

Broad Agency Announcement Defense Sciences Office (DSO) Office-wide BAA Defense Sciences Office HR001125S0013

June 3, 2025

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016 and 2 CFR § 200.203. Any resultant award negotiations will follow all pertinent law and regulation, and any negotiations and/or awards for procurement contracts will use procedures under FAR 15.4, Contract Pricing, as specified in the BAA.

Overview Information:

- Federal Agency Name Defense Advanced Research Projects Agency (DARPA), Defense Sciences Office
- Funding Opportunity Title Defense Sciences Office (DSO) Office-wide BAA
- Announcement Type Initial Announcement
- Funding Opportunity Number HR001125S0013
- Assistance Listing Number: 12.910 Research and Technology Development
- Dates/Time All Times are Eastern Time Zone (ET)
 - o Posting Date: June 3, 2025
 - o Question Submittal Closing Date: May 8, 2026, at 4:00 PM
 - Executive Summary: Executive Summaries may be submitted on a rolling basis until June 2, 2026, at 4:00 PM
 - Proposal Abstract: Abstracts may be submitted on a rolling basis until June 2, 2026, at 4:00 PM
 - Proposal Due Date: Proposals may be submitted on a rolling basis until June 2, 2026, at 4:00 PM
- Anticipated individual awards Multiple awards are anticipated.
- **Types of instruments that may be awarded** Cooperative Agreements, Procurement Contracts, Other Transaction for Research, and Other Transaction for Prototype
- NAICS Code: 541713, 541714, 541715, 541720
- Agency contact
 - Points of Contact

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DARPA/DSO

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Section I: Funding Opportunity Description

The Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is soliciting proposals that investigate innovative approaches that enable revolutionary advances in science, devices, or systems for national security applications. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

The DARPA DSO regularly publishes Broad Agency Announcements (BAAs) requesting responses to specific program topics. This announcement seeks revolutionary research ideas for topics not being addressed by ongoing DSO programs or other published solicitations.

To avoid proposals that duplicate existing activities or are responsive to other published DSO solicitations, potential proposers are highly encouraged to review current DSO programs and solicitations, respectively listed at http://www.darpa.mil/about-us/offices/dso and http://www.darpa.mil/work-with-us/opportunities. Contacting DSO program managers to discuss their research interests is strongly encouraged. A current list of program managers is available at http://www.darpa.mil/about-us/people.

A. Introduction

The mission of the DARPA DSO is to identify and spearhead the next generation of scientific discovery to fuel innovation in research and development for the DoD. DSO serves as "DARPA" by developing and executing an aggressive and forward-leaning portfolio that expands the art of the possible across a broad set of technical areas. DSO aims to create strategic surprise advantage for the DoD by pushing technology toward its fundamental scientific limits. We work to prevent technological surprise by understanding the path commercial research and development (R&D) is taking, anticipating that our adversaries will exploit available technology to develop new capabilities in the coming decades. In addition, DSO looks for transformative trends at the global scale and their potential impact on our nation.

In support of this mission, the DSO Office-wide BAA invites proposers to submit innovative basic or applied research concepts or studies and analysis proposals. Proposals in novel areas DSO has not considered are welcome. However, if the proposal addresses one or more of the following technical thrust areas, please indicate which one(s) in your submission: (1) Materials, Manufacturing, and Structures, (2) Sensing, Measuring, and Affecting, (3) Math, Computation, and Processing, and (4) Complex, Dynamic, and Intelligent Systems. Each thrust area description below includes a list of example research topics that highlight several (but not all) potential areas of interest. Proposals must investigate innovative research approaches that enable revolutionary advances. DSO is explicitly not interested in approaches or technologies that primarily result in evolutionary improvements to the existing state of practice or are for manufacturing scale-up.

B. Technical Thrust Area Descriptions

To support its mission, DSO is interested in engaging with the R&D community to tackle complex challenges and develop impactful capabilities. DSO organizes its research portfolio into the high-interest thrust areas described below, but will consider any fundamental research concept, idea, or effort that addresses DARPA's mission to make pivotal investments in breakthrough technologies for national security.

1. Materials, Manufacturing, and Structures

Breaking the tension between performance and efficiency for critical parts, production

processes, energetics, superconductors, and propulsion.

2. Sensing, Measuring, and Affecting

Developing and leveraging new science to overcome existing barriers limiting the performance and/or practicality of sensing, measurement, and control, to achieve orders-of-magnitude improvement in operational capabilities.

3. Math, Computation, and Processing

Enabling quantum, reimagining classical, and developing entirely new forms of computing for enhanced efficiency and new capabilities. Solutions may range from new approaches to hardware (implementation) to representation and computation.

