Broad Agency Announcement

Redefining Possible

Tactical Technology Office

HR001123S0042

June 16, 2023

Contents

PART I: OVERVIEW INFORMATION

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Tactical Technology Office (TTO)
- **Funding Opportunity Title** – Redefining Possible
- **Announcement Type** – Initial Announcement
- **Funding Opportunity Number** – HR001123S0042
- **Catalog of Federal Domestic Assistance Numbers (CFDA)** – 12.910 Research and Technology Development
- **Dates**
  - Posting Date: June 16, 2023
  - Closing Date and Time: 4 PM Eastern Time on June 14, 2024
  - FAQ Due Date: July 21, 2023
- **Concise description of the funding opportunity –** The Tactical Technology Office (TTO) of the Defense Advanced Research Projects Agency (DARPA) is soliciting executive summaries, proposal abstracts, and proposals for applied research, advanced technology development, platform demonstrations, or systems studies that aim to redefine the future of warfighting across four domains: Air, Ground, Maritime, and Space.
- **Anticipated individual awards** – Multiple awards are anticipated.
- **Types of instruments that may be awarded** – Procurement (FAR-based) contract, grant, cooperative agreement, or other transaction.
- **Agency contact:** The BAA Coordinator for this effort can be reached via: HR001123S0042@darpa.mil

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PART II: FULL TEXT OF ANNOUNCEMENT

I. Funding Opportunity Description

The Defense Advanced Research Projects Agency (DARPA) often selects its research efforts through the Broad Agency Announcement (BAA) process. This publication constitutes a 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. The following information is for those wishing to respond to the BAA.

A. Program Overview

The Tactical Technology Office (TTO) of the Defense Advanced Research Projects Agency (DARPA) is soliciting executive summaries, proposal abstracts, and proposals for applied research, advanced technology development, platform demonstrations, or systems studies that aim to redefine the future of warfighting across four domains: Air, Ground, Maritime, and Space, and the seams in between those domains.

The mission of the Tactical Technology Office (TTO) is to redefine access and delivery of effects to every domain in the battlespace: Air, Ground, Maritime and Space in support of national security policy. This includes both platforms as well as the enabling support elements for delivering effects, such as unit-level autonomy or human-machine collaboration. TTO accomplishes this mission by placing bold bets on developing new and novel system technologies and conducting platform demonstrations at a credible scale in realistic, operationally relevant conditions to support technology transition.

Our adversaries have developed means to counter our current military architecture built around exquisite, monolithic systems. TTO is focusing on revolutionary system architectures that are disaggregated, dispersed, diversified, disruptive, and instill doubt in our adversaries to deter and pre-empt aggression, with the ultimate goal of maintaining U.S. military superiority in the future.

DARPA is built on a foundation of pivotal investments in high-risk technologies for national security; the Office-wide BAA represents a critical portal for innovation and initial investment towards developing the DARPA portfolio. TTO views the Office-wide BAA as an opportunity to gain knowledge or understanding necessary to determine the means by which a specific need may be met. Submissions should describe how an investment would provide the unique insight into the problem TTO is trying to solve and quantifiably substantiate those assertions. These insights may include proof-of-concept prototypes, system analyses, or any other work product that identifies the path to a new demonstration concept. TTO encourages approaches that prove (or disprove) this unique insight as fast as possible. TTO is interested in quickly identifying promising technologies and moving them to the next phase of research and development.

TTO recommends submitting an executive summary prior to a proposal abstract or a full proposal submission to have your concept reviewed by TTO personnel to gauge interest. Submission instructions can be found in Section IV – concepts may not be submitted by fax or e-mail. Evaluation criteria for this solicitation can be found in Section V.A.

B. TTO Focus Areas

TTO is a systems office that researches, develops and demonstrates platform level technologies to enable revolutionary advances in military system resilience, responsiveness, range, lethality, access, endurance, and affordability to enable new Joint Force warfighting concepts. TTO is focusing on revolutionary system architectures that are disaggregated, dispersed, diversified, disruptive, and instill doubt in our adversaries to deter and pre-empt aggression, with the ultimate goal of maintaining U.S. military superiority in the future. TTO's strategy for achieving these objectives is to conduct platform level demonstrations of high-risk, high-payoff technologies in realistic, operationally relevant conditions to support technology transition.

TTO projects usually define a reference operational system upfront, decompose critical technical risks, and define a demonstration concept around them. Use of off-the-shelf technology for lower risk subsystems reduces program cost and schedule, but allows critical technologies to be matured and demonstrated.

1. Air Systems

Historically low observability has been a feature of the DoD's combat aircraft since the stealth demonstrator HAVE BLUE over 40 years ago. The F-117, F-22, B-2, and F-35 have incorporated the disruptive technologies that comprise stealth, improving performance and reliability, over this time. Our adversaries, however, have noted the value of low observability and have responded with multiple generations of countermeasures. The ability to make platforms survivable is approaching physical limits, making continuance of the traditional path impractical.

It has been about half that time since the demonstration of Unmanned Combat Air Vehicles (UCAVs), which have seen widespread use in stabilization operations. Adversary response to counter this capability has rapidly degraded the effectiveness of current Unmanned Air Vehicle (UAV) and UCAV systems.

To ensure access to and operations across all battlespace domains, TTO is interested in systems to counter the proliferation of advanced Integrated Air Defense Systems (IADS), to include extremely capable surface-to-air and air-to-air missiles, that directly threaten our ability to engage and prevail in combat, and to develop and harness revolutionary aviation technologies to achieve lasting advantage across the spectrum of conflict.

TTO's interest in Air Systems includes but is not limited to:

- Technologies to enable next generation unmanned air systems providing survivability and lethality improvements over existing UAVs.

- Distributed, disaggregated systems to reduce reliance on small numbers of exquisite platforms, increase survivability, improve flexibility, and counter adversary numerical advantage.
- Technologies to enable timely delivery of targeting data and tactical target prosecution at campaign scale to support Assault Breaker II (ABII).
- Technologies to enable development of aircraft capabilities that have not previously been fully exploited, including flight demonstration of vehicles that are traceable to operationally relevant missions, including propulsion and control technologies that improve sustainability, survivability, and efficiency.
- Technologies to enable greater levels of autonomy and cooperation (both at the individual aircraft and collaborative levels) that can minimize the risk to human warfighters and make individual platforms more "attritable," all while increasing overall effectiveness and lethality and allow piloted and autonomous systems to operate in concert.
- Emerging technologies in design and systems engineering that offer the possibility of developing and fielding systems more rapidly than previously. These may include the use of Model-Based Systems Engineering (MBSE), Multi-Dimensional Optimization (MDO), and Additive Manufacturing.

2. Ground Systems

Land combat is distinguished by its relative symmetry and profound complexity. Unlike naval, air, and space assets, which can employ long-standoff weapons and retreat to relative safety, soldiers and Marines often face direct fire from adversaries at close range. These adversaries may possess superior terrain knowledge, shorter supply lines, and increasing access to sophisticated technology for precision strikes. The future ground battlefield will be chaotic and unpredictable, with stationary forces vulnerable to lethal attacks.

TTO's interests in Ground Systems encompass, but are not limited to:

- Developing distributed autonomous systems that enable teams of platforms capable of coordinating, planning, and adapting in unknown environments while facing adversaries, demonstrating resilience to unplanned events and adaptability to new contexts.
- Advancements leading to lower communication needs between platforms, reduced sensor costs, extended endurance and enhanced operational performance.
- Enabling technologies leading to breakthroughs in platform sensing, reasoning, and actuation capabilities for resiliency in multidomain operations.
- Designing collective systems that can counter adversaries' extended planning and actions to disrupt objectives and missions.
- Technologies that enable teams of platforms to execute mission objectives despite unknown, imperfect, or incomplete information about their deployment environments.
- Developing systems that can handle attrition, surprises, and other unforeseen events through distributed reasoning and decision-making protocols, maintaining low probability of intercept (LPI) and achieving mission objectives without needing new rules in the playbook.
- Enhancing platforms' reasoning abilities through learning from other platforms,

exploration, or curricula development, in addition to technologies that enhance mobility and lethality for small units or individual warfighters.

- Expanding the combined arms maneuver trade space, including vertical dimension, building interiors, and natural and man-made subterranean environments.

3. Maritime Systems

The maritime domain is characterized by the persistent presence of a manned fleet to show the flag and exercise freedom of navigation throughout the world. The carrier strike group, has repeatedly demonstrated its efficacy in the decades following World War II. But investment in a monolithic, high-value asset (the carrier) brings with it specific deficiencies, namely, the need for a layered defense of the high-value asset against adversary countermeasures. Air-launched cruise missiles, advanced ballistic missiles, and hypersonic weapons represent serious threats to maintain presence with manned platforms inside adversary weapons engagement. Emphasis will be placed in the undersea environment and transition between undersea, surface and air. The maritime domain will also include expanding access and presence to new areas, such as the Arctic, and in new ways, such as enabling distributed architectures, to ensure freedom of navigation and prevent potential adversaries from achieving dominance across the globe.

TTO's interest in Maritime Systems includes but is not limited to:

- New maritime technologies to enable a dispersed system-of-systems architecture that complicates an adversary's plans by reducing warfighting reliance on monolithic, high-value surface and sub-surface assets.
- Technologies to identify, track, and defeat advanced subsurface systems.
- Architectures, advanced technologies, and concepts of operations to mature a capability to protect U.S. waterways and port facilities, thus enabling unencumbered naval operations.
- Technologies to provide a persistent presence in harsh environments such as the arctic, to include long duration, minimum maintenance, and safe navigation.
- Materials, coatings, structures, and systems that enable surface and sub-surface vehicle operation with dramatically increased operational envelopes.
- Technologies to enable dispersed and disaggregated maritime assets using small, inexpensive, networked vessels that leverage commercial private sector development in artificial intelligence and autonomy.
- Cross-domain technologies to leverage the undersea domain to impose doubt on our adversaries by projecting power into all other domains.

4. Space Systems

The national security space enterprise remains dominated by a culture of risk aversion and the deliberately paced development of small numbers of exquisite, expensive spacecraft used primarily for strategic applications, such as early warning of ballistic missile launches, intelligence, surveillance, and reconnaissance, and nuclear command and control. Upgrades occur on timescales measured in years to decades. Tactical applications currently comprise only a small portion of U.S. space capabilities, and they are insufficient to support envisioned

operations in denied or contested areas. Potential adversaries have recognized the U.S.'s dependency on space products – for defense, civil, and commercial applications – and have invested accordingly. Threats to our space assets and their attendant control systems have multiplied. TTO seeks innovative concepts for space systems that will preserve the U.S.'s capability to support warfighters in, and across, all domains of the battlespace.

