

PROGRAM ANNOUNCEMENT FOR FY 2024 STRATEGIC ENVIRONMENTAL RESEARCH AND DEVELOPMENT PROGRAM (SERDP)

SERDP Exploratory Development (SEED) Broad Agency Announcement Proposal Instructions

Reference: Broad Agency Announcement (BAA), *November 3, 2022*
U.S. Army Corps of Engineers, Humphreys Engineer Center Support Activity

NOTE: These instructions are for the preparation and submittal of proposals in response to the SERDP SEED Statements of Need (see the link below).

1. INTRODUCTION

The Strategic Environmental Research and Development Program (SERDP) is the Department of Defense's (DoD's) environmental research and development program, planned and executed in partnership with the Department of Energy and the Environmental Protection Agency. SERDP's role is to fund research and development that addresses environmental issues relevant to the management and mission of DoD. SERDP-supported efforts lead to the development and application of innovative environmental technologies or methods that improve the environmental performance of DoD by improving outcomes, managing environmental risks, and/or reducing costs or time required to resolve environmental problems. The development and application of innovative environmental science and technology support the long-term sustainability of DoD's installations and ranges, and significantly reduce current and future environmental liabilities. Within its broad areas of interest, the Program focuses on Environmental Restoration, Munitions Response, Resource Conservation and Resiliency, and Weapons Systems and Platforms. SERDP funds research and development programs in basic and applied research and advanced technology development.

1.1. GENERAL INFORMATION FOR PROPOSERS

The SERDP Exploratory Development (SEED) Solicitation is a means for researchers to test proof of concept during an effort of approximately one year. These projects will be funded as Firm Fixed Price contracts at a level not to exceed the Simplified Acquisition Threshold (SAT) of \$250,000 in total costs. Successful SEED projects may lead to more extensive follow-on research or development efforts.

SERDP is seeking proposals responding to SEED Statements of Need (SONs) for projects to be funded in fiscal year (FY) 2024. SEED SONs may be found on the [SERDP website](#). Proposals marked with ITAR, EAR, or a limited distribution statement are not accepted.

This Broad Agency Announcement (BAA) is for all Private Sector Organizations including Small Businesses, Large Businesses, and Educational Institutions. DoD organizations or other federal agencies should refer to the FY24 Federal Call for Proposals located on the [SERDP website](#).

Based on an evaluation of the written proposal, SERDP will notify each proposer as to whether

the Government wishes to enter into negotiation for the award of a contract. Proposers are advised that only the Contracting Officer is legally authorized to commit the Government. SERDP reserves the right to select for award any, all, or none of the proposals received. SERDP also reserves the right to select a portion of the work proposed in any single proposal for award. There is no commitment by SERDP to make any contract awards, nor to be responsible for any money expended by the proposer before a contract award is made.

The SERDP Office manages the BAA solicitation along with the U.S. Army Corps of Engineers, Humphreys Engineer Center Support Activity (HECSA) in Alexandria, Virginia. For contracting information regarding this BAA solicitation, contact David A. Kaplan (703-428-8487; David.A.Kaplan@usace.army.mil) or Douglas E. Pohlman (703-428-6420; Douglas.E.Pohlman@usace.army.mil). General SERDP procedural questions may be referred to the SERDP office at 571-372-6565. For technical information, contact the individual listed in the SON.

1.2. EVALUATION SCHEDULE

DATE	ACTIVITY
November 3, 2022	BAA Released
March 14, 2023; 2:00 p.m. Eastern Time	SEED Proposals Due to SERDP
July – August 2023	Proposers Notified
April - May 2024	Anticipated Awards*

* Proposal packages will be sent to contracting in the first quarter of FY 2024. Contract award is expected in the third quarter of 2024, but not guaranteed.

2. PROPOSAL INSTRUCTIONS

2.1. PROPOSAL LENGTH AND FORMAT

SEED 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:

- The Technical Section of the proposal should be no longer than ten (10) pages.
- Proposals should be prepared in no less than 11- point size, any font.
- All margins (top, bottom, left, and right) should not be less than 1 inch.
- Pages should be numbered.
- Proposals should use the underlined headers provided in the Proposal Format below. These headers correspond directly to the evaluation criteria provided in this Program Announcement that will be used to review, evaluate, and select proposals.
- Tabs, table of contents, and other elements not prescribed in the guidance below are neither required nor desired.

