



**Broad Agency Announcement**  
**Strategic Technology Office-wide Broad Agency**  
**Announcement**

**Strategic Technology Office**

**HR001125S0001**

**November 15, 2024**

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016 and 2 C.F.R. § 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), Strategic Technology Office
- **Funding opportunity title** – Strategic Technology Office-wide Broad Agency Announcement
- **Announcement type** – Initial announcement
- **Funding opportunity number** – HR001125S0001
- **Assistance listing number** – Not applicable
- **Dates/Time - All times are Eastern Time Zone (ET)**
  - Posting date: November 15, 2024
  - Abstract due date: Abstracts may be submitted on a rolling basis until 11:59 PM on the closing date.
  - Proposal due date: Proposals may be submitted on a rolling basis until 11:59 PM on the closing date.
  - Closing date: October 31, 2025
- **Anticipated individual awards** - Multiple awards are anticipated.
- **Types of instruments that may be awarded** – Procurement contract, cooperative agreement, or other transaction
- **NAICS code:** 541715
- **Agency contact**
  - Points of Contact

The BAA Coordinator for this effort may be reached at:  
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## **SECTION I: FUNDING OPPORTUNITY DESCRIPTION**

The Defense Advanced Research Projects Agency (DARPA) anticipates funding a limited number of proposals under this solicitation. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems.

The Strategic Technology Office (STO) at DARPA regularly publishes BAAs requesting responses to specific program topics. This announcement seeks revolutionary research ideas for topics not addressed by ongoing STO programs or other published BAA solicitations.

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

This BAA is being issued, and any resultant selection will be made, using the procedures under Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016 and 2 C.F.R. § 200.203. Any negotiations and/or awards of procurement contracts will use procedures under FAR 15.4, Contract Pricing. Proposals received as a result of this BAA shall be evaluated in accordance with evaluation criteria specified herein through a scientific review process.

DARPA BAAs are posted on the SAM website under the Contract Opportunities link at <https://sam.gov/>. The following information is for those wishing to respond to the BAA.

### **A. STO MISSION AND THRUST AREAS**

DARPA's STO seeks innovative ideas and disruptive technologies that provide the U.S. military and national security leaders with trusted, disruptive capabilities across all physical domains (Air, Space, Sea, and Land) and across the spectrum of competition. STO programs deliver solutions at speed and scale for today's warfighters while developing the resilient "breakthrough" systems and technologies needed for future battlespaces. STO does not focus on one area of responsibility or phenomenology. Rather, STO programs capture the strategic, logistical, and tactical complexity of today's national security environments.

STO is a "systems office" seeking to create new "proof-of-concept" mission systems. Its goals are to develop and demonstrate new capabilities that expand what is technically possible.

### **B. TOPIC AREAS OF INTEREST**

Research areas of current interest to STO include, but are not limited to, the following topics:

- Acoustic communication and sensing

- Adaptability
- Advanced computing
- Additive manufacturing
- Architecture and advanced systems engineering
- Artificial intelligence
- Autonomy and control algorithms
- "Big data" analytics
- Combat identification
- Command and control (C2)
- Communications and networking, virtual and adaptive
- Complexity management
- Critical infrastructure defense
- Decision aids and C2 technology
- DevOps and novel software development and integration
- Directed energy (DE)
- Distributed autonomy and teaming (machine-machine, human-machine)
- Economic security
- Effects chain functions (disaggregated find, fix, finish, target, engage, assess)
- Electro-optic/infrared sensors
- Electromagnetic warfare (EW)
- High-frequency (HF) communications and sensing
- High voltage electric power systems and architecture
- Human behavior modeling
- Human-machine symbiosis
- Industrial engineering
- Integration and reliability technologies
- Interoperability
- Logistics
- Modeling and simulation
- Microwave and millimeter wave communications and sensing
- Novel kinetic effects
- Non-kinetic effects (EW, DE, cyber)
- Optical technologies
- Photonics
- Radio technologies (especially software-defined and novel waveforms and processing)
- Radar and adaptive arrays
- Resilient systems
- Robotics
- Seekers and other expendable sensors and processing
- Sensors and analytics
- Signal processing
- Space sensors, communications, autonomy, and architectures (especially supporting proliferated low earth orbit constellations)
- Strategy analysis technology

