Program Solicitation

Photonic Integrated Circuit Architectures for Scalable System Objectives (PICASSO)

Microsystems Technology Office

DARPA-PS-26-13

January 14, 2026

OVERVIEW INFORMATION:

- **Federal Agency Name:** Defense Advanced Research Projects Agency (DARPA), Microsystems Technology Office (MTO)
- **Funding Opportunity Title:** Photonic Integrated Circuit Architectures for Scalable System Objectives (PICASSO)
- **Solicitation Type:** Initial solicitation
- **Funding Opportunity Number:** DARPA-PS-26-13
- **Assistance Listing Number:** Not applicable
- **Dates/Time: All Times are Eastern Time Zone (ET)**
  - Posting Date: January 14, 2026
  - Proposers Day: January 16, 2026
  - Proposal Abstract Due Date: February 2, 2026, at 1:00 p.m.
  - Requests for CUI Materials Closed: February 2, 2026, at 1:00 p.m.
  - Question Submittal Closed: February 20, 2026, at 5:00 p.m.
  - Deadline to Notify of Intent to Submit Proposal: February 20, 2026, at 5:00 p.m.
  - Proposal Due Date: March 6, 2026, at 1:00 p.m.
  - Anticipated Virtual Oral Presentation Dates: March 19 – March 27, 2026
  - Estimated Period of Performance Start: July 1, 2026
- **Anticipated Individual Awards:** Multiple awards are anticipated
- **Anticipated Funding:** $35M
- **Types of Instruments That May Be Awarded:**
  - Technical Area 1: Other Transaction for Prototype Agreements under 10 U.S.C. 4022
  - Technical Area 2: Other Transaction for Prototype Agreements ***(Not solicited under this PS; provided for informational purposes only)***
- **Agency Contact:**

  The PS Coordinator for this effort may be reached at:

  PICASSO@darpa.mil
  DARPA/MTO
  ATTN: DARPA-PS-26-13
  675 North Randolph Street
  Arlington, VA 22203-2114

Program Solicitation
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Photonic Integrated Circuit Architectures for Scalable System Objectives (PICASSO)
Defense Advanced Research Projects Agency (DARPA)
Microsystems Technology Office (MTO)

Section I: Funding Opportunity Description

The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative proposals in the area of very large-scale photonic circuits. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice. This solicitation includes a Controlled Unclassified Information (CUI) Addendum that contains key technical details relevant to the program goals and objectives.

Please see Attachment K of this PS for instructions on how to request the CUI Addendum and CUI Guide.

A. Background

Photonic integrated systems have the potential to unlock immense improvement in bandwidth, latency, energy efficiency for applications including computing, analog signal processing, and sensing. However, systems incorporating photonic circuits struggle to show significant system-level performance advantages over electronic systems. This is due to the photonic circuits being typically confined to narrow, isolated functions due to the limited scaling of photonic circuits.

Today's photonic circuits are limited in depth, i.e., the number of sequential optical components that a signal traverses. Datacom and telecom applications dominate the photonics landscape and are primarily realized as transceiver circuits composed of ~10s of photonic components (e.g., modulators, splitters, wavelength filters, and phase shifters).[1] Recently, photonic accelerators for artificial intelligence have attracted significant attention and resources.[2,3] However, they are limited to a single linear mathematical operation (vector-matrix multiplication) and are capable of handling ~128-element vectors. These system architectures remain dominated by electronics. The typical nanosecond latency of photonic circuits is overwhelmed by the millisecond latency of the electronics (a 10^6 degradation). As a result, photonic accelerators still struggle to compete with GPU-based systems at the system level. Similar findings are reported in recent review papers[4,5] summarizing the state of research in photonics for sensing, microwave photonics, image classification, analog signal processing, and optical network applications. In these varied

