

Broad Agency Announcement BioLogical Undersea Energy (BLUE) BIOLOGICAL TECHNOLOGIES OFFICE HR001124S0010 February 14, 2024

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PART I: OVERVIEW INFORMATION

- Federal Agency Name Defense Advanced Research Projects Agency (DARPA), Biological Technologies Office (BTO)
- Funding Opportunity Title BioLogical Undersea Energy (BLUE)
- Announcement Type Initial Announcement
- Funding Opportunity Number HR001124S0010
- North American Industry Classification System (NAICS) 541714
- Assistance Listing Number (ALN) 12.910 Research and Technology Development
- Dates
 - Posting Date: February 14, 2024
 - Proposal Abstract Due Date and Time: March 14, 2024, 4:00 PM ET
 - Full Proposal Due Date and Time: April 30, 2024, 4:00 PM ET
 - BAA Closing Date: April 30, 2024
 - Proposers Day: February 29, 2024

https://sam.gov/opp/40fadb038da34595b50e7d8f8a3ed4bc/view

- Concise description of the funding opportunity The BioLogical Undersea Energy (BLUE) program seeks to develop power supplies that capture and convert microscopic forms of marine biomass (e.g., dissolved organic matter, phytoplankton, zooplankton) or other substances (e.g., microplastics) into electrical power. These power supplies are intended for onboard use by ocean-deployed sensor systems presently powered by batteries. They are to self-refuel on marine biomass, operate fully submerged, and deliver battery-level power without being serviced far longer than is possible by comparably sized battery packs. BLUE power supplies will enable high capability and long endurance ocean-deployed sensor systems.
- Anticipated individual awards Multiple awards are anticipated.
- **Types of instruments that may be awarded** Procurement contract, cooperative agreement, other transaction for research, or other transaction for prototypes.
- Agency contact
 - o Technical POC: Leonard M. Tender, Ph.D., Program Manager, DARPA/BTO
 - Contracting Officer: Ms. Belinda Nwanguma, DARPA/CMO
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PART II: FULL TEXT OF ANNOUNCEMENT

1. Funding Opportunity Description

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

The Biological Technologies Office (BTO) of the Defense Advanced Research Projects Agency (DARPA) is soliciting innovative proposals to develop power supplies that capture and convert microscopic forms of marine biomass, such as dissolved organic matter, phytoplankton, bacteria, and microscopic zooplankton into electrical power. The goal of this program is to develop self-refueling power supplies that enable remote, ocean-deployed, sensor systems including seabed-mounted sensor and profiling systems to operate far longer than possible by comparably sized battery packs. Upon completion, BLUE will demonstrate a novel, persistent, sustainable, low environmental impact power supply that provides ultralong endurance and high payload capacity to remote, ocean-deployed sensor systems.

<u>Approaches that utilize macroscopic forms of biomass (greater than 1-mm cross section)</u> will be considered non-conforming and rejected without further review.

1.1. PROGRAM OVERVIEW

The BLUE program seeks to develop technologies to continuously provide electrical power that will expand the capabilities of remote, ocean-deployed sensor systems. Such systems hold great potential for national security, understanding dynamics of marine environments, and monitoring marine climate change. Owing to convenience, reliability, and cost, the vast majority of these systems are powered by batteries. Space constraints and finite energy densities of batteries, however, limit the amount of energy these systems can carry on board. Due to these limitations, remote, ocean-deployed sensor systems must be serviced to recharge or replace depleted batteries, which is expensive, logistically demanding, and places personnel and platforms at risk. While endurance can be extended by reducing power consumption, active, high duty cycle sensors, data processing, and communications require significant electrical power, and compromising on any one of these capabilities diminishes operational value. Developing an oceanographic power supply that can sustain at least 0.1 kW average continuous power for over a year while remaining fully submerged, not needing to be serviced, fitting within a ≤ 180 L, ≤ 200 kg form factor, and that self-refuels on marine biomass will enable significantly enhanced operational capabilities.

