

ESTCP Department of Defense (DOD)
ENVIRONMENTAL TECHNOLOGIES
FULL PROPOSAL SUBMISSION INSTRUCTIONS

1. PREPARATION AND CONTENT

A full proposal shall be submitted only by invitation from ESTCP following review of a pre-proposal. Full proposals shall contain four sections, Abstract, Technical Section, Cost Section, and Appendices, submitted as **one document**. Each section is described in detail below. Proposals shall be prepared in accordance with the following:

- Type size should not be less than 11 point, any font.
- All margins (top, bottom, left, and right) should not be less than 1 inch.
- Pages should be numbered.
- Proposals should use the section headers provided in section 1.2. These section headers correspond to evaluation criteria that will be used to review, evaluate, and select proposals.
- Table of contents, introduction, executive summary, or any other elements not prescribed by this guidance are neither required nor desired.

You will submit your proposal via the [SERDP and ESTCP Management System](#) (SEMS). No electronic mail, faxed, or hard copy proposals will be accepted. **Proposals must be submitted prior to 2:00 p.m. Eastern Time on August 6, 2020.** All full proposals must be accompanied by the signature of an individual authorized to commit the lead organization to execute the proposed work. Complete submittal instructions can be found in Section 3 of this document.

1.1 ABSTRACT

In one page or less, provide a brief summary of the proposed effort following the structure outlined below. The abstract is not included in the page limitation. If your proposal is selected for funding, the abstract will serve as the basis for a project overview to be posted on the ESTCP website. Therefore, please ensure it is well written. Items 1-4 must be located at the top of the first page:

1. **Proposal Number:** The proposal number is generated by the SERDP and ESTCP Management System (SEMS) when the proposal details are entered. The proposal number for the full proposal is the same as the pre-proposal.
2. **Proposal Title**
3. **Lead Principal Investigator**
4. **Lead Organization**
5. **Objective:** Provide a succinct statement of the project's overall objective in the context of the environmental problem that the proposed technology will address. Indicate the relevance and importance of this problem to the DoD. Include specific technical objectives if relevant.
6. **Technology Description:** Describe the proposed technology, in particular the innovative aspects of the technology that will be demonstrated in the project. Summarize what the project will attempt to demonstrate and what will constitute success.
7. **Expected Benefits:** Briefly describe the anticipated cost and performance benefits of the

use of the technology to the DoD as compared to current practice or state-of-the-art technology, if one exists.

1.2 TECHNICAL SECTION

The technical section must contain all of the content elements outlined here and must not exceed 15 pages. Many of the required sections mirror those from the pre-proposal. It is expected that each section will be expanded to provide sufficient information that responds directly to the evaluation criteria. The emphasis should be on the technical approach. Any comments from ESTCP on the technical aspects of your pre-proposal should be addressed in the appropriate sections. Throughout this document, “technology” refers broadly to integrated systems based on any combination of hardware (equipment) and software (processing), materials engineering processes, and resource management devices, methods, tools, or models based on scientific principles.

1. **Short Descriptive Title**
2. **ESTCP Topic Area:** Indicate the ESTCP topic area the proposal addresses.
3. **Lead Organization:** Project lead, organization, address, telephone number, and e-mail address.
4. **Problem Statement:** Clearly state the environmental problem the technology demonstration is addressing and its relevance and importance to DoD. Identify the current approach (if one exists) to this problem and its shortcomings.
5. **Technology Demonstration:** The technology description should include the following information:
 - a. *Technical Objective:* Discuss the objective(s) of the proposed effort.
 - b. *Technology Description:* Describe the technology in sufficient detail to provide an accurate and factual understanding of its theory, functionality, and operation. If appropriate, provide an overall schematic of the technology. Discuss how the technology is innovative. Identify the specific performance issues that require validation.
 - c. *Technology Maturity:* Provide evidence that the technology is mature enough for demonstration. Include references and past funding history. Discuss any development or design work that is required prior to demonstration.
 - d. *Technical Approach:* Provide a detailed overview of how the project will be conducted to address the technical objectives. For clarity, proposers should present this section in terms of specific tasks. Within this construct, the proposer should ensure that the following issues are addressed:
 - Include a brief description of a proposed demonstration site(s), if known. If the site has not yet been selected, discuss required site characteristics for an optimal demonstration.
 - Provide the performance objectives for the technology. These are the primary criteria established by the investigator for evaluating the performance and costs of the technology. Performance objectives may be related to qualitative or quantitative parameters. Discuss data required to evaluate the performance objectives and the criteria to determine whether objectives are successfully met. Refer to the ESTCP demonstration plan guidance on the [ESTCP website](#) for more detailed information and examples.