[1] Shekhar, S., Bogaerts, W., Chrostowski, L. *et al.* Roadmapping the next generation of silicon photonics. *Nat Commun* **15**, 751 (2024). https://doi.org/10.1038/s41467-024-44750-0
[2] Ahmed, S.R., Baghdadi, R., Bernadskiy, M. *et al.* Universal photonic artificial intelligence acceleration. *Nature* **640**, 368–374 (2025). https://doi.org/10.1038/s41586-025-08854-x
[3] Hua, S., Divita, E., Yu, S. *et al.* An integrated large-scale photonic accelerator with ultralow latency. *Nature* **640**, 361–367 (2025). https://doi.org/10.1038/s41586-025-08786-6
[4] Yi Wang, Yuqing Jiao, Kevin Williams; Scaling photonic integrated circuits with InP technology: A perspective. *APL Photonics* 1 May 2024; 9 (5): 050902. https://doi.org/10.1063/5.0200861
[5] Pérez-López, D., Torrijos-Morán, L. Large-scale photonic processors and their applications. *npj Nanophoton.* **2**, 32 (2025). https://doi.org/10.1038/s44310-025-00075-4

applications, the role of photonics is also limited to an isolated function, comprising a very small fraction of the system diagram, requiring optical-to-electrical transduction and significantly limiting their system-level impact. The inability of these systems to realize the inherent gains in latency, efficiency, and bandwidth offered by photonics is due to the inability to continually process in the optical domain.

The primary limitation to further scaling of circuit size and functionality is rooted in the fundamental properties of signaling with light. It manifests in two technical challenges:

Technical Challenge 1: Preserve optical signal integrity while minimizing excess noise

Unlike in digital complementary metal-oxide-semiconductor circuits where there is signal regeneration and noise filtering at every stage, analog optical signals in long processing chains experience significant optical attenuation and noise that cannot simply be restored with optical amplification due to inherited amplified spontaneous emission noise.

Technical Challenge 2: Mode control for predictable behavior

Signal degradation in optical systems occurs through spurious wave interactions, which are not seen in electronic systems. Performance is sensitive to scattering, coupling, mode leakage, back reflections, and spurious resonances. Over many components, control of these errors becomes unpredictable, especially when combined with manufacturing variability and thermal and environmental instabilities.

Today, these challenges are handled by transduction and reconditioning the optical signals in the electronic domain. However, heavy usage of electronics prevents system-level gains in latency, efficiency, and bandwidth offered natively by photonics. Research in these areas has focused on improving the individual photonic components. While these efforts have yielded improvements in performance, it has become apparent that the search for components with ideal performance cannot solve the problem of limited scaling.

The key to addressing these two technical challenges is to redirect the effort to circuit-level innovation. Inspiration can be drawn from electronics where individual transistors may suffer from performance limitations, but they are combined in circuits that achieve higher performance in terms of noise, linearity, power handling, stability, etc., compared to individual transistors. There emerges the concept of *perfect photonic circuits with imperfect components*.[6] PICASSO seeks innovative circuit strategies for massive scaling of photonic circuits that combine multiple mitigation concepts to overcome the limitations of piecewise component-driven approaches.

B. Program Description

PICASSO aims to catalyze future photonic capabilities through scalable photonic circuits with predictable performance to achieve system-level performance gains. PICASSO will revolutionize photonic circuit architectures, from compute to light detection and ranging, by expanding the field's focus from individual components to include a more holistic circuit- and system-level orientation, with performance measured and evaluated at the system level.

To effectively enable this vision, PICASSO will emphasize four pillars: (1) *Generalizability*, through testing diverse use cases and ruling out point solutions, (2) *Interoperability*, through defining and enforcing interface boundary conditions and capturing them in an interface control document (ICD), (3) *Accessibility*

[6] David A. B. Miller, "Perfect optics with imperfect components," Optica 2, 747-750 (2015).

and Reuse, through requiring delivery of functional circuits with documented performance and transfer of appropriate data rights, and (4) *Technology sustainability*, to promote a self-sustaining ecosystem by identifying (or creating) a domestically controlled repository for photonic designs.

All proposers should focus on identifying a compelling application, developing corresponding system design, and deriving the photonic circuits composing that system design. The proposed technical approach will be evaluated by the importance of the targeted application and by the projected improvement in application-relevant figure of merit (FOM) (as benchmarked to state-of-the-art electronics). The program specifically seeks to maximize processing in the optical domain while avoiding optical-to-electrical transduction. An overall goal should be preserving end-to-end throughput, bandwidth, and low latency inherent to optical processing.

The efforts under PICASSO are directed at circuit-level innovation as opposed to device-level design and innovation. Specifically discouraged are technical approaches that solely pursue individual device (component) improvement. Instead, proposers should focus on composing photonic circuits with exceptional performance with existing devices. It is anticipated that the photonic components are largely available and accessible at photonic foundries through existing process design kits (PDK). For components developed and matured in house, it is expected that these components be made available in foundry PDKs during the course of the program and that the device models for these components are compatible with existing photonic design automation (PDA) tools. PDKs are expected to be developed, matured and validated to fit the needs of the program and to ensure manufacturability of PICASSO technologies. PDA tool development should not be the central focus of the proposed effort.