Currently, batteries are the most deployable technology, but they are not increasing in energy density fast enough to achieve the desired level of performance in the foreseeable future. Alternative options, such as aluminum, diesel, and hydrogen also cannot achieve the energy density needed to meet BLUE specifications. While solar energy can enable systems to operate for more than a year, their power density is also too low to support highly capable payloads. As

such, nearly all ocean-deployed sensor systems are designed and operated within the constraints of battery-limited energy budgets resulting in limited capabilities and/or endurance.

If successful, BLUE technologies will offer transformative and significant improvements over state-of-the-art batteries and other types of power supplies by enabling both high capability and long endurance for remote, ocean-deployed sensor systems. BLUE technologies will:

- self-refuel on input materials readily available in many marine environments;
- prevent capture of macroscopic living marine organisms;
- operate when fully submerged;
- be durable, reliable, deployable;
- operate in diverse locations;
- operate independently with consistent electrical power production and without being serviced, extrapolated out to at least one year; and
- have negligible ecological and environmental impact.

1.2. PROGRAM OBJECTIVE

During the program, efforts will focus on the following objectives:

1.2.1. Identify and select targeted input materials. Each performer team will identify and select targeted input materials, such as microscopic forms of marine biomass (e.g., dissolved organic matter, phytoplankton, zooplankton) to be used as input materials to convert to electrical power. The form(s) of input materials must be sufficiently abundant in many locations to achieve end-of-phase performance milestones (see Table 1) and captured and utilized with negligible ecological and environmental impact. Locations meeting these criteria must be reliably predictable from existing data sets such as satellite imaging, in situ detection methods, or relevant published sources. Approaches that utilize macroscopic forms of biomass greater than 1-mm cross section will be considered non-conforming and rejected without further review.

1.2.2. Identify key environmental features. Each performer team will also determine key environmental features affecting capture and conversion of their input materials to electrical power including, but not limited to, water current, oxygen concentration, salinity, and temperature. The set of key environmental features enabling power generation must exist in many locations that are reliably predictable from readily available data sets, including satellite imaging, *in situ* detection methods, or relevant published sources.

1.2.3. Develop a laboratory test bed and field site. Each performer team will develop a laboratory test bed that enables efficient laboratory-based experimentation. Each team will also develop a field site that enables efficient design-build-test iterations of brassboard systems (experimental systems for testing outside the laboratory environment) to convert input materials to electrical power (see section 1.2.4). This field site must be readily accessible, within United States territorial waters (within 12 nautical miles of the United States coastline), between 1- and 100-m depth, have an average water current not exceeding 0.5 m/s, and enable real-time monitoring of power output by the brassboard systems. This field site is also to be used for the

end-of-phase technology field demonstrations conducted by the performer team (see Sections 1.6 and 1.7). It is the responsibility of the performer team to ensure all relevant local and federal regulations are followed including obtaining necessary permits for all performer-led demonstrations.

1.2.4. Self-capture and convert input materials to electrical power. Each performer team will develop and deliver two separate brassboard systems that self-capture and convert the selected input materials to electrical power while fully submerged without user intervention. One brassboard system is to be developed and delivered during Phase I and the other during Phase II. These brassboard systems may rely upon microorganisms, enzymes, or other biologically derived materials. These systems may utilize the current of surrounding water (e.g., for input material capture and for system mass transport) but operate in environments with average water currents as low as 0.5 m/s. If these systems require environmental conditions to operate such as a range in water temperature, water salinity, water oxygen or sulphate content, these conditions must exist in many locations to meet the end-of-phase performance metrics described in Table 1. Systems may utilize consumables (e.g., enzymes, buffers) as long as the system can be expected to sustain the end phase power metric for one year without needing service or resupply and without exceeding the end-of-phase volume and mass metrics.