TTO's interest in Space Systems includes but is not limited to:

- New space architectures that complicate an adversary's counter-space capabilities by reducing warfighting reliance on monolithic, long lead-time, high-value space assets and instruments.
- Innovative approaches to counter emerging threats assuming a contested space environment. Concepts and technologies to enhance access and freedom of operations in all orbital regimes.
- Innovative approaches to provide resilience, maneuver, and logistics support to space systems
- Concepts and technologies that reduce reliance on large, expensive, and increasingly vulnerable geostationary equatorial orbit (GEO) assets. Delivering capability by proliferating and disaggregating space assets at low earth orbit (LEO) with smaller, simpler satellites derived from commercial designs, and leveraging the emerging commercial private sector development of network and user segments.
- Concepts and technologies that exploit artificial intelligence and deep learning technologies to support access-denied scenarios, by enabling autonomous evaluation of data collected by multiple proliferated-LEO constellations, and enabling dynamic creation of kill chains.
- Advances in material science, manufacturing and computational techniques to reduce the size/weight, cost, and timeliness required to field game-changing capabilities.

II. Award Information

A. General Award Information

Multiple awards are anticipated. The amount of resources made available under this BAA will depend on the quality of the proposals received and the availability of funds. Initial awards are anticipated to be for less than $1 million and less than 18 months duration, although options that follow a base effort may also be proposed.

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation and to make awards without discussions with proposers. The Government also reserves the right to conduct discussions if it is later determined to be necessary. If warranted, portions of resulting awards may be segregated into pre-priced options. Additionally, DARPA reserves the right to accept proposals in their entirety or to select only portions of proposals for award. In the event that DARPA desires to award only portions of a proposal, negotiations may be opened with that proposer. The Government reserves the right to fund proposals in phases with options for continued work, as applicable.

Awards under this BAA will be made to proposers on the basis of the evaluation criteria identified in Section V, "Application Review Information." The Government reserves the right to request any additional, necessary documentation once it makes the award instrument determination. Such additional information may include but is not limited to Representations and Certifications (see Section IV.B.4(d), "Representations and Certifications"). The Government reserves the right to remove proposals from award consideration, should the parties fail to reach agreement on award terms, conditions, and/or cost/price within a reasonable time, or the proposer fails to provide requested additional information in a timely manner. Proposals identified for negotiation may result in a procurement contract, grant, cooperative agreement, or other transaction, depending upon the nature of the work proposed, the required degree of interaction between parties, whether or not the research is classified as Fundamental Research, and other factors. Any requests for or assumptions regarding Government Furnished Equipment (GFE) or Government Furnished Information (GFI) shall be clearly stated in the proposal.

Proposers looking for innovative, commercial-like contractual arrangements are encouraged to consider requesting Other Transactions. To understand the flexibility and options associated with Other Transactions, consult http://www.darpa.mil/work-with-us/contract-management#OtherTransactions.
In accordance with 10 U.S.C. § 4022(f), the Government may award a follow-on production contract or Other Transaction (OT) for any OT awarded under this solicitation if: (1) that participant in the OT, or a recognized successor in interest to the OT, successfully completed the entire prototype project provided for in the OT, as modified; and (2) the OT provides for the award of a follow-on production contract or OT to the participant, or a recognized successor in interest to the OT.

In all cases, the Government contracting officer shall have sole discretion to select award instrument type, regardless of instrument type proposed, and to negotiate all instrument terms and conditions with selectees. DARPA will apply publication or other restrictions, as necessary, if it determines that the research resulting from the proposed effort will present a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense. Any award resulting from such a determination will include a requirement for DARPA permission before publishing any information or results on the program. For more information on publication restrictions, see the section below on Fundamental Research

B. Fundamental Research

It is DoD policy that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. National Security Decision Directive (NSDD) 189 defines fundamental research as follows:

> 'Fundamental research' means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.

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.

University or non-profit research institution performance under this solicitation may include effort categorized as fundamental research. In addition to Government support for free and open scientific exchanges and dissemination of research results in a broad and unrestricted manner, the academic or non-profit research performer or recipient, regardless of tier, acknowledges that such research may have implications that are important to U.S. national interests and must be protected against foreign influence and exploitation. As such, the academic or non-profit research performer or recipient agrees to comply with the following requirements:

(a) The University or non-profit research institution performer or recipient must establish and maintain an internal process or procedure to address foreign talent programs, conflicts of commitment, conflicts of interest, and research integrity. The academic or non-profit research performer or recipient must also utilize due diligence to identify Foreign Components or participation by Senior/Key Personnel in Foreign Government Talent Recruitment Programs and agree to share such information with the Government upon request.

i. The above described information will be provided to the Government as part of the proposal response to the solicitation and will be reviewed and assessed prior to award. Generally, this information will be included in the Research and Related Senior/Key Personnel Profile (Expanded) form (SF-424) required as part the proposer's submission through Grants.gov.

1. Instructions regarding how to fill out the SF-424 and its biographical sketch can be found through Grants.gov.

ii. In accordance with USD(R&E) direction to mitigate undue foreign influence in DoD-funded science and technology, DARPA will assess all Senior/Key Personnel proposed to support DARPA grants and cooperative agreements for potential undue foreign influence risk factors relating to professional and financial activities. This will be done by evaluating information provided via the SF-424, and any accompanying or referenced documents, in order to identify and assess any associations or affiliations the Senior/Key Personnel may have with foreign strategic competitors or countries that have a history of intellectual property theft, research misconduct, or history of targeting U.S. technology for unauthorized transfer. DARPA's evaluation takes into consideration the entirety of the Senior/Key

Personnel's SF-424, current and pending support, and biographical sketch, placing the most weight on the Senior/Key Person's professional and financial activities over the last 4 years. The majority of foreign entities lists used to make these determinations are publicly available. The DARPA Countering Foreign Influence Program (CFIP) "Senior/Key Personnel Foreign Influence Risk Rubric" details the various risk ratings and factors. The rubric can be seen at the following link: https://www.darpa.mil/attachments/092021DARPACFIPRubric.pdf

iii. Examples of lists that DARPA leverages to assess potential undue foreign influence factors include, but are not limited to:

1. Executive Order 13959 "Addressing the Threat From Securities Investments That Finance Communist Chinese Military Companies": https://www.govinfo.gov/content/pkg/FR-2020-11-17/pdf/2020-25459.pdf
2. The U.S. Department of Education's College Foreign Gift and Contract Report: College Foreign Gift Reporting (ed.gov)
3. The U.S. Department of Commerce, Bureau of Industry and Security, List of Parties of Concern: https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern
4. Georgetown University's Center for Security and Emerging Technology (CSET) Chinese Talent Program Tracker: https://chinatalenttracker.cset.tech
5. Director of National Intelligence (DNI) "World Wide Threat Assessment of the US Intelligence Community": 2021 Annual Threat Assessment of the U.S. Intelligence Community (dni.gov)
6. Various Defense Counterintelligence and Security Agency (DCSA) products regarding targeting of US technologies, adversary targeting of academia, and the exploitation of academic experts: https://www.dcsa.mil/

(b) DARPA's analysis and assessment of affiliations and associations of Senior/Key Personnel is compliant with Title VI of the Civil Rights Act of 1964. Information regarding race, color, or national origin is not collected and does not have bearing in DARPA's assessment.

(c) University or non-profit research institutions with proposals selected for negotiation that have been assessed as having high or very high undue foreign influence risk, will be given an opportunity during the negotiation process to mitigate the risk. DARPA reserves the right to request any follow-up information needed to assess risk or mitigation strategies.

i. Upon conclusion of the negotiations, if DARPA determines, despite any proposed mitigation terms (e.g. mitigation plan, alternative research personnel), the participation of any Senior/Key Research Personnel still represents high risk to the program, or proposed mitigation affects the Government's confidence in proposer's capability to successfully complete the research (e.g., less qualified Senior/Key Research Personnel) the Government may determine not to award the proposed effort. Any decision not to award will be predicated upon reasonable disclosure of the pertinent facts and reasonable discussion of any possible alternatives while balancing program award timeline requirements.

(d) Failure of the academic or non-profit research performer or recipient to reasonably exercise due diligence to discover or ensure that neither it nor any of its Senior/Key Research Personnel involved in the subject award are participating in a Foreign Government Talent Program or have a Foreign Component with an a strategic competitor or country with a history of targeting U.S. technology for unauthorized transfer may result in the Government exercising remedies in accordance with federal law and regulation.

i. If, at any time, during performance of this research award, the academic or non-profit research performer or recipient should learn that it, its Senior/Key Research Personnel, or applicable team members or subtier performers on this award are or are believed to be participants in a Foreign Government Talent Program or have Foreign Components with a strategic competitor or country with a history of targeting U.S. technology for unauthorized transfer , the performer or recipient will notify the Government Contracting Officer or Agreements Officer within 5 business days.

1. This disclosure must include specific information as to the personnel involved and the nature of the situation and relationship. The Government will have 30 business days to review this information and conduct any necessary fact-finding or discussion with the performer or recipient.
2. The Government's timely determination and response to this disclosure may range anywhere from acceptance, to mitigation, to termination of this award at the Government's discretion.
3. If the University receives no response from the Government to its disclosure within 30 business days, it may presume that the Government has determined the disclosure does not represent a threat.

ii. The performer or recipient must flow down this provision to any subtier contracts or agreements involving direct participation in the performance of the research.

(e) Definitions

i. Senior/Key Research Personnel

1. This definition would include the Principal Investigator or Program/Project Director and other individuals who contribute to the scientific development or execution of a project in a substantive, measurable way, whether or not they receive salaries or compensation under the award. These include individuals whose absence from the project would be expected to impact the approved scope of the project.
2. Most often, these individuals will have a doctorate or other professional degrees, although other individuals may be included within this definition on occasion.

ii. Foreign Associations/Affiliations

1. Association is defined as collaboration, coordination or interrelation, professionally or personally, with a foreign government-connected entity

where no direct monetary or non-monetary reward is involved.

2. Affiliation is defined as collaboration, coordination, or interrelation, professionally or personally, with a foreign government-connected entity where direct monetary or non-monetary reward is involved.

iii. Foreign Government Talent Recruitment Programs

1. In general, these programs will include any foreign-state-sponsored attempt to acquire U.S. scientific-funded research or technology through foreign government-run or funded recruitment programs that target scientists, engineers, academics, researchers, and entrepreneurs of all nationalities working and educated in the U.S.

2. Distinguishing features of a Foreign Government Talent Recruitment Program may include:

a. Compensation, either monetary or in-kind, provided by the foreign state to the targeted individual in exchange for the individual transferring their knowledge and expertise to the foreign country.

b. In-kind compensation may include honorific titles, career advancement opportunities, promised future compensation or other types of remuneration or compensation.

c. Recruitment, in this context, refers to the foreign-state-sponsor's active engagement in attracting the targeted individual to join the foreign-sponsored program and transfer their knowledge and expertise to the foreign state. The targeted individual may be employed and located in the U.S. or in the foreign state.

d. Contracts for participation in some programs that create conflicts of commitment and/or conflicts of interest for researchers. These contracts include, but are not limited to, requirements to attribute awards, patents, and projects to the foreign institution, even if conducted under U.S. funding, to recruit or train other talent recruitment plan members, circumventing merit-based

processes, and to replicate or transfer U.S.-funded work in another country.

e. Many, but not all, of these programs aim to incentivize the targeted individual to physically relocate to the foreign state. Of particular concern are those programs that allow for continued employment at U.S. research facilities or receipt of U.S. Government research funding while concurrently receiving compensation from the foreign state.