- Supply chain analytics
- System of systems
- Undersea and seabed technology
- Tactics development technology
- Testing and data collection
- Very low earth orbit (VLEO) technology
- Very low frequency (VLF) technology

### **C. GENERAL ADVICE FOR SUBMITTING NEW IDEAS TO STO**

Proposers<sup>1</sup> are welcome to submit proposals of any scope and duration. However, submissions proposing short-duration exploratory projects, such as analytical studies or proof of concept experiments, to inform new program ideas will be given priority. An ideal study helps a program manager answer some of the Heilmeier Questions (see <https://www.darpa.mil/work-with-us/heilmeier-catechism>), such as: "Why do you think your approach will be successful?"; "What are the risks?"; and "What difference will it make?" In STO, we are a mission-centric office and try to align our answers to these questions with how a new capability will change the nature of warfare and the manner in which the U.S. defends itself.

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<sup>1</sup> As used throughout this solicitation, "proposer" refers to the lead organization on a submission to this solicitation. The proposer is responsible for ensuring that all information required by a solicitation—from all team members—is submitted in accordance with the solicitation.

## **SECTION II: EVALUATION CRITERIA**

Proposals will be evaluated using the following criteria listed in *descending order of importance*: Overall Scientific and Technical Merit; Potential Contribution and Relevance to the DARPA Mission; and Cost Realism.

### **A. OVERALL SCIENTIFIC AND TECHNICAL MERIT:**

The proposed technical approach is innovative, feasible, achievable, and complete. The proposed technical team has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements provided are complete and in a logical sequence with all proposed deliverables clearly defined such that a final outcome that achieves the goal can be expected as a result of award. The proposal identifies major technical risks, and planned mitigation efforts are clearly defined and feasible. The proposal clearly explains the technical approach(es) that will be employed and provides ample justification as to why the approach(es) is feasible.

### **B. 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 proposer clearly demonstrates its plans and capabilities to contribute to U.S. national security and U.S. technological capabilities. The evaluation will consider the proposer's plans and capabilities to transition proposed technologies to U.S. national security applications and to U.S. industry. The evaluation may consider the proposer's history of transitioning or plans to transition technologies to foreign governments or to companies that are foreign-owned, controlled, or influenced. The evaluation will also consider the proposer's plans and capabilities to assist its employees and agents to be eligible to participate in the U.S. national security environment.

In addition, the evaluation will take into consideration the proposed technology transition strategy and the extent to which the proposed intellectual property (IP) rights will potentially impact the government's ability to transition the technology, as applicable.

### **C. COST REALISM:**

The proposed costs are realistic for the technical and management approach and accurately reflect the technical goals and objectives of the solicitation. The proposed costs 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 sub-awardees 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). It is expected that the effort will leverage all available relevant prior research in order to obtain the maximum benefit from the available funding. For efforts with a likelihood of

commercial application, appropriate direct cost sharing may be a positive factor in the evaluation. DARPA recognizes that undue emphasis on cost may motivate proposers to offer low-risk ideas with minimum uncertainty and to staff the effort with junior personnel in order to be in a more competitive posture. DARPA discourages such cost strategies.

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 and General Terms and Conditions](#).

### SECTION III: SUBMISSION INFORMATION

This announcement allows for multiple award instrument types to be awarded, including procurement contracts, cooperative agreements, and other transactions. 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.