4. Complex, Dynamic, and Intelligent Systems.

Creating new scientific capabilities for classes of systems that evolve and adapt and for which traditional reductionist, data-driven, and statistical methods fail. Systems of interest include, but are not limited to, foundations of intelligence, human-AI ecosystems, homeostatic mechanisms, and global systems.

Section II: Evaluation Criteria

- Proposals will be evaluated using the following criteria listed in <u>descending order of</u> <u>importance</u>: Overall Scientific and Technical Merit; Potential Contribution and Relevance to the DARPA Mission; and Cost and Schedule Realism.
 - Overall Scientific and Technical Merit: The proposed technical approach is innovative, feasible, achievable, and complete. Detailed technical rationale is provided delineating why the proposed approach can achieve the proposed goals and metrics. The proposed technical team has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements provided are complete and logically sequenced, with all proposed deliverables clearly defined so the final outcome of the award's work achieves the goal. The proposal identifies major technical risks, and planned mitigation efforts are clearly defined and feasible.
 - o **Potential Contribution and Relevance to the DARPA Mission**: The potential contributions of the proposed effort bolster the national security technology base and support DARPA's mission to make pivotal early technology investments that create or prevent technological surprise. The proposed intellectual property restrictions (if any) will not significantly impact the Government's ability to transition the technology.
 - Cost and Schedule Realism: The proposed costs and schedule are realistic for the technical and management approach and accurately reflect the technical goals and objectives of the solicitation. All proposed labor, material, and travel costs are necessary to achieve the proposed objectives and metrics, are consistent with the proposer's Statement of Work, and reflect a sufficient understanding of the costs and level of effort needed to successfully accomplish the proposed technical approach. The costs for the prime proposer and proposed subawardees are substantiated by the details provided in the proposal (e.g., the type and number of labor hours proposed per task, the types and quantities of materials, equipment and fabrication costs, travel and any other applicable costs, and the basis for the estimates). The proposed schedule aggressively pursues performance metrics in an efficient time frame that accurately accounts for the anticipated workload. It is expected that the effort will leverage all available, relevant, prior research to obtain the maximum benefit from the available funding. For proposals containing cost share, the proposer has provided sufficient rationale regarding the appropriateness of the cost share arrangement, relative to the objectives of the proposed solution (e.g., high likelihood of commercial application, etc.).
- Unless otherwise specified in this announcement, for additional information on how DARPA
 reviews and evaluates proposals through the Scientific Review Process, please visit: Proposer Instructions: General Terms and Conditions

Section III: Submission Information

• This announcement allows for multiple award instrument types to be awarded to include Procurement Contracts, Cooperative Agreements, Other Transaction for Research, and Other Transaction for Prototype. Some award instrument types have specific cost-sharing requirements. The following websites are incorporated by reference and contain additional information regarding overall proposer instructions, general terms and conditions, and each specific award instrument type.

Proposers must review the following links:

- Proposer Instructions and General Terms and Conditions: <u>Proposer Instructions:</u> General Terms and Conditions
- o Procurement Contracts: <u>Proposer Instructions: Procurement Contracts</u>
- o Cooperative Agreements: Proposer Instructions: Grants/Cooperative Agreements
- Other Transaction for Research and Other Transaction for Prototype: <u>Proposer Instructions</u>: Other <u>Transactions</u>
- Prior to submitting a full proposal, proposers are strongly encouraged to first submit an executive summary or abstract as described below. This process allows a proposer to ascertain whether the proposed concept is applicable to the DSO Office-wide BAA, important to the DSO mission and portfolio, and currently of interest.
- Executive summaries, abstracts, and full proposals that are not found to be applicable to the DSO Office-wide BAA as defined above may be deemed non-conforming and removed from consideration. All executive summaries, abstracts, and full proposals must provide sufficient information to assess the validity/feasibility of their claims as well as comply with the requirements outlined herein for submission formatting, content, and transmission to DARPA. Executive summaries, abstracts, and full proposals that fail to do so may be deemed non-conforming and removed from consideration. Proposers will be notified of non-conforming determinations via letter.
- This announcement contains an executive summary phase. Executive summaries are strongly encouraged but not required. Executive Summaries will be reviewed on a rolling basis and can be submitted until June 2, 2026, at 4:00 PM as stated in the Overview section. Executive Summary submissions must provide Attachment A. DARPA will respond to executive summaries with a brief statement either encouraging or discouraging submission of a follow-on abstract or full proposal. In keeping with the intent of the executive summary, these responses will generally be limited to a statement of interest (or lack thereof), rather than providing detailed feedback. Regardless of DARPA's response to an executive summary, proposers may submit an abstract or full proposal. Regardless of the future instrument type desired, all executive summaries must be submitted through the Broad Agency Announcement Tool (BAAT). For instructions on how to submit to BAAT, visit the "Unclassified Submission Instructions" section at Proposer Instructions: General Terms and Conditions.
- This announcement contains an abstract phase. Abstracts are strongly encouraged but not required. Abstracts will be reviewed on a rolling basis and can be submitted until June 2, 2026, at 4:00 PM as stated in the Overview section. Additional instructions for abstract