Your proposal will be submitted on-line via the SERDP and ESTCP Management System (SEMS) website. No hard copies are required. **Proposals must be submitted prior to 2:00 p.m. Eastern Time on March 14, 2023.**

Complete submittal instructions can be found in Section 3 of this document.

2.2. ABSTRACT

In one (1) page or less, provide a brief summary of the information found in the proposal using the headers listed below:

- **System Generated Proposal Number:** Generated by the SERDP and ESTCP Management System (SEMS) when the proposal details are entered and saved in the system as outlined in Section 3 below.
- **Proposal Title**
- **Lead Principal Investigator**
- **Lead Organization**
- **Objective:** A brief description of the environmental problem to be addressed, emphasizing its relevance and importance to DoD, followed by a concise objective of the proposed project. Summarize what the project will accomplish and how the result will be applied to the problem.
- **Technical Approach:** A concise summary of the science or technology (e.g., the chemical process that will be evaluated, or the science behind a new sensor that will be developed, etc.) and a brief description of the methods (e.g., modeling, laboratory experiments, field work, etc.).
- **Expected Benefits:** A brief description of the expected benefits to DoD and the scientific community.

This abstract is **not** part of the 10-page restriction for the Technical Section of the proposal.

Note: For successful proposers, the abstract will be the basis for the project overview to be posted on the SERDP website. As such, it should be a stand-alone summary that is professionally written and edited.

2.3. TECHNICAL SECTION

The technical section shall be no more than ten (10) pages in length. Submit a detailed description of the research to be undertaken using the outline below:

1. **SERDP Relevance:** Provide a brief statement describing how the proposed research project responds to the SEED SON.
2. **Technical Objective:** State concisely the research objective. Outline specific technical questions to be answered by the research. Specifically, address how achieving the objectives of this project results in risk reduction or acquisition of the data necessary to develop a complete proposal for a more extensive follow-on project.
3. **Technical Approach (Background, Tasks, and Schedule):** Outline the research activities for which SERDP will provide support. Articulate specific technical goals and methods of the proposed project. While some allowance is made for encountering the problems and vagaries that are part of research, the proposer is expected to meet the provisions and milestones specified in this section. This section should be the primary focus of the proposal.
 - a. **Background:** Demonstrate a thorough understanding of the problem and knowledge of the state of the science. Frame the proposed research in terms of current gaps in understanding or data. Articulate the hypothesis that the project will investigate. Cite relevant literature references.
 - b. **Tasks:** Delineate the technical approach into hypothesis-driven tasks that clearly identify how the objectives of the proposed project will be addressed. For each task, provide details about the experimental design and methodology. If the methodology is new or unusual, describe it in sufficient detail for evaluation.
 - c. **Schedule:** Provide a project schedule that illustrates the timeline for each task and major deliverables in the form of a Gantt chart. Ensure that all required deliverables are included in the Gantt chart. Required deliverables are found in the reporting guidelines on the [SERDP website](#). Include an additional, zero-cost contingency year in the Gantt chart following the completion of all project tasks and deliverables. There should be no tasks during this contingency period.
4. **Research Team:** Identify the Principal Investigator(s) (PI) and the key co-performers and their respective organizations. Provide a short explanation regarding each key person's commitment of time to this research in person (months or years) and identify other personnel committed, such as number of graduate students, if any.
5. **Cooperative Development:** Identify government or non-government organizations that will be contributing direct funding or in-kind resources to the research effort. Describe existing or prospective joint sponsorship of any portion of the project. Where possible, provide estimates in dollars or level of effort equivalents of these in-kind

resources. In the absence of agreements among sponsors for joint support, the proposal should be structured so that the research can be carried out without the resources of any other sponsor. In an appendix to the proposal, provide letter(s) of support for any contributing efforts.

6. **Transition Potential:** Discuss how the proposed work will provide critical data or proof of concept. To the extent possible, outline objectives for follow-on research and the future development path if the SEED project is successful.