There is a strong preference that the proposed efforts use domestic photonic foundries and assembly and packaging services where available. Any proposed use of offshore manufacturing capabilities should be sufficiently justified in the proposal, addressing why equivalent domestic capability cannot be found.

Additional program goals and objectives are described in the CUI Addendum distributed by request only. For instructions on how to submit a request to access CUI materials, please see Attachment K.

C. Program Structure

PICASSO is a two-technical area (TA) program. TA1 will be executed in two phases and TA2 in a single phase. Any reference to TA2 is provided for informational purposes only and is not solicited under this PS. A separate PS addressing TA2 is anticipated at a later date. If released, the TA2 PS will be made available at https://sam.gov/.

Proposals in response to this solicitation should address the goals of TA1 in their entirety. Partial solutions will not be considered. Proposals should be submitted for both phases: Phase 1 – Base effort and Phase 2 – Option. DARPA anticipates a downselect between phases based on meeting the Phase 1 metrics and successful Reference System Design Review to include analysis of the expected system-level performance and the application-level impact.

Technical Area 1 (Fundamentals): Phase 1 will develop circuit-level strategies to preserve the integrity of optical signals and suppress and decouple parasitic interactions across photonic circuits. Phase 2 is focused on generalizability of the approaches to achieve distinct circuit functionality. Throughout both phases, the system-level impact of the developed solutions will be tracked by a continually updated proposer-defined Reference System Design and analysis of the expected system level performance. All

photonic circuits developed in TA1 will be delivered to a design repository, to be identified by the Government at a later date.

Technical Area 2 (Applications), not solicited under this PS: TA2 will have a delayed start to allow advancement in TA1. TA2 will leverage the TA1 circuit designs to prove out application FOM improvement for select Government use cases.

Additional information on the PICASSO program structure and metrics is available in the CUI Addendum distributed by request only. For instructions on how to submit a request to access CUI materials, please refer to Attachment K.

D. Schedule, Milestones, and Deliverables

A summary of the program schedule is presented in Figure 1. For planning and budgetary purposes, proposers should assume a program start date of July 1, 2026.

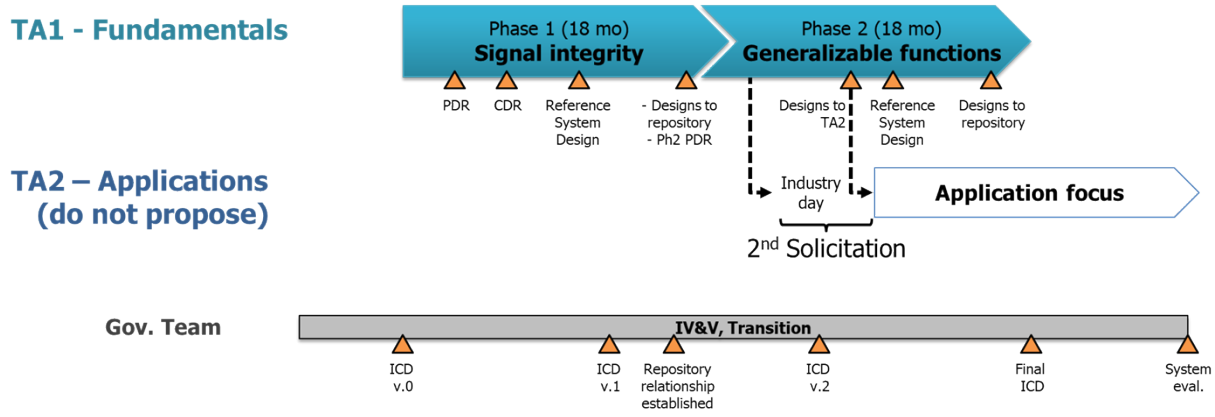

Figure 1. Program schedule

All proposals must include the following meetings and travel in the proposed schedule and costs:

- To foster collaboration between teams and disseminate program developments, a 2-day Principal Investigator (PI) meeting will be held approximately every 6 months, with locations split between the East and West Coasts of the United States. For budgeting purposes, plan for a kickoff and three 2-day meetings per program phase: two meetings in the Washington, D.C., area and two meetings in the San Francisco, CA, area.
- To collaborate in the development and refinement of the ICD, the Government support team will hold regular (approximately quarterly) ICD working group meetings. For budgeting purposes, plan for four 1-day meetings per program phase: two meetings in the Washington, D.C., area and two meetings in the San Francisco, CA, area.
- The proposers should plan and budget to attend a 1-day Industry Day in the Washington, D.C., area, to be held during the first quarter of Phase 2 in support of the anticipated solicitation for TA2.
- Regular teleconference meetings will be scheduled with the Government team for progress reporting as well as problem identification and mitigation. Proposers should also anticipate at least one site visit per phase by the DARPA Program Manager, during which they will have the opportunity to demonstrate progress towards agreed-upon milestones.

A summary of the program milestones and deliverables by phase are presented in Table 1 and Table 2.

Table 1. Phase 1 Program Milestones and Deliverables

Milestone	Month	Exit Criteria/Deliverable	% Budget*
1. Preliminary model	1	• Initial Program Plan • Preliminary model with simulations of physics underlying concepts towards development of preserving the optical signal • Report on progress toward CUI information systems compliance	15%
2. Preliminary Design Review (PDR)	4	• PDR review with DARPA for Phase 1 circuits • Documentation supporting compliance with NIST SP 800-171 Rev 2 and demonstrating that information systems meet the required standards for handling and protecting PICASSO CUI.**	20%
3. Critical Design Review (CDR)	7	• CDR review with DARPA for Phase 1 circuits • Phase 1 circuits taped out at a photonics foundry	20%
4. Reference System Design Review	10	• Quarterly program review (QPR) meeting with DARPA • Report on reference system design and analysis of application-level performance benchmarked to electronics	15%
5. Delivery of designs to repository	17	• QPR meetings with DARPA • Delivery of Phase 1 designs with characterization report and interface documentation	15%
6. Final Phase 1 report	18	• Demonstration of predictable performance of photonic circuits • Delivery of Phase 1 circuit demonstrations • PDR meeting for Phase 2 circuits • Final Phase 1 report	15%

* Use as guidance for an approximate allocation of funds. Allocation amounts are based on careful consideration of the technical value of the milestone deliverable to the Government as well as the time, effort, and resources necessary to complete each milestone. ** Performers may not be funded for subsequent milestones beyond Milestone 2 if they have not demonstrated the ability to handle and protect PICASSO CUI.

Table 2. Phase 2 Program Milestones and Deliverables

Milestone	Month	Exit Criteria/Deliverable	% Budget*
7. Updated physics model	1	• Model with simulations of physics underlying concepts towards generalized circuit functionality	15%
8. Critical Design Review (CDR)	4	• CDR review with DARPA for Phase 2 circuits • Tape out of Phase 2 circuits at a photonics foundry	20%
9. Reference System Design Review	7	• Updated report on reference system design and analysis of application-level performance benchmarked to electronics	20%
10. Deliver designs to repository	10	• QPR meetings with DARPA • Delivery of intermediate Phase 2 designs with characterization report and interface documentation	15%
11. Circuit performance characterization	17	• Demonstration of generalized circuit functionality and characterization of system performance	15%
12. Final report	18	• Delivery of final designs with characterization report and interface documentation to repository • Delivery of Phase 2 circuit demonstrations • Final report	15%

* Use as guidance for an approximate allocation of funds.

E. Government Furnished Equipment/Property/Information

Government-furnished information will be provided regarding the ICD throughout the course of the program.

F. Intellectual Property

The Government requires, at a minimum, Government Purpose Rights (GPR) to intellectual property (IP) developed under the program to meet the performer objectives in TA2. Any IP assertions must be clearly identified for IP developed prior to the start of the agreement at private expense that will be utilized during program activities or incorporated into deliverables. For any deliverables incorporating IP with less than GPR, the Government may require a license that provides sufficient rights to meet the program's objectives in TA2. Any such license should allow the Government to use, modify, reproduce, release, perform, display, or disclose the IP for Government purposes, and allow third parties to use the IP on behalf of the Government for Government purposes. For IP rights assertion and required documentation, see Attachment C.

For the purposes of this PS, the following definitions apply:

- "Data" refers to recorded information, regardless of form or method of recording, which includes but is not limited to, technical data, software, mask works, and trade secrets. The term does not include financial, administrative, cost, pricing, or management information and does not include inventions.
- "Government purpose" means any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data for commercial purposes or authorize others to do so.
- "Government purpose rights" means the rights to use, duplicate, or disclose Data, in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only.