submission are contained within <u>Attachments B and C</u>. DARPA will respond to abstracts with a statement as to whether DARPA is interested in the idea. If DARPA does not recommend the proposer submit a full proposal, DARPA will provide feedback to the proposer regarding the rationale for this decision. Regardless of DARPA's response to an abstract, proposers may submit a full proposal. DARPA will review all conforming full proposals using the published evaluation criteria and without regard to any comments resulting from the review of an abstract. Proposers should note that a favorable response to an abstract is not a guarantee that a proposal based on the abstract will ultimately be selected for award negotiation. Regardless of instrument type desired, all abstracts must be submitted through the Broad Agency Announcement Tool (BAAT). For instructions on how to submit to BAAT, visit the "Unclassified Submission Instructions" section at <u>Proposer Instructions:</u> General Terms and Conditions.

- Full proposals can be submitted through June 2, 2026, at 4:00 PM as stated in the Overview section.
 - Attachments D, E, F, and G contain specific instructions and templates and constitute a full proposal submission for proposers requesting either a Procurement Contract or Other Transaction (OT). Proposers requesting Procurement Contracts or OT must submit proposals through the Broad Agency Announcement Tool.
 - Attachments D, E, and G contain specific instructions and templates and constitute a full proposal submission for proposers requesting a Cooperative Agreement. Proposers requesting a Cooperative Agreement must also complete the SF424 (R&R) Budget form through Grants.gov. Proposers requesting a Cooperative Agreement must submit proposals through grants.gov.
 - This announcement allows for an accelerated award option for selected full proposals that do not exceed \$2,000,000 for proposers who have agreed to prescribed stipulations as part of their full proposal submissions. Awards for such proposals would be made within 30 days of the selection notification. Please see Attachments I through N for details.
 Attachment I (and Attachment M or N if requesting an Other Transaction for Agreement) must be included in the proposal submission to receive this type of award. Proposers requesting this accelerated award option must submit proposals through the Broad Agency Announcement Tool.

• BAA Attachments:

- o **(required if submitting an executive summary) Attachment A**: Executive Summary Template
- o (required if submitting an abstract) Attachment B: Abstract Summary Slide Template
- o (required if submitting an abstract) Attachment C: Abstract Instructions and Template
- o (required) Attachment D: Proposal Summary Slide Template
- o **(required) Attachment E**: Proposal Instructions and Volume I Template (Technical and Management)
- (required for proposer requesting Procurement Contracts or Other Transaction Agreements for Prototype) Attachment F: Proposal Instructions and Volume II Template (Cost)
- o (required) Attachment G: DARPA Cost Proposal Spreadsheet

- o (reference) Attachment H: Classified Submission Requirements, Instructions and Procedures
- o (required for proposers requesting accelerated award) Attachment I: Accelerated Award Option Election and Attestation Form
- o **(reference) Attachment J:** Accelerated Contract Award Option Model Contract (Large Business)
- o (reference) Attachment K: Accelerated Contract Award Option Model Contract (Small Business)
- o **(reference) Attachment L:** Accelerated Contract Award Option Baseline Model Contract Addendum: Additional Circumstance-Driven Clauses
- (required for proposers requesting an accelerated OT Prototype award) Attachment
 M: Accelerated Contract Award Option Model OT Agreement for Prototype
- (required for proposers requesting an accelerated OT Research award) Attachment
 N: Accelerated Contract Award Option Model OT Agreement for Research
- o **(reference) Attachment O**: DSO's General Controlled Unclassified Information (CUI) Guide