3. Foreign Government Talent Recruitment Programs DO NOT include:

a. Research agreements between the University and a foreign entity, unless that agreement includes provisions that create situations of concern addressed elsewhere in this section,

b. Agreements for the provision of goods or services by commercial vendors, or

c. Invitations to attend or present at conferences.

iv. Conflict of Interest

1. A situation in which an individual, or the individual's spouse or dependent children, has a financial interest or financial relationship that could directly and significantly affect the design, conduct, reporting, or funding of research.

v. Conflict of Commitment

1. A situation in which an individual accepts or incurs conflicting obligations between or among multiple employers or other entities.

2. Common conflicts of commitment involve conflicting commitments of time and effort, including obligations to dedicate time in excess of institutional or funding agency policies or commitments. Other types of conflicting obligations, including obligations to improperly share information with, or withhold information from, an employer or funding agency, can also threaten research security and integrity and are an element of a broader concept of conflicts of commitment.

vi. Foreign Component

1. Performance of any significant scientific element or segment of a program or project outside of the U.S., either by the University or by a researcher employed by a foreign organization, whether or not U.S. government funds are expended.
2. Activities that would meet this definition include, but are not limited to:

a. Involvement of human subjects or animals;

b. Extensive foreign travel by University research program or project staff for the purpose of data collection, surveying, sampling, and similar activities;

c. Collaborations with investigators at a foreign site anticipated to result in co-authorship;

d. Use of facilities or instrumentation at a foreign site;

e. Receipt of financial support or resources from a foreign entity; or

f. Any activity of the University that may have an impact on U.S. foreign policy through involvement in the affairs or environment of a foreign country.

3. Foreign travel is not considered a Foreign Component.

vii. Strategic Competitor

1. A nation, or nation-state, that engages in diplomatic, economic or technological rivalry with the United States where the fundamental strategic interests of the U.S are under threat.

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 http://www.darpa.mil/work-with-us/additional-baa.

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.

III. Eligibility Information

A. Responsible Sources

All 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 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.

All responsible sources includes but is not limited to:

- Industrial/commercial concerns including small businesses
- Accredited degree granting colleges and universities
- Non-profit and not-for-profit organizations

1. Federally Funded Research and Development Centers (FFRDCs) and Government Entities

a) FFRDCs

FFRDCs are subject to applicable direct competition limitations and cannot propose to this solicitation in any capacity unless they meet the following conditions. (1) FFRDCs must clearly demonstrate that the proposed work is not otherwise available from the private sector. (2) FFRDCs must provide a letter, on official letterhead from their sponsoring organization, that (a) cites the specific authority establishing their eligibility to propose to Government solicitations and compete with industry, and (b) certifies the FFRDC's compliance with the associated FFRDC sponsor agreement's terms and conditions. These conditions are a requirement for FFRDCs proposing to be awardees or subawardees.

All proposers are expected to address transition; transition is part of the evaluation criteria in Section V.A. However, given their special status, FFRDCs should describe how and when a proposed technology/system will transition to which Non-FFRDC organization(s).

b) Government Entities

Government Entities (e.g., Government/National laboratories, military educational institutions, etc.) are subject to applicable direct competition limitations. Government Entities must clearly demonstrate that the work is not otherwise available from the private sector and provide written documentation citing the specific statutory authority and contractual authority, if relevant,

establishing their ability to propose to Government solicitations and compete with industry. This information is required for Government Entities proposing to be awardees or subawardees.

c) Authority and Eligibility

At the present time, DARPA does not consider 15 U.S.C. § 3710a to be sufficient legal authority to show eligibility. While 10 U.S.C.§ 4892 may be the appropriate statutory starting point for some entities, specific supporting regulatory guidance, together with evidence of agency approval, will still be required to fully establish eligibility. DARPA will consider FFRDC and Government Entity eligibility submissions on a case-by-case basis; however, the burden to prove eligibility for all team members rests solely with the proposer.

2. Non-U.S. Organizations and/or Individuals

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.

B. Organizational Conflicts of Interest

FAR 9.5 Requirements

In accordance with FAR 9.5, proposers are required to identify and disclose all facts relevant to potential OCIs involving the proposer's organization and *any* proposed team member (subawardee, consultant). Under this Section, the proposer is responsible for providing this disclosure with each proposal submitted to the solicitation. The disclosure must include the proposer's, and as applicable, proposed team member's OCI mitigation plan. The OCI mitigation plan must include a description of the actions the proposer has taken, or intends to take, to prevent the existence of conflicting roles that might bias the proposer's judgment and to prevent the proposer from having unfair competitive advantage. The OCI mitigation plan will specifically discuss the disclosed OCI in the context of each of the OCI limitations outlined in FAR 9.505-1 through FAR 9.505-4.

Agency Supplemental OCI Policy

In addition, DARPA has a supplemental OCI policy that prohibits contractors/performers from concurrently providing Scientific Engineering Technical Assistance (SETA), Advisory and Assistance Services (A&AS) or similar support services and being a technical performer. Therefore, as part of the FAR 9.5 disclosure requirement above, a proposer must affirm whether the proposer or *any* proposed team member (subawardee, consultant) is providing SETA, A&AS, or similar support to any DARPA office(s) under: (a) a current award or subaward; or (b) a past award or subaward that ended within one calendar year prior to the proposal's submission date.

If SETA, A&AS, or similar support is being or was provided to any DARPA office(s), the proposal must include:

- The name of the DARPA office receiving the support;
- The prime contract number;

- Identification of proposed team member (subawardee, consultant) providing the support; and
- An OCI mitigation plan in accordance with FAR 9.5.

Government Procedures

In accordance with FAR 9.503, 9.504 and 9.506, the Government will evaluate OCI mitigation plans to avoid, neutralize or mitigate potential OCI issues before award and to determine whether it is in the Government's interest to grant a waiver. The Government will only evaluate OCI mitigation plans for proposals that are determined selectable under the solicitation evaluation criteria and funding availability.

The Government may require proposers to provide additional information to assist the Government in evaluating the proposer's OCI mitigation plan.

If the Government determines that a proposer failed to fully disclose an OCI; or failed to provide the affirmation of DARPA support as described above; or failed to reasonably provide additional information requested by the Government to assist in evaluating the proposer's OCI mitigation plan, the Government may reject the proposal and withdraw it from consideration for award.

C. Cost Sharing/Matching

Cost sharing is not required; however, it will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument. Cost sharing is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort.

For more information on potential cost sharing requirements for Other Transactions for Prototype, see http://www.darpa.mil/work-with-us/contract-management#OtherTransactions.

IV. Application and Submission Information

A. Application Assistance

All administrative correspondence and questions on this solicitation, including requests for information on how to submit an executive summary, proposal abstract, or full proposal to this BAA, should be directed to HR001123S0042@darpa.mil.

This announcement, any attachments, and any references to external websites herein constitute the total solicitation. If proposers cannot access the referenced material posted in the announcement found at www.darpa.mil, Sam.gov or Grants.gov, contact the administrative contact listed above. No additional information is available, except as provided at SAM.gov or Grants.gov, nor will a formal Request for Proposal (RFP) or additional solicitation regarding this announcement be issued. Requests for the same will be disregarded.

Technical support for DARPA's BAA Website may be reached at BAAT_Support@darpa.mil. It is recommended that you Courtesy Copy (CC) the administrative contact at HR001123S0042@darpa.mil on this correspondence, for situational awareness.

B. Content and Form of Application Submission

Proposers are strongly encouraged to submit an executive summary and, if encouraged, a proposal abstract in advance of a full proposal. This procedure is intended to minimize unnecessary effort and cost in proposal preparation.

All submissions must be written in English with type not smaller than 12-point font. A page is defined as being no larger than an electronically formatted page of 8.5" by 11.0" with type not smaller than 12 point. Smaller font may be used for figures, tables, and charts. Copies of all documents submitted must be clearly labeled with the DARPA BAA number, proposer organization, and proposal title/proposal short title.

For a proposal that includes both classified and unclassified information, the proposal may be separated into an unclassified portion and a classified portion. The proposal should use the unclassified portion to the maximum extent reasonable. Submissions should be made according to the instructions outlined in Section IV.C.4. All monetary references in the proposal shall be in U.S. Dollars.

NOTE: Non-conforming submissions that do not follow the instructions herein may be rejected without further review. Submissions including profane, racially charged, or other similarly inappropriate language will not be reviewed.

1. Executive Summary (ES) Format

Executive summaries are encouraged in advance of submitting proposal abstracts and full proposals in order to provide potential proposers with a rapid response to minimize unnecessary effort. Proposers should specifically and clearly address the innovation of their proposed system or subsystem component development, the scientific or technical basis for innovative claims, and the impact of the proposed development on military mission capabilities, efficiency, or effectiveness. DARPA policy is to treat all submissions as source selection information (see FAR 2.101 and 3.104), and to disclose their contents only for the purpose of evaluation. The executive summary should be clearly marked "EXECUTIVE SUMMARY," and the total length shall not exceed two [2] pages. All executive summary submissions must be written in narrative form. No formal transmittal letter is required, but submissions must include the organization name, submission title, and technical POC information (e-mail and mailing address).

2. Proposal Abstract (PA) Format

Proposers are strongly encouraged to submit a proposal abstract, or white paper, in advance of a proposal. Abstracts should follow the same general format as described for proposals (see IV.B.3) but include ONLY sections I and II of Volume I, Technical and Management Proposal. The abstract must include a statement of the anticipated Rough Order of Magnitude (ROM) cost and the anticipated duration of the proposed effort. It is recommended that proposers provide sufficient information to assess the technical performance claims – DARPA policy is to treat all submissions as source selection information (see FAR 2.101 and 3.104), and to disclose their contents only for the purpose of evaluation. The cover sheet should

be clearly marked "ABSTRACT," and the total length should not exceed six [6] pages. The maximum page count excludes the cover page in Volume I, Technical and Management Proposal, section I, and official transmittal letter, but does include any figures, tables, and/or the requested tri chart. An official transmittal letter is not required.

