - 0.5 Page*The technical proposal shall begin with a brief table of contents indicating the page numbers of each of the parts of the proposal. |   |  |   |   |  |   |
| Identification and Significance of the Proposed Innovation | *Suggested Page Limit - 5 Pages*Succinctly describe:* The proposed innovation.
* The relevance and significance of the proposed innovation to an interest, need or needs, within a subtopic described in section 9.
* The proposed innovation relative to the state of the art.
 |   |  |   |   |  |   |
| Technical Objectives | *Suggested Page Limit - 1 page*State the specific objectives of the Phase I R/R&D effort as it relates to the problem statement(s) posed in the subtopic description and the types of innovations being requested by the subtopic manager(s).**Proposed Deliverables:** Indicate the proposed deliverables at the end of the Phase I effort and how these align with the proposed subtopic deliverables described within a subtopic found in section 9. These may include, but are not limited to, required contract deliverables, test reports, software, or hardware, etc.***Note: All offerors submitting proposals who are planning to use NASA Intellectual Property (IP) must describe their planned developments with the IP. The NASA Evaluation License Application should be added as an attachment in the Proposal Certifications form (see section 1.6 of the solicitation).*** |   |  |   |   |  |   |
| Work Plan  | *Suggested Page Limit - 5 pages*Include a detailed description of the Phase I R/R&D plan to meet the technical objectives. The plan should indicate what will be done, where it will be done and how the R/R&D will be carried out. Discuss in detail the methods planned to achieve each task or objective. Task descriptions, schedules, resource allocations, estimated task hours for each key personnel and planned accomplishments including project milestones shall be included. Offerors should ensure that the estimated task hours provided in the work plan for key personnel are consistent with the hours reported in the Proposal Budget form. If the offeror is a joint venture or limited partnership, a statement of how the workload will be distributed, managed and charged should be included here.  |   |  |   |   |  |   |
| Related R/R&D  | *Suggested Page Limit - 1 page*Describe significant current and/or previous R/R&D that is directly related to the proposal including any conducted by the PI or by the offeror. Describe how it relates to the proposed effort and any planned coordination with outside sources. The offeror must persuade reviewers of his or her awareness of key recent R/R&D conducted by others in the specific subject area.  |   |  |   |   |  |   |
| Key Personnel and Bibliography of Directly Related Work  | *Suggested Page Limit - 2.5 pages*Identify all key personnel involved in Phase I activities whose expertise and functions are essential to the success of the project. Provide biographical information, including directly related education and experience. Where the resume/vitae is extensive, summaries that focus on the most relevant experience or publications are desired and may be necessary to meet proposal size limitation. The PI is considered key to the success of the effort and must make a substantial commitment to the project. The following requirements are applicable:**Functions:** The functions of the PI are planning and directing the project, leading it technically and making substantial personal contributions during its implementation, serving as the primary contact with NASA on the project and ensuring that the work proceeds according to contract agreements. Competent management of PI functions is essential to project success. The Phase I proposal shall describe the nature of the PI's activities and the amount of time that the PI will personally apply to the project. The amount of time the PI proposes to spend on the project must be acceptable to the Contracting Officer.**Qualifications:** The qualifications and capabilities of the proposed PI and the basis for PI selection are to be clearly presented in the proposal. NASA has the sole right to accept or reject a PI based on factors such as education, experience, demonstrated ability and competence, and any other evidence related to the specific assignment.**Eligibility:** This part shall also establish and confirm the eligibility of the PI and shall indicate the extent to which other proposals recently submitted or planned for submission in Fiscal Year 2021 and existing projects commit the time of the PI concurrently with this proposed activity. Any attempt to circumvent the restriction on PIs working more than half time for an academic or a nonprofit organization by substituting an ineligible PI will result in rejection of the proposal. However, for an STTR the PI can be primarily employed by either the SBC or the RI. Please see section 1.5.3 of the solicitation for further explanation.  |  |  |  |  |  |  |
| The Market Opportunity   | *Suggested Page Limit - 1 page*Phase I applicants should describe both NASA and non-NASA markets and addressable markets for the innovation. Discuss the business economics and market drivers in the target industry. How has the market opportunity been validated? Describe your customers and your basic go-to-market strategy to achieve the market opportunity. Describe the competition. How do you expect the competitive landscape may change by the time your innovation enters the market? What are the key risks in bringing your innovation to market? Describe your commercialization approach. Discuss the potential economic benefits associated with your innovation and provide estimates of the revenue potential, detailing your underlying assumptions. Describe the resources you expect will be needed to implement your commercialization approach.***Note: Companies with no SBIR/STTR awards or fairly recent awards will not be penalized under past performance for the lack of past SBIR/STTR commercialization.***  |  |  |  |  |  |  |
| Facilities/Equipment   | *Suggested Page Limit - 1 page*If an offeror requests to use Government-furnished laboratory equipment, facilities, or services (collectively, “Government resources”) the offeror shall describe in this part why the use of such Government resources is necessary and not reasonably available from the private sector. See sections 3.3.3.4 and 5.14 of solicitation for additional requirements when proposing use of such Government resources. The narrative description of resources should support the proposed approach and documentation in the Proposal Budget form.***Note: Use of federal laboratories/facilities for Phase I contracts is highly discouraged. Approval for use of federal facilities and labs, for a Phase I proposal, requires Program Executive approval during negotiations if selected for award.***  |  |  |  |  |  |  |
| Subcontracts and Consultants  | *Suggested Page Limit - 1 page*The offeror must describe all subcontracting or other business arrangements and identify the relevant organizations and/or individuals with whom arrangements are planned. The expertise to be provided by the entities must be described in detail, as well as the functions, services and number of hours. Offerors are responsible for ensuring that all organizations and individuals proposed to be utilized are actually available for the time periods proposed. Subcontract costs shall be documented in the Subcontractors/Consultants section of the Proposal Budget form and supporting documentation should be uploaded for each (appropriate documentation is specified in the form). The narrative description of subcontracts and consultants in the technical proposal should support the proposed approach and documentation in the Proposal Budget form.  |  |  |  |  |  |  |
| Related, Essentially Equivalent, and Duplicate Proposals and Awards | *Suggested Page Limit - 1 page*WARNING – While it is permissible with proper notification to submit identical proposals or proposals containing a significant amount of essentially equivalent work for consideration under numerous federal program solicitations, it is unlawful to enter into funding agreements requiring essentially equivalent work. If an applicant elects to submit identical proposals or proposals containing a significant amount of essentially equivalent work under other federal program solicitations, a statement must be included in each such proposal indicating:1. The name and address of the agencies to which proposals were submitted or from which awards were received.
2. Date of proposal submission or date of award.
3. Title, number and date of solicitations under which proposals were submitted or awards received.
4. The specific applicable research topics for each proposal submitted or award received.
5. Titles of research projects.
6. Name and title of principal investigator or project manager for each proposal submitted or award received.