The first brassboard system, to be developed during Phase I, will be assessed against the Phase I metrics (see Table 1) during an end-of-phase, performer-conducted, 30-day technology field demonstration (see Section 1.6). This demonstration is to be conducted by the performer team at the performer field site (see Section 1.2.3). Following completion of the demonstration, the system will be delivered to a Government provided team for independent evaluation in which the system will be deployed and operated at a different location within United States territorial waters (within 12 nautical miles of the United States coastline) at between 1- and 100-m depth. The intention of this evaluation is for the DARPA BLUE program team to independently obtain and evaluate performance related data including power generation, compliance with environmental/ecological/biosafety design regulations, compliance with transition partner requirements, and risk identification and possible mitigation. It is expected that the performer team engage regularly with the Government team prior to delivery of the brassboard system to ensure readiness of the brassboard system for the external evaluation as well as to inform the Government team in their development of the evaluation process including selection of a site that takes into account the type of input materials and key environmental parameters (see Section 1.5.4).

The second brassboard system, to be developed during Phase II, will be assessed against the Phase II metrics (see Table 1) during an end-of-phase, performer-conducted, 30-day field demonstration (see Section 1.7). The Phase II system is to be delivered to a Government team for independent evaluation in the manner described above for Phase I.

1.2.5. Achieve endurance. Although each end-of-phase field technology demonstration is to last 30 days, each performer team is to develop strategies to enable their brassboard systems sustain power production for one year of continuous operation in a real marine environment. Successful demonstration of these strategies will be assessed by extrapolation of any observed decay in power generation, degradation in system integrity due to operation in the marine environment,

and rate of utilization of any consumable materials observed during the end-of-phase field technology demonstrations. Such strategies may include, but are not limited to, development of novel embedded bacterial factories, slow-release reagents (e.g., enzymes, buffer), sensors, actuators, biocontainment strategies, and automated feedback control.

1.2.6. Incorporate ocean engineering. Unlike batteries, which must be housed in oceanographic enclosures to isolate them from the marine environment, BLUE power supplies must directly interface with the marine environment where corrosion and fouling of internal components and other issues must be addressed. It is therefore recognized that successful BLUE efforts will require incorporation of rigorous ocean engineering from ideation through execution. This will be necessary to ensure that BLUE power supplies successfully complete end phase, 30-day technology field demonstrations that project out to one year of continuous operation without being serviced in real marine environments at up to 100-meter depth.

1.2.7. Satisfy biosafety design requirements. Each performer team will: 1) devise robust containment and deactivation methods that leave no traceable signature in the operational environment; 2) provide samples of any nonnative biological materials used for conversion of input materials to a Government provided team who will assess the containment and deactivation methods; 3) ensure compliance with all relevant standards and regulation; and 4) secure all required approvals and permits.

1.2.8. Satisfy ecological and environmental requirements. Each performer team will complete an ecological and environmental analysis to be assessed by a Government provided team to include the type of input materials; methods of capture and conversion; test bed and field site used for developmental testing and field demonstrations; and any non-native, biologically-derived materials to be used. This analysis is to be completed in Phase I and revised at the discretion of the Program Manager in Phase II.

1.2.9 Address Ethical, Legal, and Societal Implications (ELSI). Each performer team will engage with a selected group of experts to identify, discuss, and address the potential ELSI of their technical plan that are not otherwise addressed in the BAA.

1.3. TECHNICAL PROPOSAL GUIDANCE

To craft a successful proposal for the BLUE solicitation, offerors are suggested to present technical evidence (e.g., relevant preliminary data) when addressing the program objectives (1.2.1 - 1.2.9 above) against the following guidance:

1.3.1. Proposals must detail the team's relevant experience, demonstrate a deep understanding of the many challenges associated with achieving the program objectives, and present a credible plan to achieve the program objectives which may require multiple technical breakthroughs.

1.3.2. Proposals must include calculations or modeling based on relevant literature or data including, for example, concentrations and fluxes of input materials at example locations and a method of conversion (e.g., enzyme kinetics) that substantiates that their targeted form(s) of input materials can be used to sustain the end-of-phase program metrics (Table 1).