3. Full Proposal (FP) Format

All proposals must be in the format given below. Non-conforming proposals may be rejected without review. The typical proposal should express a consolidated effort in support of one or more related technical concepts or ideas. Separate or disjointed efforts should not be combined into a single proposal. Proposals shall consist of two volumes: 1) Volume I, Technical and Management Proposal (composed of three parts), and 2) Volume II, Cost Proposal. The maximum page limit for Volume I is 30 pages if the proposal dollar value is < $1 million. The maximum page limit for Volume I is 40 pages if the proposal dollar value is > $1 million. Bracketed numbers by each section denote page limits. The page limitation for full proposals includes all figures, tables, and charts. The Volume I page limit does not include the SOW.

Ensure that each section provides the detailed discussion of the proposed work necessary to enable an in-depth review of the specific technical and managerial issues. Specific attention must be given to addressing both risk and payoff of the proposed work that make it desirable to DARPA.

Volume I, Technical and Management Proposal, described below, may include an attached bibliography of relevant technical papers or research notes (published and unpublished), which document the technical ideas and approach upon which the proposal is based. Copies of not more than three (3) relevant papers may be included with the submission. The bibliography and attached papers are not included in the page limits. The submission of other supporting materials along with the proposals is strongly discouraged and will not be considered for review.

a) Volume I, Technical and Management Proposal

<u>Section I: Administrative</u>

A. Cover Sheet to include {no page limit}:

(1) BAA number (HR001123S0042);
(2) Technical area;
(3) Lead Organization submitting proposal;
(4) Type of organization, selected among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," OR "OTHER NONPROFIT";
(5) Proposer's reference number (if any);
(6) Other team members (if applicable) and type of organization for each;
(7) Proposal title;
(8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);

(9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
(10) Total funds requested from DARPA, including total base cost, estimates of base cost in each year of the effort, estimates of itemized options in each year of the effort, and the amount of cost share (if any);
(11) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract – no fee, cost sharing contract – no fee, or other types of procurement contract (specify), grant, cooperative agreement, or other transaction;
(12) Place(s) and period(s) of performance;
(13) Affirmation of Human Subject Research. If none, state "none";
(14) Affirmation of Animal Research. If none, state "none";
(15) Summary of the costs of the proposed research, including total base cost, estimates of base cost in each year of the effort, estimates of itemized options in each year of the effort, and cost sharing if relevant;
(16) Name, address, and telephone number of the proposer's cognizant Defense Contract Management Agency (DCMA) administration office (if known);
(17) Name, address, and telephone number of the proposer's cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
(18) DUNS number;
(19) TIN number;
(20) Cage code (lead organization);
(21) Proposal validity period (minimum 180 days);
(22) Affirmation of existing SETA support contacts (see Part III, Section B). If none, state "none";
(23) Statement of Unique Capability Provided by Government or Government- Funded Team Member {no page limit};
(24) Per Section III.A – Eligible Applicants, proposals that include Government or Government-funded entities (i.e., FFRDC's, National laboratories, etc.) as prime, subcontractor or team member, shall provide a statement that clearly demonstrates the work being provided by the Government or Government- funded entity team member is not otherwise available from the private sector. If none of the team members belongs to a Government or Government-funded entity, then the proposer should state "Not Applicable."
(25) Date proposal was submitted.

B. Official transmittal letter {1 page limit}

C. Table of Contents {no page limit}

Section II: Summary of Proposal {4 page limit}

Note: The Summary of Proposal should not have any unique information not contained in the Detailed Proposal Information.

A. Innovation: Succinctly describe the uniqueness and benefits of the proposed research relative to the existing body of research and industry work. Provide a basic description of the scientific or technical basis for the innovative claims.

B. Results: Provide a short description of the deliverables associated with the proposed research – discuss the results, products, transferable technology, and transition path.

i Include in this section all proprietary claims to the results, prototypes, intellectual property, or systems supporting and/or necessary for the use of the research, results, and/or prototype. If there are no proprietary claims, this should be stated. For forms to be completed regarding intellectual property, see Section IV.B.4.i of this BAA. There will be no page limit for the listed forms.

ii Proposers responding to this BAA must submit a separate list of all technical data or computer software that will be furnished to the Government with other than unlimited rights. The Government will assume unlimited rights if proposers fail to identify any intellectual property restrictions in their proposals.

C. Technical Rationale: Provide a short description of the impact of the proposed development on military mission capabilities, efficiency, or effectiveness.

i Should include general discussion of other research in this area.

ii The purpose of this section is to explain why the specific technical approach you chose is superior to other technical approaches. This section is not intended to expand on the military utility of your concept.

D. Technical Approach: Provide a short description of the technical approach and constructive plan for accomplishment of technical goals in support of innovative claims and deliverable production.

E. Experience: Describe the unique capabilities of project and corporate team members. Describe the proposer's previous accomplishments and work in closely related research areas.

F. Cost: Cost, schedule and measurable milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the prime and major subcontractors, total cost and company cost share, if applicable. (Note: Measurable milestones should capture key development points in tasks and should be clearly articulated and defined in time relative to the start of effort).

G. Tri Chart: Include, in PowerPoint format, a Tri chart that reflects the content and claims in the proposal. The sections should be as follows: (1) proposal picture in the upper left-hand section; (2) proposal description, proposal budget and schedule in the right-hand section; (3) proposal military impact in the lower left-hand section. For full proposals, the tri chart will serve as the fourth page.

Section III: Detailed Proposal Information {Limited to 25 pages or 35 pages if proposal is more than $1 million. Page limit does not include SOW }

A. Statement of Work (SOW) – In plain English, clearly define the technical tasks/subtasks to be performed, their durations, and dependencies among them. The SOW should be structured with separate sections as follows:

Scope
Background
Tasks/Subtasks
Milestones
Deliverables

Ensure that the following elements are addressed:

i. A general description of the technical objective (for each defined task/activity);
ii. A detailed description of the approach to be taken to accomplish each defined task/activity in support of the innovative claims and deliverable production;
iii. Identification of the primary organization responsible for task execution (prime, sub, team member, by name, etc.);
iv. A top-level schedule for all major tasks and the completion criteria for each task/activity (a product, event or milestone that defines its completion). Please include where the effort could be partitioned into initial and future phases – future phases should be identified as options.
v. Define all deliverables (reporting, data, reports, hardware, software, technology, products, etc.) to be provided to the Government in support of the proposed tasks/activities; and
vi. Clearly identify any tasks/subtasks (to be performed by either an awardee or subawardee) that will be accomplished on-campus at a university, if applicable.

Note: The SOW should be developed so that each Phase of the program is separately defined with the tasks for the Base Period and any proposed Option Periods delineated. The SOW is not included as part of the Volume I page limit.

Do not include any proprietary information in the SOW.

B. Technical Rationale:

i Provide the technical rationale for the objective requirement, including technology advancements and value-added to DoD capabilities.
ii Provide technical rationale, scientific basis, and any supporting analysis for the technical approach for each major task/activity.
iii Provide a comparison of the technical objectives and technical approach with other ongoing research and existing state-of-the-art, indicating advantages and disadvantages of the proposed effort.

C. Risk and Risk Reduction:

i Provide an initial list of critical technology risk areas.

ii Describe the formal process for identifying and tracking the risk elements that translate into critical and unique technologies, processes and system attributes associated with technology objective.
iii For each proposed risk reduction task:
    a. Provide a detailed discussion of the technical objectives of each of the proposed risk reduction tasks as well as quantifiable success metrics.
    b. Describe the technical approach for each risk reduction task.
    c. Describe the value of performing the risk reduction activities during the initial phase, as opposed to deferring them until future phases.
iv Describe the process for identifying and evaluating applicable technologies available from other Government and industry R&D programs.
v Address mitigation of life cycle and sustainment risks associated with transitioning intellectual property for U.S. military applications, if applicable.
vi Provide a breakdown of all research tasks and subtasks and indicate the proposed classification of each. For all tasks and subtasks proposed to be unclassified, distinguish between work proposed to be Fundamental Research versus work proposed to be CUI.

D. Results:

i Describe the results, products, transferable technology and expected technology transfer/transition paths.
ii Provide a description of all proprietary claims to the results, prototypes, intellectual property, or systems. If there are no proprietary claims, this should be stated. For forms to be completed regarding intellectual property, see Section IV.B.4.i – Intellectual Property. There will be no page limit for the listed forms.

E. Organization:

i Describe the programmatic relationship of corporate team members.
ii Describe the responsibilities of corporate and project team members.
iii Describe the teaming strategy among the team members.
iv Identify the key personnel by name and include descriptions of their roles. DARPA requires key personnel identified in the proposal to be assigned as proposed, and the resulting contract/agreement will indicate no substitution shall be made without prior approval of the Government.
v Describe the proposer's previous accomplishments and work in closely related research areas.
vi Submit a clearly defined organization chart for the project team which includes, as applicable:
    a. The programmatic relationship of team members;
    b. The unique capabilities of team members;
    c. The task of responsibilities of team members;
    d. The teaming strategy among the team members; and
    e. The key personnel along with the amount of effort to be expended by each person during each year.

F. Facilities: Provide the location(s) at which the work will be performed, to include a description of any unique facilities necessary for the execution of the proposed effort that would be used.

G. Project Management:

i Management Plan:
   a. Describe program management process that will be utilized to achieve the technical objective.
   b. Include a description of how the team will function and share technical and financial information among the team members and with the Government.
   c. Provide short resumes for the key personnel in key disciplines/risk areas.

ii Schedule: Provide a detailed integrated schedule of all initial phase activities, including risk reduction tasks.
   a. Proposals below $1 million should provide an Integrated Master Schedule (IMS) aligned with the Statement of Work (SOW), showing and numbering tasks down to Level 2 of the Work Breakdown Structure (WBS) or other detailed project organization structure. Level 1 is defined as the overall project, and Level 2 is defined as the first-order breakdown of major tasks or activities (e.g., in a systems development project, Level 1 would be the entire system, for instance, a vehicle; and Level 2 would be the individual subsystems such as propulsion, navigation, communications, etc.).
   b. Proposals that exceed $1 million (total proposed value, regardless of potential cost share) should provide an IMS at WBS Level 3, defined as the tasks and activities subordinate to the Level 2 elements (e.g., Level 3 would be individual components such as an engine or a radio in the example above).
   c. Alternate work decomposition nomenclature as appropriate to the effort may be proposed, provided that it is broken down to the second or third hierarchical level based on the proposed value as described above.
   d. Measurable critical milestones should occur every two (2) to three (3) months after the start of the effort. Additional interim non-critical management milestones are also highly encouraged at regular intervals. Milestones must not include proprietary information.
   e. Top-level schedules are required for optional phases and should be based on the proposer's initial risk reduction strategy.
   f. Include key events and demonstrations as appropriate for the technology concept. An electronic copy of the IMS in MS Project shall be included with proposal submissions.
   g. All tasks in the IMS shall be linked and the ability to display the critical path shall be implemented.

b) Volume II, Cost Proposal

All proposers, including FFRDCs, must submit the following:

Section I: Administrative

A. Cover sheet to include:

(1) BAA number (HR001123S0042);
(2) Technical area;
(3) Lead Organization submitting proposal;
(4) Type of organization selected among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," OR "OTHER NONPROFIT";
(5) Proposer's reference number (if any);
(6) Other team members (if applicable) and type of organization for each;
(7) Proposal title;
(8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
(9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available);
(10) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract—no fee, cost sharing contract – no fee, or other type of procurement contract (specify), grant, cooperative agreement, or Other Transaction;
(11) Place(s) and period(s) of performance;
(12) Total proposed cost separated by basic award and option(s) (if any);
(13) Name, address, and telephone number of the proposer's cognizant Defense Contract Management Agency (DCMA) administration office (if known);
(14) Name, address, and telephone number of the proposer's cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
(15) Date proposal was prepared;
(16) DUNS number;
(17) TIN number;
(18) CAGE Code;
(19) Subawardee Information; and
(20) Proposal validity period.