Offerors are at risk for submitting essentially equivalent proposals and therefore are strongly encouraged to disclose these issues to the soliciting agency to resolve the matter prior to award.A summary of essentially equivalent work information, as well as related research and development on proposals and awards is also required on the Proposal Certifications form (if applicable).  |  |  |  |  |  |  |

|  |
| --- |
| 1. Applications to I-Corps

Firms proposing to this solicitation will be allowed to also propose participation in the SBIR/STTR I-Corps Program using the following submittal process. I-Corps awards will be made separately from the Phase I contract as a training grant. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Step 1: Opt-In Form  | Phase I SBIR/STTR offerors must complete a short I-Corps interest Form (see section 1.7 for additional information on the I-Corps program) as part of their Phase I proposal submission. NASA uses this form to determine the level of interest from Phase I offerors to participate in the NASA I-Corps program. Offerors are encouraged to complete the form in its entirety. In the event a large number of offerors express interest, the Government reserves the right to limit the number of offerors invited to submit I-Corps proposals based upon the Government’s assessment of the initial summary statements.Offerors that are selected for Phase I contract negotiations will receive information from the SBIR/STTR PMO describing the process to provide a 5-page proposal to participate in the I-Corps program. Directions for completing the proposal including due dates, training dates, and available training grant funding will be provided via email. Additional details on the program can be found at <http://sbir.nasa.gov/content/I-Corps>. |   |  |   |   |  |   |
| I-Corps Proposal | To be qualified to submit an I-Corps proposal: 1) firms must have submitted the I-Corps Opt-In Form as part of their Phase I proposals; and; 2) firms must be selected for a Phase I award. Participating firms must form a team composed of three main members: The Principal Investigator, the Entrepreneurial Lead and the Industry Mentor. The Principal Investigator, the Entrepreneurial Lead and the Mentor, as described in <http://sbir.nasa.gov/content/I-Corps>. The I-Corps proposal shall follow the same format requirements as the SBIR/STTR Phase I proposal, shall be limited to five pages and shall include the following sections in order to be considered complete: * I-Corps Team and Commercialization Plan (limited to five pages).
* I-Corps Team: Biographical sketches of I-Corps team members and their commitment to participate in I-Corps (limited to one page per team member).
* Commercialization Plan (limited to two pages). This shall build upon the commercialization information provided in the Phase I proposal and include:
	+ Identification of commercial application(s) and market(s) for the proposed technology
	+ Types of customers the firm plans to interview
	+ Sample list of potential customers for the targeted market(s)
	+ Brief description of the potential non-NASA commercial impacts of the project
	+ Brief description of how the firm will select, contact, and request interviews for a minimum of thirty prospective customers for SBIR and one hundred prospective customers for STTR
	+ Planned travel
	+ Types of customer discovery the firm hopes to accomplish through I-Corps
	+ What steps the company will take to move the project closer to commercialization
* I-Corps Proposal Budget (limited to one page).
	+ Capped at $10,000 for each SBIR team and $25,000 for each STTR team.
	+ Only recovery of certain direct costs associated with participation in I-Corps is allowed, no recovery of indirect costs is allowed.
	+ The budget should include the following five components, which are the only allowable costs:
* Maximum of $4,000 for Entrepreneurial Lead compensation (no compensation for the Principal Investigator or I-Corps Mentor) for each SBIR team and $5,500 for each STTR team
* An estimate for the travel costs associated with team member participation in required kick-off and close out / lessons learned meetings (i.e. airfare, per diem costs, other). Maximum is $3,000 for each SBIR team and $5,000 for each STTR team
* Costs for workshop registration fees that will be paid by the team to the instruction service (logistics) providers. Maximum is $450 for each SBIR team and $4,500 for each STTR team
* Estimated costs for travel associated with the three team members traveling as a group to conduct customer interviews (30 interviews for SBIR participants and 100 interviews for STTR participants). Maximums are $2,550 for each SBIR team and $10,000 for each STTR team
* Indirect costs associated for the above five direct cost categories