- Provide a broad overview of the experimental design. Discuss the scope of the proposed demonstration and relate the planned data collection to the performance objectives. Include a discussion of controls, various operational phases, and/or other means to evaluate the technology performance. Include any assumptions that have been made for costing purposes.
 - Include a description of the data analyses that will be conducted to determine whether the success criteria for the performance objectives have been met. Include a description of statistical analyses to be conducted.
- e. *Technical Risks:* Identify potential issues of concern and technical risks in taking the technology from the research phase to the proposed scale of the demonstration. Identify any assumptions that have been made that, if not realized, could impact the successful implementation of the project. Discuss how risks will be managed. If the demonstration is not at full scale, discuss any scale- up issues that will remain at the conclusion of a successful demonstration.
- f. *Related Efforts:* Provide information on any relationship to other similar projects. Identify funding sources for these efforts.
6. **Expected DoD Benefit:** Describe the expected benefit in terms of environmental impact and/or reduced cost. Assess the environmental benefit per site or implementation and the expected aggregate benefit for DoD. Provide realistic projections of the number of DoD sites or facilities where the technology can be deployed. Discuss how the information obtained from the demonstration will enable adoption of the technology throughout DoD. Estimate the expected return on investment and the time for payback. Discuss the life cycle cost advantages over current approaches.
7. **Schedule of Milestones:** Provide a project schedule with expected milestones and deliverables for the duration of the project in the form of a Gantt chart. Ensure that all required ESTCP deliverables are included in the Gantt chart. Reporting requirements are found on the [ESTCP website](#).
- Explicitly identify any development, design, baseline characterization, or treatability work that is required prior to demonstration.
 - Estimate the time required for the demonstration. Include the planned initiation and completion dates for critical events, including but not limited to equipment installation, monitoring, fieldwork, data analysis, and other key activities as appropriate.
 - Include expected submission dates to the ESTCP Office for the first draft and completed final document for Demonstration Plans and Final Reports. Separate first draft and final submission dates by a two-month period to allow time for ESTCP review.
8. **Technology Transition:** Technology Transition should be included as a separate task in your project structure. All proposals are expected to include a description of specific technology transition approaches that will aid in the transition of the technology to the end user. Reliance on presentations at conferences, scientific publications, or final project deliverables (i.e., Final Report) is not acceptable. Strong transition approaches should focus on highlighting key lessons learned from the technology demonstration as well as an overview of the technology. Consider innovative methods to convey such information including user guides and web- or video-based approaches.
- Specify how technology transfer methods will differ to reach appropriate audiences (e.g.,

regulators, consultants, etc.). Describe any proposed guidance documents that will assist in future implementation (e.g., guidance, design, and/or protocol documents). Explicitly identify potential first DoD users and follow-on implementation. If there are known institutional or regulatory barriers that affect the transition, they should be described in this section along with recommendations for addressing these barriers.

9. **Disposition of Equipment:** Identify any major equipment to be purchased for the demonstration.
10. **Performers:** List the name and organization of the lead person(s) for each organization involved in the proposed demonstration and summarize their expected contributions.
11. **ESTCP Review Comments:** Comments from the ESTCP review of the pre-proposal, provided in the letter from ESTCP requesting a full proposal, should be addressed in the appropriate sections of the full proposal. The response to each comment should be summarized in this section and a citation provided indicating the full proposal section and text location in which the comment was addressed. Not included in the page limitation.
12. **Acronym List:** Include a list defining all acronyms used in the proposal. Not included in the page limitation.