Section II: Detailed Cost Proposal

Note: Nonconforming proposals may be rejected without review.

Additional Cost Proposal Information

A. Supporting Cost and Pricing Data

i The proposer should include supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates and should include a description of the method used to estimate costs and supporting documentation. The Government strongly encourages that tables included in the cost proposal also be provided in an editable (e.g., MS Excel) format with calculation formulas intact to allow traceability of the cost proposal numbers across the prime and subcontractors.

ii The awardee is responsible for ensuring all subawardee proposals are complete and timely (i.e., submitted at the same time as the prime proposal, either as part of the

prime submission or separately – see iv. below). Subawardee cost proposals shall be submitted to the same level of detail as that required for the prime.

iii Subawardee proposals include Interdivisional Work Transfer Agreements (ITWA) or similar arrangements being utilized.

iv All proprietary subawardee proposal documentation, prepared at the same level of detail as that required of the awardee's proposal and that cannot be uploaded with the proposed awardee's proposal, shall be provided to the Government either by the awardee or by the subawardee organization by e-mail (HR001123S0042@darpa.mil) when the proposal is submitted.

v Where the effort consists of multiple portions that could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.

vi For IT and equipment purchases, include a letter stating why the proposer cannot provide the requested resources from its own funding.

vii Each copy must be clearly labeled with the DARPA BAA number, proposer organization, and proposal title (short title recommended).

B. Cost Breakdown Information and Format:

The cost proposal must include the attached cost detail spreadsheet, completed by the prime proposer and each proposed subcontractor, in an editable format with calculation formulas intact.

Detailed cost breakdown to include the following.

i Provide the total cost and costs broken down by initial phase and options.

ii Provide costs broken down by task for the initial phase, including at a minimum:
   a. Major tasks by fiscal year;
   b. A summary of projected funding requirements by month;
   c. Direct labor, including labor categories and man-hours, and labor rates;
   d. Cost by the prime and major subcontractors;
   e. Cost by major risk/activity;
   f. Materials;
   g. Other Direct Costs (ODCs) (e.g., travel, equipment, etc.);
   h. Overhead/Indirect charges, and rates used to calculate overhead/indirect costs; provide the source, nature, and amount of any industry cost-sharing.

iii An itemization of major subcontracts and equipment purchases, including:
   a. Documentation supporting the reasonableness of the proposed equipment costs (vendor quotes, past purchase orders/purchase history, detailed engineering estimates, etc.) and a description of the method used to estimate costs and supporting documentation.
   b. Identification of pricing assumptions of which may require incorporation into the resulting award instrument (e.g., use of Government Furnished Property/Facilities/Information, access to Government Subject Matter Experts, etc.)

c. Any information technology (IT) purchase, as defined by FAR 2.101 – Documentation supporting the reasonableness of the proposed equipment costs (vendor quotes, past purchase orders/purchase history, detailed engineering estimates, etc.) shall be provided, including a letter stating why the proposer cannot provide the requested resources from its own funding for prime and all sub-awardees.
d. If the effort is a classified Special Access Program (SAP) and the offeror proposes use of a SAP IT system other than the current DARPA approved SAP IT systems solution, and DARPA approves in writing use of a SAP IT system that is unique or different from the current DARPA approved SAP IT systems solution, then: 1) successful offerors are required to track and provide all SAP IT costs associated with such unique SAP IT system solution, and 2) any such costs, to include costs for associated cybersecurity manpower, shall be reported at least annually to the DARPA Program Manager by Oct 1st of each year for inclusion in the DARPA Annual SAP report. Those costs should also include costs associated with the SAP IT Destruction, disposition, and sanitization processes required in the DoD CIO Memorandum of April 20, 2020[1]. NOTE: If the proposed SAP IT system for use is the DARPA approved SAP IT systems solution only, then no separate tracking or reporting of costs by the contractor for SAP IT is required.

The Government requires that proposers* use the provided MS Excel™ DARPA Standard Cost Proposal Spreadsheet in the development of their cost proposals. A customized cost proposal spreadsheet may be an attachment to this solicitation. If not, the spreadsheet can be found on the DARPA website at http://www.darpa.mil/work-with-us/contract-management (under "Resources" on the right-hand side of the webpage). All tabs and tables in the cost proposal spreadsheet should be developed in an editable format with calculation formulas intact to allow traceability of the cost proposal. This cost proposal spreadsheet should be used by the prime organization and all subcontractors. In addition to using the cost proposal spreadsheet, the cost proposal still must include all other items required in this announcement that are not covered by the editable spreadsheet. Subcontractor cost proposal spreadsheets may be submitted directly to the Government by the proposed subcontractor via e-mail to the address in Part I of this solicitation. **Using the provided cost proposal spreadsheet will assist the Government in a rapid analysis of your proposed costs and, if your proposal is selected for a potential award, speed up the negotiation and award execution process**.
*University proposers requesting a grant, cooperative agreement, or Other Transaction for Research do not need to use the MS Excel™ DARPA Standard Cost Proposal Spreadsheet. Instead, a proposed budget and justification may be provided using the SF-424 Research & Related Budget forms provided via https://www.grants.gov.

C. Certified Cost or Pricing Data

[1] The title of this memorandum is CUI and the memo is classified SECRET//HANDLE VIA SPECIAL ACCESS CHANNELS ONLY. This memorandum may be provided under separate cover.

Per FAR 15.403-4, certified cost or pricing data shall be required for any procurement contract award not subject to any of the FAR 15.403-1 exceptions. Please note that adequate price competition is not considered present in BAA awards; therefore, this exception does not apply to proposals submitted under this BAA. Certified cost or pricing data are not required if the proposer proposes an award instrument other than a procurement contract (e.g., a grant, cooperative agreement, or other transaction.)

D. Other Transaction Requests

The Government may award either a Federal Acquisition Regulation (FAR) based contract or Other Transaction for Prototype (OT) agreement for prototype system development.

All proposers requesting an OT must include a detailed list of milestones. Each milestone must include the following:

a. milestone description;
b. completion criteria;
c. due date; and
d. payment/funding schedule (to include, if cost share is proposed, awardee and Government share amounts).

It is noted that, at a minimum, milestones should relate directly to accomplishment of program technical metrics as defined in the BAA and/or the proposer's proposal. Agreement type, expenditure or fixed-price based, will be subject to negotiation by the Agreements Officer. Do not include proprietary data. If a proposer requests award of an OT for Prototype, information must be provided in the cost proposal to verify the proposer's eligibility in accordance with 10 U.S.C. § 4022.

4. Additional Proposal Information (unclassified and classified)

a) Proprietary Markings

Proposers are responsible for clearly identifying proprietary information. Submissions containing proprietary information must have the cover page and each page containing such information clearly marked with a label such as "Proprietary." NOTE: "Confidential" is a classification marking used to control the dissemination of U.S. Government National Security Information as dictated in Executive Order 13526 and should not be used to identify proprietary business information.

b) Marking Classified Submissions

Submission instructions can be found in Section IV.C.3. should a proposer wish to submit classified information. 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.

Classified submissions shall be transmitted and marked in accordance with the following guidance. Security classification guidance via a Security Classification Guide (SCG) and/or DARPA DD Form 254, "DoD Contract Security Classification Specification," may be provided at a later date.

If a submission contains Classified National Security Information or the suspicion of such, as defined by Executive Order 13526, the information must be appropriately and conspicuously marked with the proposed classification level and declassification date. Submissions requiring DARPA to make a final classification determination shall be marked as follows:

"CLASSIFICATION DETERMINATION PENDING. Protect as though classified_____(insert the recommended classification level, e.g., Top Secret, Secret or Confidential)"

If a submission contains Classified National Security Information or the suspicion of such, as defined by Executive Order 13526, applicants will ensure all industrial, personnel, and information systems processing security requirements are in place and at the appropriate level (e.g., Facility Clearance Level (FCL), Automated Information Security (AIS), Certification and Accreditation (C&A), and any Foreign Ownership Control and Influence (FOCI) issues are mitigated prior to submission. Additional information on these subjects can be found at http://www.dcsa.mil.

NOTE: Classified submissions must indicate the classification level of not only the submitted materials, but also the classification level of the anticipated award.

c) Disclosure of Information and Compliance with Safeguarding Covered Defense Information Controls

The following provisions and clause apply to all solicitations and contracts; however, the definition of "controlled technical information" clearly exempts work considered fundamental research and therefore, even though included in the contract, will not apply if the work is fundamental research.
DFARS 252.204-7000, "Disclosure of Information"
DFARS 252.204-7008, "Compliance with Safeguarding Covered Defense Information Controls"
DFARS 252.204-7012, "Safeguarding Covered Defense Information and Cyber Incident Reporting"
The full text of the above solicitation provision and contract clauses can be found at http://www.darpa.mil/work-with-us/additional-baa#NPRPAC.
Compliance with the above requirements includes the mandate for proposers to implement the security requirements specified by National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, "Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations" (see https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-171r2.pdf) and DoDI 8582.01 that are in effect at the time the solicitation is issued.

