Broad Agency Announcement
Information Innovation Office (I2O)

Information Innovation Office (I2O) Office-Wide

HR001125S0002

October 30, 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 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.

SECTION I: OVERVIEW

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Information Innovation Office

- **Funding Opportunity Title** – Information Innovation Office (I2O) Office-Wide

- **Announcement Type –** Initial Announcement

- **Funding Opportunity Number –** HR001125S0002

- **Assistance Listing Number:** 12.910 Research and Technology Development

- **Dates/Time - All Times are Eastern Time Zone (ET)**

  o Posting Date: October 30, 2024

  o Proposers Day: November 7, 2024

  o Proposal Abstracts: Abstracts may be submitted on a rolling basis until October 1, 2025 at 5:00 PM

  o Proposal Due Date: Proposals may be submitted on a rolling basis until October 29, 2025 at 5:00 PM

- **Anticipated individual awards** - Multiple awards are anticipated.

- **Types of instruments that may be awarded** – Procurement Contract, Grant, Cooperative Agreement, Other Transaction for Research, or Other Transaction for Prototype.

  DARPA welcomes engagement from non-traditional sources in addition to current DARPA performers. DARPA is willing and able to work with a potential performer to identify a contracting arrangement that benefits everyone. See Section V: Special Considerations for additional information.

- **NAICS Code**: 541715

- **Agency contact**

  The BAA Coordinator for this effort may be reached at:
  HR001125S0002@darpa.mil

  DARPA/ I2O
  ATTN: HR001125S0002
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  Arlington, VA 22203-2114

SECTION II: FUNDING OPPORTUNITY DESCRIPTION

The Information Innovation Office (I2O) creates groundbreaking science and develops transformational capabilities in the informational and computational spheres to surprise adversaries and maintain enduring advantages for national security. I2O programs address elements of four key thrust areas:

- **Proficient artificial intelligence (AI):** seeks to (1) advance the state of the art of AI, (2) apply state-of-the-art AI to create new capabilities for national security, and (3) develop techniques to mitigate the threats posed by state-of-the-art AI systems. The predominant research challenge on the path to proficient AI is defining and creating trustworthy AI systems, including in the face of attacks by skilled, high-resource adversaries. In these efforts, I2O will leverage the AI Forward initiative to explore new directions for AI research that will result in safe, secure, and trustworthy systems for national security missions. An area of particular interest is accelerating the pace of science and engineering for national security applications.

- **Resilient, adaptable, and secure systems:** aims to dramatically enhance the security and resilience of both new and legacy software, with a focus on practical and scalable approaches. The portfolio emphasizes formal methods development while leveraging AI and machine learning. Techniques and tools are provided to both the broad community (for example, as open-source software), the defense industrial base, and the Department of Defense (DOD).

- **Advantage in cyber operations:** leverages and advances state-of-the-art AI and secure resilient system technologies to produce trustworthy cyber tools and capabilities that operate beyond the capacity or speed of humans. Efforts in this thrust anticipate adversary countermeasures to create enduring capabilities.

- **Confidence in the information domain:** focuses on protecting, detecting attacks on, and measuring the health of the information domain, broadly construed. This domain spans the cognitive level of beliefs and attitudes; the knowledge level of scientific discourse, the financial system, supply chains, etc.; the tracking level, which records the digital dust we leave behind when interacting with the myriad digital devices required by modern life; and finally, the transport level, which delivers electronic messages in many forms and with various gradations of observability.

I2O may also consider submissions outside these thrust areas if the proposal involves the development of novel capabilities having a promise to provide decisive information advantage for the United States and its allies. I2O seeks unconventional computational approaches that are outside the mainstream, challenge accepted assumptions and have the potential to radically change established practices, and the state of the art. Proposed research should investigate innovative approaches that enable revolutionary advances in software science, technology, or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of the art.

I2O collaborates with other DARPA technical offices, in some cases acting as the recipient of significant emerging technologies and, in other cases, serving as a catalyst by identifying relevant new external technology trends. Novel methods are sought to build technical communities and tap into sources of innovation both inside and outside traditional DOD performer communities. However, proposers may not propose work (1) they have already completed; nor (2) for which they have already received funding or a positive funding decision from DARPA or another Government agency. I2O encourages efforts that are creative and agile both in terms of the technologies proposed and in the structure of the approach (e.g., shorter periods of performance).