1.3 COST SECTION

The cost section of the full proposal is an estimate of the total project cost. The cost spreadsheet template is found on the [ESTCP website](#). Cost sections in formats other than this template will not be accepted. The cost spreadsheet for the lead organization should reflect the entire project costs. Separate cost spreadsheets are required for each co-performer or sub-contractor whose costs exceed \$50,000. **Cost information must be rounded to the nearest dollar.**

All ESTCP projects are funded incrementally, with funds provided in the year in which they are expected to be expended. The cost section should be structured to indicate annual, incremental funding required. For planning purposes, proposers should assume a project initiation date of March 1, 2021. The first year's planned funding should run through January 31, 2022, and each subsequent year should span February 1-January 31, until anticipated project completion.

1. **Labor Costs:** Show the projected labor rates in units of hourly rate or annual salary to be charged by the PI(s), associates, and assistants. Indicate in the footnote to the cost table the units you are using. In the units column, indicate the number of hours or the fraction of annual salary to be charged. The total column is the amount per year to be paid to each performer on the project. Labor costs should be unburdened.
2. **Indirect Charge #1:** Indicate burden or fringe rate applied to salaries and the total cost per year. Provide an explanation in the table footnote of what is included in this indirect charge.
3. **Indirect Charge #2:** Indicate other relevant indirect charges such as G&A. Provide an explanation in the table footnote of what is included in this indirect charge and to which cost elements it will be applied.
4. **Major Equipment:** Provide an itemized list of permanent equipment, if any, to be acquired in support of the project, showing the cost for each item. Use the second tab in the cost spreadsheet located on the [ESTCP website](#) as a template. Permanent equipment is any article of non-expendable, tangible property having a useful life of more than two years and an acquisition cost of \$5,000 or more per unit.
5. **Materials, Supplies and Consumables:** Provide a general description and total estimated cost of expendable equipment and supplies.
6. **Subcontracts and Government Partners:** For any co-performer or subcontract totaling \$50,000 or more, provide a breakout of the tasks and associated costs in a separate cost estimate using the cost spreadsheet template located on the [ESTCP website](#). Government partners will be provided a separate allocation of funds directly based upon this separate estimate. The cost spreadsheet for the lead organization should include all costs for sub-contractors and co-performers. The lead organization should plan to manage all sub-contracts to non-government partners.
7. **Travel Costs:** Estimate total travel costs. List the number of trips, the destinations, and purposes for all proposed travel. For trips where the specific destination has not yet been determined, budget for a representative location. For planning purposes, ESTCP conducts an annual in-progress review of management and technical status of each project in the Arlington, VA area. New start projects funded to begin in 2021 will be reviewed first in February 2022, with additional annual reviews in either April/May or October/November thereafter for multi-year projects. ESTCP will support attendance at one domestic technical meeting each year. ESTCP intends to sponsor an annual technical Symposium in the Washington, D.C. area. In years when the Symposium takes place, investigators are

expected to attend. Investigators are encouraged to budget for students working on the project to attend the Symposium in the total travel costs. In the event the Symposium is not held, investigators may attend an appropriate meeting of their choice at comparable cost.

8. **Publication and Report Costs:** Estimate the costs of publishing and reporting results, including the direct charges for clerical preparation, page or illustration charges, and distribution. The ESTCP reporting requirements are found on the [ESTCP website](#).
9. **Fixed Fee:** Eligible organizations shall list the fixed fee, if any, applied to the demonstration project. Indicate in the footnote to the table the cost elements included in the basis for the fixed fee.
10. **Cost by Task Summary Table:** Provide a breakout of cost per task. The third tab in the cost spreadsheet located on the [ESTCP website](#) provides a template. These numbers must match those on the main cost spreadsheet.