For awards where the work is considered fundamental research, the contractor will not have to implement the aforementioned requirements and safeguards. However, should the nature of the work change during performance of the award, work not considered fundamental research will be subject to these requirements.

d) Representations and Certifications

In accordance with FAR 4.1102 and 4.1201, proposers requesting a procurement contract must complete electronic annual representations and certifications at https://www.sam.gov/.
In addition, all proposers are required to submit for all award instrument types supplementary DARPA-specific representations and certifications at the time of proposal submission. See http://www.darpa.mil/work-with-us/reps-certs for further information on required representation and certification depending on your requested award instrument.
A small business joint venture offeror must submit, with its offer, the representation required in paragraph (c) of FAR solicitation provision 52.212-3, Offeror Representations and Certifications-Commercial Products and Commercial Services, and paragraph (c) of FAR solicitation provision 52.219-1, Small Business Program Representations, in accordance with 52.204-8(d) and 52.212-3(b) for the following categories: (A) Small business; (B) Service-disabled veteran-owned small business; (C) Women-owned small business (WOSB) under the WOSB Program; (D) Economically disadvantaged women-owned small business under the WOSB Program; or (E) Historically underutilized business zone small business.

e) Human Subjects Research (HSR)/Animal Use

Proposers that anticipate involving human subjects or animals in the proposed research must comply with the approval procedures detailed at http://www.darpa.mil/work-with-us/additional-baa, to include providing the information specified therein as required for proposal submission.

f) Approved Cost Accounting System Documentation

Proposers that do not have a Cost Accounting Standards (CAS) compliant accounting system considered adequate for determining accurate costs that are negotiating a cost- type procurement contract must complete an SF 1408. For more information on CAS compliance, see http://www.dcaa.mil/. To facilitate this process, proposers should complete the SF 1408 found at http://www.gsa.gov/portal/forms/download/115778 and submit the completed form with the proposal.

g) Small Business Subcontracting Plan

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. § 637(d)) and FAR 19.702(a)(1), each proposer who submits a contract proposal should review FAR 19.7 to determine whether it is required to submit a subcontracting plan with its proposal. The plan format is outlined in FAR 19.704.

h) Section 508 of the Rehabilitation Act (29 U.S.C. § 749d)/FAR 39.2

All electronic and information technology acquired or created through this BAA must satisfy the accessibility requirements of Section 508 of the Rehabilitation Act (29 U.S.C. § 749d)/FAR 39.2.

i) Grant Abstract

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.

j) Intellectual Property

All proposers must provide a good faith representation that the proposer either owns or possesses the appropriate licensing rights to all intellectual property that will be utilized under the proposed effort.

(1) For Procurement Contracts

Proposers responding to this BAA requesting procurement contracts will need to complete the certifications at DFARS 252.227-7017. See http://www.darpa.mil/work-with-us/additional-baa for further information. If no restrictions are intended, the proposer should state "none." The table below captures the requested information:

Technical Data Computer Software To be Furnished With Restrictions	Summary of Intended Use in the Conduct of the Research	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(NARRATIVE)	(LIST)	(LIST)	(LIST)

(2) For All Non-Procurement Contracts

Proposers responding to this BAA requesting a Grant, Cooperative Agreement, or Other Transaction for Prototypes shall follow the applicable rules and regulations governing these various award instruments, but, in all cases, should appropriately identify any potential restrictions on the Government's use of any Intellectual Property contemplated under the award instrument in question. This includes both Noncommercial Items and Commercial Items. Proposers are encouraged use a format similar to that described in Paragraph (1). above. If no restrictions are intended, then the proposer should state "NONE."

k) System for Award Management (SAM) and Universal Identifier Requirements

All proposers must be registered in SAM unless exempt per FAR 4.1102. FAR 52.204-7, "System for Award Management" and FAR 52.204-13, "System for Award Management Maintenance" are incorporated into this solicitation. See http://www.darpa.mil/work-with-us/additional-baa for further information.
International entities can register in SAM by following the instructions in this link: https://www.fsd.gov/sys_attachment.do?sys_id=c08b64ab1b4434109ac5ddb6bc4bcbb8.

C. Submission Information

DARPA will acknowledge receipt of all submissions and assign an identifying control number that should be used in all further correspondence regarding the submission. DARPA intends to use electronic mail correspondence regarding HR001123S0042 for questions only. Executive Summary, Proposal Abstract and/or Full Proposal submissions may not be made by fax or e-mail (with the exception of subcontractor submissions submitted directly to DARPA due to the presence of proprietary information); any so sent will be disregarded.

The submission should express a consolidated effort in support of one or more related technical concepts or ideas. Disjointed or separate efforts should not be combined into a single submission. All classified concepts mailed via appropriate U.S. Postal Service (USPS) methods (e.g., USPS Registered Mail or USPS Express Mail) are to be submitted separately.

Submissions will not be returned. An electronic copy of each submission received will be retained at DARPA and all other non-required copies destroyed. A certification of destruction may be requested, provided the formal request is received by DARPA within 5 days after notification that a proposal was not selected.

Executive summaries, proposal abstracts, and full proposals must be submitted on or before June 21, 2024. Submissions received to HR001123S0042 after this time and date may not be evaluated.

1. Unclassified Submission Instructions (Proposers Not Requesting Grants or Cooperative Agreements)

Unclassified concepts sent in response to this BAA may be submitted via DARPA's BAA Website (https://baa.darpa.mil). Classified submissions and proposals requesting grants or cooperative agreements must NOT be submitted through DARPA's BAA Website (https://baa.darpa.mil). Instructions for a proposal that includes both classified and unclassified information can be found below under "Submission Instructions for both Classified and Unclassified Submissions (Section IV.C.4)."

All concepts submitted electronically through DARPA's BAA Website must be uploaded as zip archives (i.e., files with a .zip or .zipx extension). The final zip file archive should be no greater than 100 MB in size. Only one zip archive will be accepted per submission – subsequent

upload for the same submission will overwrite previous uploads, and submissions not uploaded as zip archives will be rejected by DARPA. Submissions should be made separately – multiple submissions submitted in the same package (or zip file) shall not be reviewed.

Technical support for DARPA's BAA Website may be reached at BAAT_Support@darpa.mil, and is typically available during regular business hours (9:00 AM – 5:00 PM Eastern Time). You are encouraged to courtesy copy (HR001123S0042@darpa.mil) for situational awareness.

Note: If an account has recently been created for the DARPA BAA Website, this account may be reused. Accounts are typically disabled and eventually deleted following 75-90 days of inactivity – if you are unsure when the account was last used, it is recommended that you create a new account. If no account currently exists for the DARPA BAA Website, visit the website to complete the two-step registration process. Submitters will need to register for an Extranet account (via the form at the URL listed above) and wait for two separate e-mails containing a username and temporary password. The "Password Reset" option at the URL listed above can be used if the password is not received in a timely fashion. After accessing the Extranet, submitters may then create an account for the DARPA BAA website (via the "Register your Organization" link along the left side of the homepage), view submission instructions, and upload/finalize the proposal. Note: Even if a submitter's organization has an existing registration, each user submitting a proposal must create their own Organization Registration.

2. Submission Instructions for Proposers Requesting Grants or Cooperative Agreements

Proposers requesting grants or cooperative agreements should NOT submit a full proposal through DARPA's BAA Website (https://baa.darpa.mil).

Proposers requesting grants or cooperative agreements must submit proposals through one of the following methods: (1) electronic upload per the instructions at https://www.grants.gov/applicants/apply-for-grants.html (DARPA-preferred); or (2) hard-copy mailed directly to DARPA. If proposers intend to use Grants.gov as their means of submission, then they must submit their entire proposal through Grants.gov; applications cannot be submitted in part to Grants.gov and in part as a hard-copy. Proposers using Grants.gov do not submit hard-copy proposals in addition to the Grants.gov electronic submission.

Submissions: In addition to the volumes and corresponding attachments requested elsewhere in this solicitation, proposers must also submit the three forms listed below.

Form 1: SF 424 Research and Related (R&R) Application for Federal Assistance, available on the Grants.gov website at https://apply07.grants.gov/apply/forms/sample/RR_SF424_2_0-V2.0.pdf. *This form must be completed and submitted.*

To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681 et.seq.), the Department of Defense (DoD) is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in science, technology, engineering or mathematics disciplines. In addition, the

National Defense Authorization Act (NDAA) for FY 2019, Section 1286, directs the Secretary of Defense to protect intellectual property, controlled information, key personnel, and information about critical technologies relevant to national security and limit undue influence, including foreign talent programs by countries that desire to exploit United States' technology within the DoD research, science and technology, and innovation enterprise. This requirement is necessary for all research and research-related educational activities. The DoD is using the two forms below to collect the necessary information to satisfy these requirements. Detailed instructions for each form are available on Grants.gov.

Form 2: The Research and Related Senior/Key Person Profile (Expanded) form, available on the Grants.gov website at https://apply07.grants.gov/apply/forms/sample/RR_KeyPersonExpanded_3_0-V3.0.pdf, will be used to collect the following information for all senior/key personnel, including Project Director/Principal Investigator and Co-Project Director/Co-Principal Investigator, whether or not the individuals' efforts under the project are funded by the DoD. The form includes 3 parts: the main form administrative information, including the Project Role, Degree Type and Degree Year; the biographical sketch; and the current and pending support. The biographical sketch and current and pending support are to be provided as attachments:

- Biographical Sketch: Mandatory for Project Directors (PD) and Principal Investigators (PI), optional, but desired, for all other Senior/Key Personnel. The biographical sketch should include information pertaining to the researchers:
    - Education and Training.
    - Research and Professional Experience.
    - Collaborations and Affiliations (for conflict of interest).
    - Publications and Synergistic Activities.
- Current and Pending Support: Mandatory for all Senior/Key Personnel including the PD/PI. This attachment should include the following information:
    - A list of all current projects the individual is working on, in addition to any future support the individual has applied to receive, regardless of the source.
    - Title and objectives of the other research projects.
    - The percentage per year to be devoted to the other projects.
    - The total amount of support the individual is receiving in connection to each of the other research projects or will receive if other proposals are awarded.
    - Name and address of the agencies and/or other parties supporting the other research projects
    - Period of performance for the other research projects.

Additional senior/key persons can be added by selecting the "Next Person" button at the bottom of the form. Note that, although applications without this information completed may pass Grants.gov edit checks, if DARPA receives an application without the required information, DARPA may determine that the application is incomplete and may cause your submission to be rejected and eliminated from further review and consideration under the solicitation. DARPA

reserves the right to request further details from the applicant before making a final determination on funding the effort.

Form 3: Research and Related Personal Data, available on the Grants.gov website at https://apply07.grants.gov/apply/forms/sample/RR_PersonalData_1_2-V1.2.pdf. *Each applicant must complete the name field of this form, however, provision of the demographic information is voluntary. Regardless of whether the demographic fields are completed or not, this form must be submitted with at least the applicant's name completed.*

Grants.gov Submissions: Grants.gov requires proposers to complete a one-time registration process before a proposal can be electronically submitted. First time registration can take between three business days and four weeks. For more information about registering for Grants.gov, see http://www.darpa.mil/work-with-us/additional-baa.

Technical support for Grants.gov submissions may be reached at 1-800-518-4726 or support@grants.gov.

Hard-copy Submissions: Proposers electing to submit grant or cooperative agreement proposals as hard copies must complete the same forms as indicated above.