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 Budget and Price.
    - **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 includes an analysis of compelling applications, corresponding system architecture, analysis of the expected system-level performance, and the application-level impact evaluated through a proposer-defined application FOM. The proposal should present evidence that the application FOM is maximized by processing in the optical domain while minimizing the overhead by supporting electronic circuits. The proposal details circuit-level strategies to preserve the integrity of optical signals (signal, noise, phase, coherence, etc.) and suppress and control parasitic interactions (reflections, leakage, long-range coupling, and crosstalk) and spurious modes and resonances across photonic circuits. The proposed technical approach clearly supports the scalability of photonic circuits to VLPI and beyond.
    - **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. See *Section I-F* above. The proposed effort utilizes domestic manufacturing capabilities where possible and does not show strong reliance on foreign supply chain elements. The performer demonstrates the ability to protect program CUI information by either having an information system in accordance with NIST SP 800-171 and DoDI 8582.01, OR proposes a realistic plan to achieve compliance within 4 months of program kickoff to include identified specific steps, timeline, responsible point of contact(s), and budget allocation.
    - **Budget and Price:** The proposed solution is realistic and affordable. The budget is realistic and accurately reflects the technical goals and objectives of the solicitation and reflects a sufficient understanding of the level of effort and staffing needed to successfully accomplish the proposed technical approach. The milestone cost is appropriately apportioned according to the Government expectations above.
- Unless otherwise specified in this solicitation, for additional information on how DARPA reviews proposals through the Scientific Review Process, please visit: Proposer Instructions and General Terms and Conditions.

Section III: Submission Information

- Award instrument considerations:
  - This PS may result in Other Transaction for Prototype (OT-P) agreements under 10 U.S.C. § 4022, which can include not only commercially available technologies fueled by commercial or strategic investment, but also concept demonstrations, pilots, and agile development activities that can incrementally improve commercial technologies, existing Government-owned capabilities, and/or concepts for broad defense and/or public application(s). Follow-on production contracts or transactions may also be awarded pursuant to 10 U.S.C. § 4022. The OT agreement will not require cost sharing unless the offeror is a traditional defense contractor who is not working with a non-traditional defense contractor participating in the program to a significant extent.
  - DARPA determined a reasonable profit calculation range of 10 - 11% for TA1 of the PICASSO program. This was determined based on consideration of factors such as the technology being developed during the program, project complexity, contractor expertise required, data and IP rights required, value of the prototype to the DoD, and the reduced compliance burden for Other Transactions relative to FAR-based efforts subject to FAR and DFARS requirements. Proposers should propose a profit calculation that falls within the above range. Because that profit range already has been determined to be reasonable relative to PICASSO, proposals need not include any further profit justification. Elimination of profit as a negotiation item is expected to result in reduced award timelines for any proposal selected for award negotiation. Proposers are reminded that when cost share is required to meet the requirements of 10 U.S.C.4022(d)(1), profit should not be included in pricing.
- The following websites are incorporated by reference and contain additional information regarding overall proposer instructions, general terms and conditions, and Other Transactions for Prototype.
  - **Proposer Instructions and General Terms and Conditions**: Proposer Instructions and General Terms and Conditions
  - **Other Transaction agreements**: Proposer Instructions: Other Transactions
- This solicitation contains an abstract phase. Abstract submission is required in order to be eligible to submit a full proposal. Abstracts are due no later than the due date and time stated in the Overview section. Additional instructions for abstract submission are contained within **Attachment A**.
- Full proposals are due no later than the due date and time stated in the Overview section. **Attachments C, D, E, F, G, H, and I** 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).
- DARPA is interested in whether, and to what extent, proposers are using artificial intelligence (AI) tools to contribute to Volume 1 of proposals submitted in response to DARPA solicitations. Therefore, proposers must answer the following questions on the cover sheet of Volume 1 of this solicitation:
  - Did you use AI tools to assist in preparing this proposal?
  - If yes, what tools did you employ?

  Any content in Volume 1 that utilized an AI tool to generate information, assist in technical understanding, or guide the technical work should have a citation and a corresponding reference in

the Bibliography section of Volume 1. The citation should specify the tool, content, and purpose. For example, "[AI tool] was used to understand existing state of the art in manufacturing."

NOTE – THIS INFORMATION WILL NOT BE USED FOR EVALUATION PURPOSES. Proposals will be evaluated in accordance with the Evaluation Criteria outlined in the solicitation regardless of whether AI tools were employed.