1.4 APPENDICES

Appendices are not included in the page count for the full proposal.

1. **Required, if literature is cited, Literature Citations:** Provide literature citations for any material cited in the technical section or the supporting technical data.
2. **Required, Abbreviated Curricula Vitae (CV) (3 pages or less per CV):** CVs are required for all key technical personnel at the lead organization and the lead individual for all key co-performers or subcontractors.
3. **Optional, Letters of Support:** If you have received letters of support or commitment from installations or site managers, provide them in this section.
4. **Optional, Supporting Technical Data (limited to 5 pages):** Include data sheets, charts, and excerpts from referenced research.

2. EVALUATION FACTORS FOR FULL PROPOSALS

The following evaluation factors will be the sole basis for reviewing full proposals submitted in response to this CFP. Among the evaluation factors, Technical Merit is more important than Cost/Benefit of Technology, Transition Potential and Cost of Proposal.

TECHNICAL MERIT

Proposal reviewers will assess the technical merit of the proposal. Factors to be considered include: (a) the methodology is scientifically sound; (b) the technology is innovative and is the current state-of-the-art; (c) the technical risks are well characterized; and (d) the technical team is qualified to execute the proposed project.

COST/BENEFIT OF TECHNOLOGY

Proposal reviewers will assess the cost/benefit of the proposed technology, if it were deployed. Factors to be considered include: (a) the projected cost savings and/or risk reduction are significant; (b) the projected benefits are reasonable and consistent with the proposed technology; and (c) the payoffs from the proposed technology are commensurate with the projected costs and risks.

TRANSITION POTENTIAL

Proposal reviewers will assess the potential for a successful transfer of the technology to the DoD user. Factors to be considered include: (a) there is a well-defined DoD user for the technology; (b) there are clearly identified activities that will support and enhance the transfer of the technology; and (c) the technology can be implemented within DoD.

COST OF PROPOSAL

Proposal reviewers will assess the reasonableness of the proposed cost. Costs should be appropriate and traceable to the level of effort required to execute the project.

3. SUBMITTAL INSTRUCTIONS

Proposals are submitted via the SERDP and ESTCP Management System (SEMS). No electronic mail, faxed, or hard copy proposals will be accepted. **Proposals must be submitted prior to 2:00 p.m. Eastern Time on August 6, 2020.**

Complete all steps below in order to submit a proposal.

- Create a single PDF file that contains all required sections outlined in the proposal guidance.
- Log in to [SEMS](#).
- Enter all required proposal details into SEMS. Proposal details may be saved and edited prior to final submission.
- Download or print the “Proposal Details” page. This must be signed by an individual with the authority to commit the lead organization to execute the proposed work. The document may be electronically or hand-signed. Ensure all information on the signed summary matches the proposal file.
- Upload the signed “Proposal Details” page.
- Add the system-generated proposal number, project title, lead PI name and organization to first page of proposal as instructed in Section 1.1 above.
- Upload the final proposal file.
- Submit the proposal. Only proposals that have been submitted will be considered. Proposals with a “Saved” status will not be reviewed.

Once the proposal has been submitted, SEMS will display an on-line confirmation message and will send an email notification to the proposer. It is the sole responsibility of the proposer to make certain the proposal is properly received by ESTCP.

The proposer may continue to modify proposal details and upload revised proposal files until the due date. Prior versions of the proposal will be over-written and **only the last version uploaded** will remain in the system. Ensure the proposal details entered into the system match the contents of the proposal file. It is recommended that proposals are uploaded as early as possible prior to the deadline, to ensure a successful and timely submission.

For proposal upload questions, contact the ESTCP Office at 571-372-6565.

For technical questions, contact the Program Manager.

4. REQUIREMENTS FOR PROPOSALS SELECTED FOR FUNDING

Proposals selected for funding may require revision following the selection process and prior to contract award. Common revisions include adjustments to schedule, task structure, funding profile, or specification of required deliverables. These requirements are considered part of the proposal process and the associated costs are to be borne by the proposer.