3. Classified Submission Instructions, Requirements, and Procedures (applicable to all Proposers)

Classified submissions (Executive Summary, Proposal Abstract or Full Proposal) should NOT be submitted through DARPA's BAA Website (https://baa.darpa.mil). Proposers will likely still need to visit https://baa.darpa.mil to register their organization (or verify an existing registration) to ensure the BAA office can verify and finalize their submission – instructions for this process can be obtained by inquiry via the BAA Coordinator inbox (HR001123S0042@darpa.mil). **Executive Summary or Proposal Abstracts will not be accepted if submitted via Grants.gov.**

Proposers submitting classified information must have, or be able to obtain prior to contract award, cognizant security agency approved facilities, information systems, and appropriately cleared/eligible personnel to perform at the classification level proposed. All proposer personnel performing Information Assurance (IA)/Cybersecurity related duties on classified Information Systems shall meet the requirements set forth in DoD Manual 8570.01-M (Information Assurance Workforce Improvement Program). Additional information on the subjects discussed in this section may be found at http://www.dcsa.mil.

Proposers choosing to submit classified information from other classified sources (i.e., sources other than DARPA) must ensure (1) they have permission from an authorized individual at the cognizant Government agency (e.g., Contracting Officer, Program Manager); (2) the proposal is marked in accordance with the source Security Classification Guide (SCG) from which the material is derived; and (3) the source SCG is submitted along with the proposal.

When submitting a hard copy of the classified portion according to the instructions outlined below, proposers should submit three (3) hard copies of the classified portion of their proposal and two (2) CD-ROMs containing the classified portion of the proposal as a single searchable Adobe PDF file. Please ensure that all CDs are well-marked. Each copy of the classified portion must be clearly labeled with HR001123S0042, proposer organization, proposal title (short title recommended), and "Copy _ of _."

Confidential, Secret, and Top-Secret Information

Use transmission, classification, handling, and marking guidance provided by previously issued SCGs, the DoD Information Security Manual (DoDM 5200.01, Volumes 1 - 4), and the National Industrial Security Program Operating Manual, including the Supplement Revision 1 (DoD 5220.22-M and DoD 5200.22-M Sup. 1), when submitting Confidential, Secret, and/or Top Secret classified information.

Confidential and Secret

Confidential and Secret classified information may be submitted via ONE of the two following methods to the mailing address listed in the contact information in Part I of this BAA:

- Hand-carried by an appropriately cleared and authorized courier to the DARPA Classified Document Registry (CDR). Prior to traveling, the courier shall contact the DARPA CDR at 703-526-4052 to coordinate arrival and delivery.

OR

- Mailed via U.S. Postal Service (USPS) Registered Mail or USPS Express Mail. All classified information will be enclosed in opaque inner and outer covers and double-wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. Senders should mail to the mailing address listed in the contact information herein.

  The inner envelope shall be addressed to:
  Defense Advanced Research Projects Agency
  ATTN: DARPA/TTO
  Reference: HR001123S0042
  675 North Randolph Street Arlington, VA 22203-2114

  The outer envelope shall be sealed with no identification as to the classification of its contents and addressed to:

  Defense Advanced Research Projects Agency Security & Intelligence Directorate ATTN: CDR
  675 North Randolph Street
  Arlington, VA 22203-2114

Top Secret Information

Top Secret information must be hand-carried by an appropriately cleared and authorized courier to the DARPA CDR. Prior to traveling, the courier shall contact the DARPA CDR at 703-526-4052 to coordinate arrival and delivery.

Sensitive Compartmented Information (SCI)

SCI must be marked, managed and transmitted in accordance with DoDM 5105.21 Volumes 1 - 3. Questions regarding the transmission of SCI may be sent to the DARPA Technical Office Program Security Officer (PSO) via the BAA mailbox or by contacting the DARPA Special Security Officer (SSO) at 703-812-1970.

Successful proposers may be sponsored by DARPA for access to SCI. Sponsorship must be aligned to an existing DD Form 254 where SCI has been authorized. Questions regarding SCI sponsorship should be directed to the DARPA Personnel Security Office at 703-526-4543.

Special Access Program (SAP) Information

SAP information must be marked in accordance with DoDM 5205.07 Volume 4 and transmitted by specifically approved methods which will be provided by the Technical Office PSO or their staff.

Proposers choosing to submit SAP information from an agency other than DARPA are required to provide the DARPA Technical Office PSO written permission from the source material's cognizant Special Access Program Control Officer (SAPCO) or designated representative. For clarification regarding this process, contact the DARPA Technical Office PSO via the BAA mailbox or the DARPA SAPCO at 703-526-4102.

Additional SAP security requirements regarding facility accreditations, information security, personnel security, physical security, operations security, test security, classified transportation plans, and program protection planning may be specified in the DD Form 254.

NOTE: All proposals containing Special Access Program (SAP) information must be processed on a SAP information technology (SAP IT) system that has received an Approval-to-Operate (ATO) from the DARPA Technology Office PSO or other applicable DARPA SAP IT Authorizing Official. The SAP IT system ATO will be based upon the Risk Management Framework (RMF) process outlined in the Joint Special Access Program Implementation Guide (JSIG), current version (or successor document). (Note: A SAP IT system is any SAP IT system that requires an ATO. It can range from a single laptop/tablet up to a local and wide area networks.)

The Department of Defense mandates the use of a component's SAP enterprise system unless a compelling reason exists to use a non-enterprise system. The DARPA Chief Information Officer (CIO) must approve any performer proposal to acquire, build, and operate a non-enterprise SAP IT system during the awarded period of performance. Use of the DARPA SAP enterprise system, SAVANNAH, does not require CIO approval.

SAP IT disposition procedures must be approved by the DARPA Senior Authorizing Official, or SAPCO, IAW the OSD SAPCO Memorandum, "Disposition of DoD Special Access Program Information Technology Devices," July 27, 2017.

4. Submission Instructions for both Classified and Unclassified Submissions

For a proposal that includes both classified and unclassified information, the proposal may be separated into an unclassified portion and a classified portion. When a proposal includes a classified portion, and when able according to security guidelines, we ask that proposers send an e-mail to HR001123S0042@darpa.mil as notification that there is a classified portion to the proposal.

The proposal should include as much information as possible in the unclassified portion and use the classified portion ONLY for classified information. The unclassified portion can be submitted through the DARPA BAA Website, per the instructions in "Unclassified Submission Instructions (Proposers Not Requesting Grants or Cooperative Agreements)" above. The classified portion must be provided separately, according to the instructions outlined in the 'Classified Submission Instructions, Requirements, and Procedures' section above.

D. Funding Restrictions

Not applicable

E. Other Submission Requirements

DARPA will post a consolidated Frequently Asked Questions (FAQ) document. To access the posting go to: http://www.darpa.mil/work-with-us/opportunities. Under the HR001123S0042 summary will be a link to the FAQ. Submit your question/s by e-mail to HR001123S0042@darpa.mil. Questions must be received by the FAQ/Questions due date listed in Part I, Overview Information.

V. Application Review Information

A. Evaluation Criteria

Submissions that are deemed technically identical, or nearly identical, to previous submissions may be rejected without further review.

Conforming proposals will be evaluated using the following criteria, listed in descending order of importance:

1. Overall Scientific and Technical Merit

The proposed technical approach is innovative, feasible, achievable, and complete.

Concepts specifically and clearly address the innovation proposed and the

scientific or technical basis of the claims.

The proposed technical team reflects 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 contains sufficient information demonstrating an executable course of research to enable capabilities beyond state-of-the-art. The proposal identifies major technical risks and planned mitigation efforts are clearly defined and feasible. Barriers to implementation have been adequately discussed and addressed.

2. Potential Contribution and Relevance to the DARPA Mission

The potential contributions of the proposed effort are relevant to the national technology base. Specifically, DARPA's mission is to make pivotal early technology investments that create or prevent strategic surprise for U.S. National Security.

The proposal clearly supports TTO mission and the office's focus on platform development efforts. The proposed approaches or technologies are not comparable to the current state of practice, or duplicative of on-going efforts.

The proposer will be evaluated on their capability to transition the technology to the research, industrial, and/or operational military communities in such a way as to enhance U.S. defense. In addition, this evaluation will take into consideration the extent to which the proposed intellectual property (IP) rights will potentially impact the Government's ability to transition the technology to the research, industrial, and operational military communities.

3. 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 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).

Where applicable, the proposal demonstrates the leveraging of 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. The proposal has not included undue emphasis on cost such that low-risk ideas with minimum uncertainty and staffing with junior personnel in order to be in a more competitive posture is apparent.

4. Realism of Proposed Schedule

The proposed schedule aggressively pursues performance metrics in an efficient time frame that accurately accounts for the anticipated workload. The proposed schedule identifies and mitigates any potential schedule risk.

5. Proposer's Capabilities and/or Related Experience

The proposer's prior experience in similar efforts clearly demonstrates an ability to deliver the product proposed, meeting the proposed technical performance within the proposed budget and schedule. The proposed team has the expertise to manage the cost and schedule. Similar efforts completed/ongoing by the proposer in this area are fully described including identification of other Government sponsors.

B. Review of Submissions

1. Review Process

It is the policy of DARPA to ensure impartial, equitable, comprehensive evaluations based on the criteria listed in Section V.A and to select the source (or sources) whose offer meets the Government's technical, policy, and programmatic goals.

The potential contributions of the proposed effort are relevant to the national technology base. Specifically, DARPA's mission is to make pivotal early technology investments that create or prevent strategic surprise for U.S. National Security.

DARPA will conduct a scientific/technical review of each conforming proposal. Conforming proposals comply with all requirements detailed in this solicitation; proposals that fail to do so may be deemed non-conforming and may be removed from consideration. Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

Award(s) will be made to proposers whose proposals are determined to be the most advantageous to the Government, consistent with instructions and evaluation criteria specified in the BAA herein, and availability of funding.

2. Handling of Source Selection Information

DARPA policy is to treat all submissions as source selection information (see FAR 2.101 and 3.104), and to disclose their contents only for the purpose of evaluation. Restrictive notices notwithstanding, during the evaluation process, submissions may be handled by support contractors for administrative purposes and/or to assist with technical evaluation. All DARPA support contractors performing this role are expressly prohibited from performing DARPA-sponsored technical research and are bound by appropriate nondisclosure agreements. Subject to the restrictions set forth in FAR 37.203(d), input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants/experts who are strictly bound by the appropriate non-disclosure requirements.

3. Federal Awardee Performance and Integrity Information (FAPIIS)

Per 41 U.S.C. 2313, as implemented by FAR 9.103 and 2 CFR § 200.205, prior to making an award above the simplified acquisition threshold, DARPA is required to review and consider any information available through the designated integrity and performance system (currently FAPIIS). Awardees have the opportunity to comment on any information about themselves entered in the database, and DARPA will consider any comments, along with other information in FAPIIS or other systems prior to making an award.

4. Countering Foreign Influence Program (CFIP)

DARPA's 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 CFIP team will create risk assessments of all proposed Senior/Key Personnel selected for negotiation of a fundamental research grant or cooperative agreement award. The CFIP risk assessment process will be conducted separately from the DARPA scientific review process and adjudicated prior to final award.