2.4. COST SECTION

The cost section of the proposal is an estimate of the total project cost. All SEED projects will be awarded as Firm Fixed Price (FFP) contracts; however, proposals should detail the individual cost elements (labor rates, unit of measure, other direct costs, travel, etc.). The required SEED FFP cost section template can be found on the [SERDP website](#). All rates should be fully burdened. The cost sheet for the lead organization should reflect the entire project cost. Separate cost sheets are required for each co-performer or subcontractor whose costs exceed \$50,000. Co-performers and sub-contractors are only required to complete the cost spreadsheet located on the [SERDP website](#). Subcontractors with costs over \$50,000 should complete all tabs as applicable. Subcontractors under \$50K may complete only the first tab. An accompanying cost breakdown narrative is required as an appendix. Cost sections in formats other than this template will not be accepted.

SEED projects will be funded at a level not to exceed the Simplified Acquisition Threshold of \$250,000 in total costs and projects should be completed within approximately one year from date of contract award. For planning purposes, proposers should assume a project initiation date of June 1, 2024, or later, and that the project will be funded in full at time of contract award. Include an additional, zero-cost contingency year in the cost spreadsheet following the final year of planned project execution. The contingency year must also be included on the proposal signature page generated in SEMS.

1. **Labor Costs:** Labor costs must show the projected amount of labor in a format which includes clearly defined units of measure and the quantity of labor with respect to the unit of measure used per each labor category. Labor categories include, but are not limited to the following: PI(s), associates, and assistants. Clearly indicate the unit of measure in the footnotes to the cost table. The total column is the amount per year to be paid to each performer on the project. Labor costs should be fully burdened for FFP contract. Labor costs can be unburdened.

The spreadsheet provided is a template and is not a one size fits all. Offerors should modify the spreadsheet as needed to incorporate all applicable indirect rates per DCAA/DHHS agreements. Below is a sample of common indirect charges:

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. **Contractor Acquired Property:** Provide an itemized list of contractor acquired property (CAP), if any, showing the cost for each item. Use the second tab in the cost spreadsheet template on the [SERDP website](#) as a template. CAP includes permanent equipment, defined as 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 the total estimated cost of expendable equipment and supplies. Include a separate itemized list using the third tab of the cost spreadsheet template on the [SERDP website](#).
6. **Subcontracts and Government Partners:** For any co-performer or subcontract totaling \$50,000 or more, provide a breakout of costs in a separate cost estimate using the cost spreadsheet template on the [SERDP website](#). Government partners will be provided a separate allocation of funds directly based upon this separate estimate. The lead organization should plan to manage all subcontracts to non-government partners.
7. **Travel Costs:** Estimate total travel costs. List the number of trips, the destinations, purposes, and costs per trip using reasonable and allowable rates in accordance with [FAR 31.205-46](#) for all proposed travel. Use the fourth tab in the cost spreadsheet template on the [SERDP website](#) as a template for the travel budget breakdown. Multiple trips to the same location can be included in a single table. For planning purposes, SERDP will support attendance at one domestic technical meeting. SERDP intends to sponsor an annual technical Symposium in the Washington, D.C. area that investigators are expected to attend. If applicable, investigators are encouraged to budget for students and postdocs supporting the project to attend this meeting. In the event the Symposium is not held, investigators may attend an appropriate meeting of their choice at comparable cost. In addition, PIs are required to give a presentation in or near Arlington, VA at the conclusion of the project. For trips where the specific destination has not yet been determined, budget for a representative location and indicate your assumptions in a footnote to the table.
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 SERDP reporting requirements are on the [SERDP website](#). Include a separate itemized list using the fifth tab of the cost spreadsheet template on the [SERDP website](#).
9. **Profit:** Eligible organizations shall list the profit (fee), if any, applied to the demonstration project. Indicate in the footnote to the table the cost elements included in the basis for the profit.
10. **Cost by Task Summary Table:** Include a total cost matrix with breakout of cost per task using the template in the sixth tab of the cost spreadsheet template found on the [SERDP website](#). These cost numbers must match those on the main cost spreadsheet.

2.5. APPENDICES

Appendices to the proposal include:

1. **Required: Abbreviated Curriculum Vitae (CV):** CVs (3 pages or less per CV) for each PI involved with the project that provide their relevant research experience and

publications. Include the full mailing addresses, phone numbers, and email addresses for each PI listed.