For the purposes of this solicitation, only submissions deemed compliant and relevant will receive a detailed scientific review. Compliance and relevance, first and foremost, requires that submissions address one or more of the I2O thrust areas and/or propose revolutionary advances in information or computational science, technology, or systems. Additional compliance and relevance factors include whether the overall goal of the proposed effort, if achieved, would create technology significantly beyond the state of the art; whether the timetable for achieving results is appropriate for a mission agency such as DARPA; and whether the cost, scale, and scope of work is commensurate with I2O resources and priorities.

SECTION III: 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.

- **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 effort's 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 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.

- **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 Realism and Schedule:** The proposed costs and schedule are realistic for the technical and management approach and accurately reflect the technical goals and objectives of the solicitation. The proposed costs are necessary to achieve the program metrics, 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 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 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 IV: SUBMISSION INFORMATION

- This announcement allows for multiple award instrument types to include Procurement Contracts, Grants, Cooperative Agreements, Other Transactions for Research, and Other Transactions 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.

    o **Proposer Instructions and General Terms and Conditions**: Proposer Instructions and General Terms and Conditions
    o **Procurement Contracts**: Proposer Instructions: Procurement Contracts
    o **Assistance (Grants and Cooperative Agreements)**: Proposer Instructions: Grants/Cooperative Agreements
    o **Other Transactions for Research and Other Transactions for Prototype:** Proposer Instructions: Other Transactions

- Prior to submitting a full proposal, proposers are strongly encouraged to first submit an abstract as described below. This process allows a proposer to ascertain whether the proposed concept is applicable to the I2O Office-wide BAA, important to the I2O mission and portfolio, and currently of interest.

- Abstracts and full proposals that are not found to be applicable to the I2O Office-wide as defined above may be deemed non-conforming and removed from consideration. All 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. 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 abstract phase. Abstracts are strongly encouraged but not required. Abstracts will be reviewed on a rolling basis and can be submitted until October 1, 2025 at 5:00 PM as stated in the Overview section. Additional instructions for abstract submission are contained within the Attachments A1 and A2. 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 [Proposer Instructions and General Terms and Conditions.](#)

  Abstract Attachments
  o A1 - Abstract Summary Slide Instructions and Template
  o A2 - Abstract Instructions and Submission Template

- Full proposals can be submitted through October 29, 2025 at 5:00 PM as stated in the Overview section. The Proposal Attachments 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).

  Proposal Attachments
  o P1 - Proposal Summary Slide Instructions and Template
  o P2 - Proposal Instructions and Volume I Template (Technical and Management)
  o P3 - Proposal Instructions and Volume II Template (Cost)
  o P4 - DARPA Standard Cost Proposal Spreadsheet
  o P5 - Associate Contractor Agreement (ACA)

SECTION V: 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 shall 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.

- Periodically, DARPA may endeavor to hold "Pitch Day(s)." A "Pitch Day" entails DARPA soliciting proposals for a specific, targeted aspect under one or more of the BAA's thrust areas. Proposers ultimately would pitch their proposals to DARPA via oral presentations. Any "Pitch Day" established under this BAA would be advertised via a separate Special Notice announcement linked to this BAA and posted on www.sam.gov and will include specific instructions and evaluation criteria.

- Federally Funded Research and Development Centers, 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 at 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 may be met by proposed efforts for fundamental research and non-fundamental research. Some proposed research may present a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense. Based on the anticipated type of proposer (e.g., university or industry) and the nature of the solicited work, the Government expects that some awards will include 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 at 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 subawardee's effort may be fundamental research. It is also possible that the research performed by a potential awardee is fundamental research while its proposed subawardee'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, now FRRBS 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's team will create risk assessments of all proposed Senior/Key Personnel selected for negotiation of a fundamental research grant or 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.

- Per Section 8123 of the Department of Defense Appropriations Act, 2015 (Pub. L. 113-235), all grant awards must be posted on a public website in a searchable format. To comply with this requirement, proposers requesting grant awards must submit a maximum one (1) page abstract that may be publicly posted and explains the program or project to the public. The proposer should sign the bottom of the abstract confirming the information in the abstract is approved for public release. Proposers are advised to provide both a signed PDF copy, as well as an editable (e.g., Microsoft word) copy. Abstracts contained in grant proposals that are not selected for award will not be publicly posted.

- 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 Human Subjects and Animal Subjects Research, 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

    o 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 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.

o 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.

o 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.