VI. Award Administration Information

A. Selection Notices and Notifications

All official notifications will be sent via email to the Technical and/or Administrative POC identified within the submission. DARPA will attempt to reply to executive summaries in writing within forty-five (45) calendar days. DARPA will attempt to reply to proposal abstracts and full proposals via the same method within sixty (60) days.

1. Executive Summaries

DARPA will respond to executive summaries with a statement as to whether DARPA is interested in the idea. A letter of interest will encourage the submission of a proposal abstract. Regardless of DARPA's response to an executive summary, proposers may submit a proposal abstract or a full proposal. DARPA will review all conforming full proposals submitted using the published evaluation criteria and without regard to any comments resulting from the review of an executive summary.

A favorable response to an Executive Summary is not an assurance or commitment of any kind on behalf of the Government that a full proposal on the Executive Summary's topic will ultimately be selected for award.

2. Proposal Abstracts

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.

A favorable response to a proposal abstract is not an assurance or commitment of any kind on behalf of the Government that a full proposal on the proposal abstract's topic will ultimately be selected for award.

3. Full Proposals

After the evaluation of a proposal is complete, the proposer will be notified that (1) the proposal has been selected for funding pending award negotiations, in whole or in part, or (2) the proposal has not been selected. These official notifications will be sent via e-mail to the Technical POC and/or Administrative POC identified on the proposal coversheet.

B. Administrative and National Policy Requirements

1. Meeting and Travel Requirements

There will be a program kickoff meeting and all key participants are required to attend. Performers should also anticipate regular program-wide PI Meetings and periodic site visits at the Program Manager's discretion.

2. Solicitation Provisions and Award Clauses, Terms and Conditions

Solicitation clauses in the FAR and DFARS relevant to procurement contracts and FAR and DFARS clauses that may be included in any resultant procurement contracts are incorporated herein and can be found at http://www.darpa.mil/work-with-us/additional-baa.

3. Controlled Unclassified Information (CUI) and Controlled Technical Information (CTI) on Non-DoD Information Systems

Proposers and awardees are subject to the DoD requirements related to protection of CUI and CTI IAW Executive Order 13556, *Controlled Unclassified Information*, DFARS 252.204-7000, *Disclosure of Information*, DFARS 252.204-7012, *Safeguarding Covered Defense Information and Cyber Incident Reporting*, DoD Instruction 5200.48, Controlled Unclassified Information, DoD Instruction 8582.01, *Security of Non-DoD Information Systems Processing Unclassified Nonpublic DoD Information*. See http://www.darpa.mil/work-with-us/additional-baa for additional guidance on protecting CUI on Non-DoD Information Systems.

CUI is defined as unclassified information that requires safeguarding or dissemination controls, pursuant to and consistent with applicable law, regulations, and Government-wide policies.

Controlled Technical Information (CTI) is defined as technical information with military or space application that is subject to controls on its access, use, reproduction, modification, performance, display, release, disclosure, or dissemination. The term CTI does not include information that is lawfully publicly available without restrictions.

DoD considers “technical information” to be technical data or computer software, as those terms are defined in Defense Federal Acquisition Regulation Supplement clause 252.227-7013, "Rights in Technical Data - Noncommercial Items" (48 CFR 252.227-7013). Examples of technical information include research and engineering data; engineering drawings and associated lists; specifications, standards, process sheets, manuals, technical reports, technical orders, catalog item identifications, data sets, studies and analyses and related information; and computer software code. Note that such technical information may or may not be controlled (i.e., CTI), depending on whether it has military or space application.

Proposers should indicate in their proposal if their proposed solution includes CUI. All proposals indicating CUI requirements must include a draft CUI protection plan detailing how CUI will be protected at performance sites as well as subcontractor locations. The draft CUI protection plan is not a source selection criterion, and there is no page limit. During selection and negotiation, DARPA will determine additional requirements and clarification required of the CUI protection plan. Potential award instruments for proposals containing CUI will be limited to contracts or Other Transactions.

CTI is to be marked “DISTRIBUTION C. Distribution authorized to U.S. Government agencies and their contractors; Critical Technology; [current date]. Other requests for this document shall be referred to DARPA, DSO” in accordance with Department of Defense Instruction 5203.24, “Distribution of Statements on Technical Documents.”

4. Terms and Conditions

For terms and conditions specific to grants and/or cooperative agreements, see the DoD General Research Terms and Conditions (latest version) at http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions and the supplemental DARPA-specific terms and conditions at http://www.darpa.mil/work-with-us/contract-management#GrantsCooperativeAgreements.

C. Reporting

The number and types of reports will be specified in the award document, but will include as a minimum monthly technical and financial status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed on before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be continued under a follow-on vehicle. At least one copy of each report will be delivered to DARPA and not merely placed on a SharePoint site.

D. Electronic Systems

1. Wide Area Work Flow (WAWF)

Performers will be required to submit invoices for payment directly to https://wawf.eb.mil, unless an exception applies. Performers must register in WAWF prior to any award under this BAA.

2. i-Edison

The award document for each proposal selected for funding will contain a mandatory requirement for patent reports and notifications to be submitted electronically through i-Edison (https://public.era.nih.gov/iedison).

E. DARPA Embedded Entrepreneurship Initiative (EEI)

Awardees pursuant to this solicitation may be eligible to participate in the DARPA Embedded Entrepreneurship Initiative (EEI) during the award's period of performance. EEI is a limited scope program offered by DARPA, at DARPA's discretion, to a small subset of awardees. The goal of DARPA's EEI is to increase the likelihood that DARPA-funded technologies take root in the U.S. and provide new capabilities for national defense. EEI supports DARPA's mission "to make pivotal investments in breakthrough technologies and capabilities for national security" by accelerating the transition of innovations out of the lab and into new capabilities for the Department of Defense (DoD). EEI investment supports development of a robust and deliberate Go-to-Market strategy for selling technology to government and commercial markets and positions DARPA awardees to attract U.S. investment. The following is for informational and planning purposes only and does not constitute solicitation of proposals to the EEI.

There are three elements to DARPA's EEI: (1) A Senior Commercialization Advisor (SCA) from DARPA who works with the Program Manager (PM) to examine the business case for the awardee's technology and uses commercial methodologies to identify steps toward achieving a successful transition of technology to the government and commercial markets; (2) Connections to potential industry and investor partners via EEI's Transition Working Groups; and (3) Additional funding for awardees to hire an embedded entrepreneur to achieve specific commercialization milestones and work towards the delivery of a robust transition plan for both defense and commercial markets. This embedded entrepreneur's qualifications should include business experience within the target industries of interest, experience in commercializing early stage technology, and the ability to communicate and interact with technical and non-technical stakeholders. Funding for EEI is typically no more than $250,000 per awardee over the duration of the award. An awardee may apportion EEI funding to hire more than one embedded entrepreneur, if achieving the milestones requires different expertise that can be obtained without exceeding the awardee's total EEI funding. The EEI effort is intended to be conducted concurrent with the research program without extending the period of performance.

EEI Application Process:

After receiving an award under the solicitation, awardees interested in being considered for EEI should notify their DARPA Program Manager (PM) during the period of performance. Timing of such notification should ideally allow sufficient time for DARPA and the awardee to review the awardee's initial transition plan, identify commercial milestones to deliver under EEI, modify the award, and conduct the work required to achieve such milestones within the original award period of performance. These steps may take 18-24 months to complete, depending on the technology. If the DARPA PM determines that EEI could be of benefit to transition the technology to product(s) the Government needs, the PM will refer the performer to DARPA's Commercial Strategy team.

DARPA's Commercial Strategy team will then contact the performer, assess fitness for EEI, and in consultation with the DARPA technical office, determine whether to invite the performer to participate in the EEI. Factors that are considered in determining fitness for EEI include DoD/Government need for the technology; competitive approaches to enable a similar capability or product; risks and impact of the Government's being unable to access the technology from a sustainable source; Government and commercial markets for the technology; cost and affordability; manufacturability and scalability; supply chain requirements and barriers; regulatory requirements and timelines; Intellectual Property and Government Use Rights, and available funding.

Invitation to participate in EEI is at the sole discretion of DARPA and subject to program balance and the availability of funding. EEI participants' awards may be subsequently modified bilaterally to amend the Statement of Work to add negotiated EEI tasks, provide funding, and specify a milestone schedule which will include measurable steps necessary to build, refine, and execute a Go-to-Market strategy aimed at delivering new capabilities for national defense. Milestone examples are available at: https://www.darpa.mil/work-with-us/contract-management

Awardees under this solicitation are eligible to be considered for participation in EEI, but selection for award under this solicitation does not imply or guarantee participation in EEI.

VII. Agency Contacts

For information concerning agency level protests see http://www.darpa.mil/work-with-us/additional-baa#NPRPAC.

Administrative, technical, or contractual questions should be sent via e-mail to HR001123S0042@darpa.mil. All requests must include the name, e-mail address, and phone number of a point of contact.

The BAA Coordinator may be reached at:
HR001123S0042@darpa.mil
DARPA/TTO
ATTN: HR001123S0042

675 North Randolph Street
Arlington, VA 22203-2114

VIII. Other Information

Collaborative efforts/teaming are encouraged.

In order to ensure that U.S. scientific and engineering students will be able to continue to make strategic technological advances, DARPA is committed to supporting the work and study of Ph.D. students and post-doctoral researchers that began work under a DARPA-funded program awarded through an assistance instrument. Stable and predictable federal funding enables these students to continue their scientific and engineering careers.

To that end, should a DARPA funded program awarded through a grant or cooperative agreement with a university or a Research Other Transaction pursuant to 10 U.S.C. § 4021 where the university is a participant end (due to termination or down-select) before the planned program completion, DARPA may continue to fund, for no more than two semesters (or equivalent), the documented costs to employ or sponsor Ph.D. students and/or post-doctoral researchers. Should such a circumstance arise, the following will take place:

1) The Government will provide appropriate notification to the University participant by the Agreements Office or through the prime performer.
2) The University must make reasonable efforts to find alternative research or employment opportunities for these students and researchers.
3) Before any costs will be paid, the University must submit documentation describing their due diligence efforts in finding alternative arrangements that is certified by a University official.
4) In addition to this documentation, the affected students and researchers must submit statements of work describing what research activities they will pursue during the period of funding and the final deliverable they will submit when the funding is complete.
5) In determining these costs, DARPA will rely on information from the University's original proposal unless specific circumstances warrant requesting updated proposals. In no circumstances will this funding be provided when the program is ended because of suspected or actual fraud or negligence.

DARPA Down-Select Definition:

DARPA often structures programs in phases or options that include specific objectives and a designated period of performance. This may result in potentially issuing multiple awards to maximize the number of innovative approaches. This approach allows the Government to monitor progress and enables programmatic decision points based, at a minimum, against stated evaluation criteria, metrics, funding availability, and program goals and objectives. As a result, select performers may advance via award of a subsequent phase or through exercise of a planned option period.