1.3.3. Proposals must include a process block diagram that provides a detailed description of the proposed process as well as reasonable estimates of rates, efficiencies, and yields for each step. For any steps that require power, these requirements must be clearly substantiated and subtracted from the gross power output yielding the target net power output required in the program metrics (Table 1).

1.4. PROGRAM STRUCTURE

The BLUE program is structured as a 30-month effort consisting of two Phases: 21-month Phase I (Base) and 9-month Phase II (Option I). Phases I and II are the focus of this BAA, with program milestones for each listed in Table 1. The Government reserves the right to execute all, some, one, or none of the optional Phase II awards. A potential Phase III expansion may be pursued separately and at a later date for further research, development, and system integration.



Figure 1. BLUE Program Performer Schedule

1.5. GOVERNMENT TEAM ACTIVITY

Each performer team will engage regularly with Government provided teams possessing relevant expertise in support of the DARPA BLUE program. The purpose of these engagements is to mitigate specific risks inherent to the DARPA BLUE program and maximize the opportunity for each performer team to thoroughly test the hypotheses underlying their proposed technical approach. Each performer team will engage the Government provided teams in performing tasks pursuant to meeting program metrics, milestones, deliverables, and evaluations, and descriptions of these engagements are to be included in the performer team's monthly status reports (MSRs, see Section 1.6). Each performer team is to have a designated point of contact for engagement with the supporting Government teams performing the following roles:

1.5.1. Assessment of the ocean engineering rigor of the performer's technical approach and its execution. This is to ensure that brassboard systems are designed and built for the realities of operating in marine environments. While selectable proposals must demonstrate a high-level of ocean engineering rigor (see Section 1.2.6), at the discretion of the Program Manager, a Government team may advise performer teams and/or provide additional ocean engineering support to augment performer teams' technical plans.

1.5.2. Assessment of ecological and environmental impact analysis and compliance with relevant standards and regulations. Selectable proposals must demonstrate a high-level understanding of and compliance with relevant ecological and environmental standards and regulations (see Section 1.2.8). At the discretion of the Program Manager, a Government provided team may advise performer teams in ecological and environmental aspects of their technical plans.

1.5.3. Assessment of biosafety design compliance with relevant standards and regulations. Selectable proposals must demonstrate a high-level understanding of and compliance with biosafety standards and regulations (see Section 1.2.7). At the discretion of the Program Manager, a Government provided team may advise performer teams to ensure they meet biosafety standards and regulations.

1.5.4. Assessment of brassboard readiness in preparation for independent evaluation by a supporting Government team. At the discretion of the Program Manager, a Government provided team may advise performer teams to maximize readiness of brassboard systems for independent evaluation by the supporting Government team (see Section 1.2.4).

1.5.3. Assessment of ethical, legal and social implications (ELSI). This is to assess and manage ethical, legal and social implications of the performers technical approach (See Section 1.2.9).

1.6. PHASE I (BASE, MONTHS 1-21)

Phase I will focus on establishing the feasibility of the proposed methods for self-capture of input materials and conversion of input materials to electrical power while remaining fully submerged. The culmination of Phase I will be a performer-conducted 30-day long technology field demonstration of a brassboard system that meets the Phase I metrics (Table 1) to be conducted at the performer field site (see Section 1.2.3). Ability of the system to meet the Phase I metrics will project out to 1 year of operation based on extrapolation of any decay in power generation, any degradation in system integrity due to operation in the marine environment, and on rate of utilization of any consumable materials that occur during the demonstration. Following the demonstration, the brassboard system will be delivered to a supporting Government team for subsequent deployment and evaluation (see Section 1.2.4).

Phase I (Base) Milestones and Associated Deliverables where indicated:

• *Month 1:* **In-Person, Phase I Kickoff Meeting.** To be attended by all key members of the performer team and include a presentation (deliverable) of the technical approach (location and date TBD; use Oct 15, 2024, and Arlington, VA USA for cost determination).