2. **Required: List of Acronyms:** Provide a complete list of acronyms used in your proposal and their definitions. List the proposal number at the top of the page.
3. **Required, if literature is cited: Literature Citations:** Provide literature citations for any material cited in the technical section or the supporting technical data.
4. **Required, Cost Breakdown Narrative:** Provide a 1-2 page narrative discussing each cost element in sufficient detail to explain why the cost proposed is considered fair and reasonable, including the techniques used to determine subcontractor costs fair and reasonable. The narrative should be supported by the cost backup documentation required in Section 5.6 of this instruction.
5. **Optional: Supporting Technical Data:** (limited to 5 pages) Data sheets, charts, referenced research extracts.
6. **Optional: Existing Support:** If the PI is funded by other programs to conduct research that overlaps or parallels the current proposal, provide a brief description of that support (½ page per relevant effort).
7. **Optional: Letters Supporting Collaborative Efforts:** If you are providing letters of support, they must be included in your proposal. See 'Cooperative Development' in the Technical Section format.

Appendices are not part of the 10-page restriction for the Technical Section of the proposal.

3. SUBMITTAL

Proposals are submitted via 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 March 14, 2023.**

Complete all steps below in order to submit a proposal.

- 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 “Signature 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. Please note, the contracting process is subject to a number of delays and may not be completed until late September in the year following selection. If possible, pricing valid until September 30, 2024 will minimize requests for new cost information before contract award. The “Signature Page” must include the zero-cost contingency year requested in Section 2.3.
- Upload the signed “Proposal Details” page.
- Add the system-generated proposal number, project title, lead investigator name, and organization to first page of proposal as instructed in Section 2.2 above.
- Create a single PDF file that contains all required sections outlined in the proposal guidance.
- 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 SERDP.

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 SERDP Office at 571-372-6565.

4. EVALUATION FACTORS FOR SEED PROPOSALS

The following evaluation factors will be the sole basis for reviewing proposals pursuant to the SON. SERDP Relevance is evaluated on a pass/fail basis. Technical Merit is more important than Transition Potential and the Cost of Proposal. ***Note the cost limitation of \$250,000 described above in section 2.4 remains applicable.***

SERDP RELEVANCE

Proposal reviewers will assess whether the proposal (1) responds to the objectives as described in the SON, and (2) falls within the SERDP mission to support basic and applied research or advanced technology development. SERDP Relevance is a threshold review and if the proposal is not determined to be relevant, no further evaluation of the proposal will be made.

TECHNICAL MERIT

The overall scientific and technical merit of the proposal must be clearly identifiable. The evaluation will consider the proposed approach and its substantiation by calculations, test data, and references. Emphasis will be placed on the proposer's demonstration of a thorough understanding of the environmental problem. The proposer must demonstrate the ability to execute the work by providing a comprehensive, logical, orderly, and concise plan that indicates major tasks, milestones, critical paths, go/no-go decision points and key events, leading to the completion of the project in the proposed time frame. Strong consideration will be given to innovation; however, the degree of risk associated with individual proposals will be weighed against potential benefits. The proposal should clearly articulate how the research will advance the state of the science.

TRANSITION POTENTIAL

The transition potential of the proposed research product(s) is demonstrated by the proposer's clear identification of how the proposed work will provide the critical proof of concept and an identification of the future development path if the SEED project is successful.

COST OF PROPOSAL

Cost realism and reasonableness may also be considered during the selection of acceptable proposals in accordance with FAR 35.016(e). Costs should be appropriate and traceable to the level of effort required to execute the project.

5. REQUIREMENTS FOR PROPOSALS SELECTED FOR FUNDING

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

5.1. REVISED PROPOSAL

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.

5.2. SAFEGUARDING COVERED DEFENSE INFORMATION AND CYBER INCIDENT REPORTING

DFARS Clause 252.204-7012 Safeguarding Covered Defense Information and Cyber Incident Reporting (OCT 2016) as prescribed in DFARS 204.7304(c) is a mandatory clause that will be included in all SERDP contracts. DFARS 204.7304(c) reads:

“(c) Use the clause at 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, in all solicitations and contracts, including solicitations and contracts using FAR part 12 procedures for the acquisition of commercial items, except for solicitations and contracts solely for the acquisition of commercially available off-the-shelf (COTS) items.”