- **Proposer Instructions and General Terms and Conditions:** [Proposer Instructions and General Terms and Conditions](#)
- **Procurement Contracts:** [Proposer Instructions: Procurement Contracts](#)
- **Assistance (Cooperative Agreements):** [Proposer Instructions: Grants/Cooperative Agreements](#)
- **Other Transaction Agreements:** [Proposer Instructions: Other Transactions](#)

Prior to submitting a full proposal, proposers are *strongly encouraged* to first submit an abstract as described below. **Attachments A and B** contain specific instructions and templates and constitute a full proposal submission. This process allows a proposer to ascertain whether the proposed concept is (1) applicable to the STO Office-wide BAA and (2) currently of interest. For the purposes of this BAA, applicability is defined as follows:

- The proposed concept is applicable to the technical areas described herein.
- The proposed concept is important to STO's current investment portfolio.
- The proposed concept investigates an innovative approach that enables revolutionary advances, i.e., will not primarily result in evolutionary improvements to the existing state of practice.
- The proposed work has not already been completed (i.e., the research element is complete, but manufacturing/fabrication funds are required).
- The proposer has not already received funding or a positive funding decision for the proposed concept (whether from DARPA or another Government agency).

Full proposals are accepted before the due date outlined in this announcement. **Attachments C, D, E, and F** contain specific instructions and templates and constitute a full proposal submission. Please visit [Proposer Instructions and General Terms and Conditions](#) for specific information regarding submission methods through the Broad Agency Announcement Tool (BAAT).

Abstracts and full proposals that are not found to be applicable to the STO Office-wide BAA as defined above may be deemed non-conforming<sup>2</sup> and removed from consideration. All abstracts and full proposals must provide sufficient information to assess the validity/feasibility of their claims and comply with the requirements outlined herein for submission formatting, content, and transmission to DARPA. 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.

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<sup>2</sup> “Conforming” is defined as having been submitted in accordance with the requirements outlined herein.



- **BAA Attachments:**
  - **(required) Attachment A:** Abstract Summary Slide Template
  - **(required) Attachment B:** Abstract Instructions and Template
  - **(required) Attachment C:** Proposal Summary Slide Template
  - **(required) Attachment D:** Proposal Instructions and Volume I Template (Technical and Management)
  - **(required) Attachment E:** Proposal Instructions and Volume II Template (Cost)
  - **(required) Attachment F:** MS Excel™ DARPA Standard Cost Proposal Spreadsheet

## 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 shall take precedence.
- All responsible sources capable of satisfying the government's needs, including both U.S. and non-U.S. sources, may submit a proposal that will be considered by DARPA. 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.
- As of the time of publication of this solicitation, all proposal submissions are anticipated to be unclassified.
- Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers, and Government entities interested in proposing to this BAA should first contact the Agency Point of Contact (POC) listed in the Overview section prior to the abstract due date to discuss eligibility. Complete information regarding eligibility can be found in [Proposer Instructions and General Terms and Conditions](#).
- As of the date of publication of this solicitation, the government expects that program goals as described herein either cannot be met by proposers intending to perform fundamental research or the proposed research is anticipated to present a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense. Therefore, the government anticipates restrictions on the resultant research that will require the awardee to seek DARPA permission before publishing any information or results relative to the program. For additional information on fundamental research, please visit [Proposer Instructions and 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 non-fundamental research to prescribe publication requirements and other restrictions, as appropriate. This language can be found in [Proposer Instructions and 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, its proposed sub-awardee's effort may be

fundamental research. It is also possible that the research performed by a potential awardee is fundamental research while its proposed sub-awardee's effort may be non-fundamental research. In all cases, it is the potential awardee's responsibility to explain in its 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) 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. The DARPA team will create risk assessments of all proposed Senior/Key Personnel selected for negotiation of a fundamental research grant or cooperative agreement award. The 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](#).

- 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](http://www.DARPAConnect.us) to leverage on-demand learning and networking resources.
- The APEX Accelerators program, formerly known as the Procurement Technical Assistance Program (PTAP), focuses on building 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 helps businesses:
  - Complete registration with a wide range of databases necessary for them to participate in the government marketplace (e.g., SAM).
  - Identify which agencies and offices may need their products or services and how to connect with buying agencies and offices.
  - 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.
  - 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 a Pilot Program to help accelerate cybersecurity compliance.

- DARPA has streamlined our BAAs and is interested in your feedback on this new format. Please send any comments to [DARPA solicitations@darpa.mil](mailto:DARPA solicitations@darpa.mil).