Section IV: Special Considerations

- This announcement, stated attachments, and websites incorporated by reference constitute the entire solicitation. In the event of a discrepancy between the announcement, attachments, or websites, the announcement takes precedence.
- All responsible sources capable of satisfying the Government's needs, including both U.S. and non-U.S. sources, may submit a proposal DARPA will consider. Historically Black Colleges and Universities, Small Businesses, Small Disadvantaged Businesses, and Minority Institutions are encouraged to submit proposals and join others in submitting proposals; however, no portion of this announcement will be set aside for these organizations' participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities. Non-U.S. organizations and/or individuals may participate to the extent that such participants comply with any necessary nondisclosure agreements, security regulations, export control laws, and other governing statutes applicable under the circumstances.
- Instructions for classified submissions are contained within <u>Attachment H</u>: Classified Submission Requirements, Instructions and Procedures. For a full proposal that includes both classified and unclassified information, the proposal may be separated into an unclassified and a classified portion. The proposal should use the unclassified portion to the maximum extent practicable. Instructions regarding a combined classification submission are contained within <u>Attachment H</u>: Classified Submission Requirements, Instructions and Procedures.
- This program is subject to <u>Attachment O</u>: DSO's General Controlled Unclassified Information (CUI) Guide signed May 13, 2025. All individuals accessing CUI agree to protect CUI in accordance with DoD Instruction 5200.48 CONTROLLED UNCLASSIFIED INFORMATION (CUI) and NIST Special Publication 800-171 Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations.
- Federally Funded Research and Development Centers (FFRDC), University Affiliated Research Centers (UARCs), and Government Entities to include National Laboratories are not eligible to propose to this solicitation.
- As of the date of publication of this solicitation, the Government cannot identify whether the work under this solicitation may be considered fundamental research and may award both fundamental and non-fundamental research. For additional information on fundamental research, please visit Proposer Instructions: General Terms and Conditions.
- Proposers should indicate in their proposal whether they believe the scope of the research included in their proposal is fundamental or not. While proposers should clearly explain the intended results of their research, the Government shall have sole discretion to determine whether the proposed research shall be considered fundamental and to select the award instrument type. Appropriate language will be included in resultant awards for nonfundamental research to prescribe publication requirements and other restrictions, as appropriate. This language can be found at Proposer Instructions: General Terms and Conditions.
- For certain research projects, it may be possible that although the research to be performed by a potential awardee is non-fundamental research, their proposed subawardee's effort may

be fundamental research. It is also possible the research performed by a potential awardee is fundamental research while their proposed subawardee's effort may be non-fundamental research. In all cases, it is the potential awardee's responsibility to explain in their proposal which proposed efforts are fundamental research and why the proposed efforts should be considered fundamental research.

- DARPA's Fundamental Research Risk-Based Security Review Process (formerly CFIP, now FRR-BS aka "FERBS") is an adaptive risk management security program designed to help protect the critical technology and performer intellectual property associated with DARPA's research projects by identifying the possible vectors of undue foreign influence. DARPA will create risk assessments of all proposed Senior/Key Personnel selected for negotiation of a fundamental research cooperative agreement award. The DARPA risk assessment process will be conducted separately from the DARPA scientific review process and adjudicated prior to final award. For additional information on this process, please visit Proposer Instructions: Grants/Cooperative Agreements.
- Proposals could potentially include Human Subjects Research (HSR) and/or Animal Use.
 Proposers that anticipate involving human subjects or animals in the proposed research must
 comply with the approval procedures detailed at https://www.darpa.mil/work-with-us/humanresearch, to include providing the information specified therein as required for
 proposal submission.
- DARPA has streamlined our Broad Agency Announcements and is interested in your feedback on this new format. Please send any comments to DARPAsolicitations@darpa.mil.

Additional Resources Available to Proposers

- The APEX Accelerators program, formerly known as the Procurement Technical Assistance Program (PTAP), focuses on building a strong, sustainable, and resilient U.S. supply chains by assisting a wide range of businesses that pursue and perform under contracts with the DoD, other federal agencies, state and local governments and with government prime contractors. See https://www.apexaccelerators.us/ for more information. APEX Accelerators help businesses:
 - Complete registration with a wide range of databases necessary for them to participate in the government marketplace (e.g., SAM).
 - o Identify which agencies and offices may need their products or services and how connect with buying agencies and offices.
 - o Determine whether they are ready for government opportunities and how to position themselves to succeed.
 - Navigate solicitations and potential funding opportunities.
 - Receive notifications of government contract opportunities on a regular basis.
 - o Network with buying officers, prime contractors, and other businesses.
 - Resolve performance issues and prepare for audit, only if the service is needed, after receiving an award.

- Project Spectrum is a nonprofit effort funded by the DoD Office of Small Business Programs to help educate the Defense Industrial Base (DIB) on compliance. Project Spectrum is vendor-neutral and available to assist businesses with their cybersecurity and compliance needs. Their mission is to improve cybersecurity readiness, resilience, and compliance for small/medium-sized businesses and the federal manufacturing supply chain. Project Spectrum events and programs will enhance awareness of cybersecurity threats within the manufacturing, research and development, as well as knowledge-based services sectors of the industrial base. Project Spectrum will leverage strategic partnerships within and outside of the DoD to accelerate the overall cybersecurity compliance of the DIB.
 www.Projectspectrum.io is a web portal that will provide resources such as individualized dashboards, a marketplace, and Pilot Program to help accelerate cybersecurity compliance.
- DARPAConnect offers free resources to potential performers to help them navigate DARPA, including "Understanding DARPA Award Vehicles and Solicitations," "Making the Most of Proposers Days," and "Tips for DARPA Proposal Success." Join DARPAConnect at www.DARPAConnect.us to leverage on-demand learning and networking resources.