- **PS Attachments**:
  - **Attachment A**: Abstract Instructions and Template
  - **Attachment B**: Proposal Summary Slide Template
  - **Attachment C**: Proposal Instructions and Volume I Template (Technical and Management)
  - **Attachment D**: Proposal Instructions and Volume II Template (Cost)
  - **Attachment E:** DARPA Price Summary Spreadsheet
  - **Attachment F**: Other Transaction Certification Template
  - **Attachment G**: Task Description Document (TDD) Template
  - **Attachment H**: Schedule of Milestones and Payments
  - **Attachment I**: Model Other Transaction for Prototype
  - **Attachment J**: PICASSO Controlled Unclassified Information (CUI) Guide (distributed by request only, see Attachment K)
  - **Attachment K:** PICASSO CUI Materials Request Form
- All technical, contractual, and administrative questions regarding this notice must be emailed to PICASSO@darpa.mil. Emails sent directly to the Program Manager or any other address may result in delayed or no response. All questions must be in English and must include the name, email address, and telephone number of a point of contact. DARPA will attempt to answer all questions in a timely manner and post an FAQ list on the DARPA/MTO Opportunities page at (http://www.darpa.mil/work-with-us/opportunities). The list will be updated on an ongoing basis until 2 weeks prior to the proposal due date.

Section IV: Security Information

- Unclassified Submission Requirements

  Proposers are responsible for preventing the inclusion of any CUI in proposals marked as Unclassified. This responsibility includes ensuring that unauthorized personnel and non-accredited information systems are not used in the preparation of the proposal.

- CUI Proposal Marking

  If an Unclassified submission contains CUI or the suspicion of such, as defined by Executive Order 13556 and 32 CFR Part 2002, the information must be appropriately and conspicuously marked CUI in accordance with DoDI 5200.48. Identification of what is CUI about this DARPA program will be detailed in the PICASSO Controlled Unclassified Information Guide (CUIG) and is provided upon request as Attachment J to the PS.

- CUI Submission Requirements

  For Unclassified proposals containing CUI, applicants will ensure personnel and information systems processing CUI are in accordance with DoDI 5200.48 and NIST SP 800-171 Rev 2

  Unclassified submissions containing CUI may be submitted via DARPA's BAA Website (https://baa.darpa.mil) in accordance with Section III or Section IV of this PS.

- Classified Submissions

  DARPA anticipates that submissions received under this PS will be at least CUI. However, should a proposer wish to submit classified information, an unclassified email must be sent to PICASSO@darpa.mil notifying the MTO Program Security Officer.

  Security classification guidance and direction via a Security Classification Guide (SCG) and/or DD Form 254, "DoD Contract Security Classification Specification," will not be provided at this time. If a determination is made that the award instrument may result in access to classified information, a SCG and/or DD Form 254 will be issued by DARPA and attached as part of the award.

  Performers who wish to propose classified solutions should contact PICASSO@darpa.mil for further instructions. Included within the request to share classified information should be, if possible, the level of information, information owner, disposition system, and a point of contact for further instructions.

Section V: Special Considerations

- This solicitation, stated attachments, and websites incorporated by reference constitute the entire solicitation. In the event of a discrepancy between the solicitation, attachments, or websites, the solicitation shall take precedence.

- Non-U.S. organizations and/or individuals cannot participate as lead proposers in this solicitation. Non-U.S. organizations and/or individuals may participate as subcontractors or consultants 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. All other responsible sources capable of satisfying the Government's needs 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 solicitation 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.

- DARPA encourages technical solutions from all responsible sources capable of satisfying the Government's needs. To ensure fair competition across the ecosystem, DARPA prohibits contractors/performers from concurrently providing Systems Engineering Technical Assistance (SETA), Advisory and Assistance Services (A&AS), or similar support services and being a technical performer, unless the DARPA Deputy Director grants a written waiver.

- Federally Funded Research and Development Centers (FFRDCs), 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 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.

  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. In all cases, it is the potential awardee's responsibility to explain in its proposal which proposed subawardee efforts are fundamental research and why the proposed efforts should be considered fundamental research.

- 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 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 https://www.darpaconnect.us to leverage on-demand learning and networking resources.

- DARPA has streamlined our Program Solicitations and is interested in your feedback on this new format. Please send any comments to DARPAsolicitations@darpa.mil.