The I-Corps proposal will be due one week after formal notification that the firm has been selected for negotiation of a Phase I SBIR or STTR contract. The firm shall submit their I-Corps proposal into the Proposal Submissions EHB, which shall be re-opened for those firms which have met the three qualifications identified above. ***Note: Proposals for I-Corps have separate page limitations outside the page limitations for the technical proposal.*** |  |  |  |  |  |  |

|  |
| --- |
| 1. Briefing Chart

The one-page briefing chart is required to assist in the ranking and advocacy of proposals prior to selection and contains the following sections with summary information:• Identification and Significance of Innovation• Technical Objectives• Proposed Deliverables• NASA Applications• Non-NASA Applications• GraphicThe briefing chart shall not contain any proprietary data or ITAR restricted data. An electronic form will be provided during the submissions process.*Note: The briefing chart is public information and may be disclosed. Do not include proprietary information in this form.*  |
| 1. Firm Certifications

Firm certifications that are applicable across all proposal submissions submitted to this solicitation must be completed via the Firm Certifications section of the Proposal Submissions Electronic Handbook. The offeror shall answer Yes or No as applicable. An example of the certifications can be found in the NASA SBIR/STTR Firm Library <http://sbir.gsfc.nasa.gov/sbir/firm_library/index.html>. An electronic form will be provided during the submissions process.*Note: The designated Firm Admin, typically the first person to register your firm, is the only individual authorized to update the certifications.* |
| 1. Audit Information

Although firms are not required to have an approved accounting system, knowledge that a firm has an approved accounting system facilitates NASA’s determination that rates are fair and reasonable. To assist NASA, the SBC shall complete the questions in the Audit Information form regarding the firm’s rates and upload the federal agency audit report or related information that is available from the last audit. There is a separate “Audit Information” section in the Proposal Budget form that shall also be completed. If your firm has never been audited by a federal agency, then answer "No" to the first question and you do not need to complete the remainder of the form. An electronic form will be provided during the submissions process. The Contracting Officer will use this Audit Information to assist with negotiations if the proposal is selected for award. The Contracting Officer will advise offerors what is required to determine reasonable cost and/or rates in the event the Audit Information is not adequate to support the necessary determination on rates. *Note: The designated firm admin, typically the first person to register your firm, is the only individual authorized to update the audit information.* |
| 1. Prior Awards Addendum

If the SBC has received more than 15 Phase II awards in the prior 5 fiscal years, submit name of awarding agency, solicitation year, phase, date of award, funding agreement/contract number, and topic or subtopic title for each Phase II. If your firm has received any SBIR or STTR Phase II awards, even if it has received fewer than 15 in the last 5 years, it is still recommended that you complete this form for those Phase II awards your firm did receive. This information will be useful when completing the Commercialization Metrics Survey, and in tracking the overall success of the SBIR and STTR Programs. Any NASA Phase II awards your firm has received will be automatically populated in the electronic form, as are any Phase II awards previously entered by the SBC during prior submissions (you may update the information for these awards). An electronic form will be provided during the submissions process. *Note: The designated firm admin, typically the first person to register your firm, is the only individual authorized to update the addendum information.* |
| 1. Commercial Metrics Survey (CMS)

NASA has instituted a comprehensive commercialization survey/data gathering process for firms with prior NASA SBIR/STTR awards. If the SBC has received any Phase III awards resulting from work on any NASA SBIR or STTR awards, provide the related Phase I or Phase II contract number, name of Phase III awarding agency, date of award, funding agreement number, amount, project title and period of performance. The survey will also ask for firm financial, sales and ownership information, as well as any commercialization success the firm has had as a result of SBIR or STTR awards. This information must be updated annually during proposal submission via the EHB. This information will allow firms to demonstrate their ability to carry SBIR/STTR research through to achieve commercial success and allow agencies to track the overall commercialization success of their SBIR and STTR Programs. The survey should be limited to information requested above. An electronic form will be provided during the submissions process.*Note: Information received from SBIR/STTR awardees completing the survey is kept confidential and will not be made public except in broad aggregate, with no firm-specific attribution.* The Commercialization Metrics Survey is a required part of the proposal submissions process and must be completed via the Proposal Submissions Electronic Handbook. Also, Companies with no SBIR/STTR awards or only fairly recent awards will not be penalized under past performance for the lack of past SBIR/STTR commercialization. |