Most SERDP projects do not result in defense covered information. A written determination will be made the SERDP program office at final project acceptance for those that do. However, any resultant contract will not include addendums or local text regarding this mandatory clause. DFARS 252.204-7012 is a mandatory clause that will not be removed from any contract for a SERDP project, nor will DFARS 252.204-7012 be altered in any way. For more information please see the link below:

<https://business.defense.gov/Small-Business/Cybersecurity/>

SERDP is considered Fundamental Research is defined in the USD (AT&L) memorandum on Fundamental Research, dated May 24, 2010. "Fundamental research" means basic and applied research in science and engineering, the result of which ordinarily are published and shared broadly within the scientific community. In rare cases, a project may involve sensor or performance data that necessitate limitations on the distributions of the project results. A determination will be made by the SERDP program office if an individual project is likely to fall into this latter category.

5.3. COVERED TELECOMMUNICATIONS EQUIPMENT

In accordance with Section 889(a)(1)(B) of the National Defense Authorization Act (NDAA) for Fiscal Year 2019 the provision at FAR 52.204– 24, Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment, and the clause at FAR 52.204– 25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment will be included with all contracts issued in connection with this Broad Agency Announcement. Additionally, all contracts awarded under this Broad Agency Announcement will include the clause at FAR 52.-204-26 Covered Telecommunications Equipment or Services.

Contractors submitting proposal shall include a statement ensuring their representations are up to date in the System for Award Management (<http://sam.gov>) as applicable under IAW FAR 52.204-24, FAR 52.204-25 and, or FAR 52.204-26. Contracts WILL NOT be issued to Contractors who do not have their representations and certifications updated in SAM.gov

5.4. EFFECTIVE DATES OF AWARDED CONTRACTS

All contracts awarded off of this BAA require bilateral execution and will be executed in counterparts. Any contract awarded off of this BAA will first be sent to the successful offeror(s) for signature and execution of the offeror's counterpart. No contracts which are executed solely by the successful offeror(s) are effective. **Offerors shall not begin performance prior to the receipt of a fully executed contract. Offeror(s) who begin performance prior to receipt of a fully executed contract are performing at their own cost and at their own risk.**

Contracts are not effective until the Government's Contracting Officer signs and executes the Government's counterpart and the counterpart with the Government's Contracting Officer's signature is distributed to the successful offeror(s).

5.5. OTHER COST AND PRICING DATA

All successful offeror(s) will result in firm fixed price contract awards. Successful offerors will be required to submit Other Cost and Pricing Data for the Government's required pre-award contract price/cost analysis. Submitting this data along with the final proposal will help expedite the contract process. Other Cost and Pricing Data includes:

1. Cost backup data in cost-type format to allow the Government to perform required pre-award price and cost analysis. Offerors who are unable to provide a cost-type format cost sheet may submit all cost and pricing data in firm fixed price format with fully burdened pricing. The Government must be able to establish from the Other Cost and Pricing Data provided by the successful offeror that a fair and reasonable price will be achieved prior to awarding a contract.
2. Cost Proposal Backup Documents including:
 - a. Payroll backup documents which show wages and fringe;
 - b. Defense Contract Audit Agency (DCAA) Rate Agreement, Forward Pricing Rate Agreement (FPRA), Forward Pricing Rate Recommendations, Department of Health and Human Services College Rate Agreement, or Navy Rate Agreement, and the point of contact for the same. In the event of no established rate agreement, submit the last three years of actual incurred rate data for analysis;
 - c. Details with respect to materials, supplies, and consumables (MSCs) including quantities and type of MSCs (ex. 500 gal. hydrogen peroxide at \$2/gal or, 20 large columns at \$50/column, etc.) which includes evidence of quotes for MSCs (actual quotes are preferred);
 - d. Quotes for any subcontracted services detailed as other direct costs and not directly allocable to subcontractor expenses (i.e. if laboratory costs are listed, the laboratory pricing information);

- e. Travel specifics (who, where, when, purpose, mode of transportation), etc.
GSA per-diem and lodging rates may be used for the destination cities

Offerors with subcontractor costs in excess of \$50,000 shall include a costsheet and backup data with similar details as the Offeror for each subcontractor exceeding \$50,000 in costs.