- *Month 3:* Ecological and Environmental Impact Analysis. Submission of a written report (deliverable) detailing a thorough analysis of potential ecological and environmental impacts of the proposed technical approach and plan of action to meet ecological and environmental standards and regulations as well as acquire necessary permits. This report is to be assessed by a supporting Government team. This analysis must include, but is not limited to, the proposed technical approach to achieving the Phase II metrics (see Table 1); the type of input materials; methods of capture and conversion; test bed and field site used used for developmental testing and field demonstrations; and any non-native, biologically derived materials to be used. It is also to include a comparison to a state-of-the-art device: a 1000-kg mass, 2-cubic meter volume, seabed-mounted sensor system deployed at 100-m depth in United States territorial waters (within 12 nautical miles of the United States coastline) and equipped with a conventional battery pack that depletes in 3 months and must be serviced 3 times in order to achieve 1 year of operation.
- *Month 9:* Phase I Design Review. Host DARPA team site visit, to include presentation of engineering drawings (deliverable) for first iteration brassboard system designed to meet Phase I performance metrics (Table 1).
- *Month 10:* Mid-Phase Technical Interchange Meeting. To be attended by key members of each performer team and include a presentation (deliverable) of results and progress. (Location TBD; use Arlington, VA USA for cost determination.)
- *Month 15:* Biosafety Design Analysis. Submission of a written report (deliverable) and demonstration (deliverable) of methods of containment and deactivation strategies for any non-native biological materials to be assessed by a supporting Government team. A successful biocontainment approach should leave no traceable signature in the operational environment and meet biosafety design standards and regulations.
- Month 16-21: Host a site visit by DARPA and supporting Government teams.
- *Month 19:* Technology Field Demonstration. Completion of a 30-day long technology field demonstration of the brassboard system operating at the performer field site that meets the Phase I metrics (see Table 1). A successful demonstration system must self-capture and convert input materials to electrical power while fully submerged without being serviced or resupplied. Performance of the brassboard system should demonstrate sustained operation with only negligible deterioration in power output due to depletion of any consumables, fouling, clogging, or other relevant challenges of the operational environment. Successful operation should project out to at least one year of continuous operation in which Phase I performance metrics are sustained.
- *Month 19:* Design Lock. Design lock in the form of revised engineered drawings (deliverable) of the brassboard system after completion of the 30-day long technology field demonstration.
- *Month 20:* Technology Handoff. Transfer of the brassboard system (deliverable) to a supporting Government team for subsequent evaluation (see Section 1.2.4).

- *Month 21:* End-of-Phase Report. Submission of an end-of-phase report (deliverable) summarizing technical progress against all tasks and metrics, technical challenges, and lessons learned. This report should act as a comprehensive, standalone record of the Phase I effort and include detailed descriptions of technical accomplishments, failures, next steps, and lessons learned.
- *Month 21:* End-of-Phase Technical Interchange Meeting. To be attended by key members of each performer team and include a presentation (deliverable) of results and progress. (Location TBD; use Arlington, VA for cost determination.)
- *Monthly:* Monthly Status Reports (MSRs). Technical and financial MSRs in the form of slides (deliverables) submitted and presented to the DARPA BLUE program team and supporting Government teams via monthly online meetings. MSRs are to conform to a template provided by the DARPA BLUE program team. It is expected that the principal investor (PI) conducts MSRs, with the PI, key personnel, and/or other personnel (e.g., trainees) presenting on the different technical sections, and that all performer team members attend. It is expected that the PI and/or the performer team administrative/financial manager present on the financial section. A schedule for MSR meetings will be established at the program kickoff meeting and will include prior submission of the MSR slides for read ahead by the DARPA BLUE program team and supporting Government teams.

Selectable proposals must specifically and separately identify tasks proposed to achieve Phase I performance metrics in the Statement of Work (SOW) and the cost proposal documents. Assessment of the performance of Phase I brassboard systems against Phase I metrics (see Table 1) will inform whether performers progress to Phase II of the program (i.e., from Base to Option). The Government reserves the right to select for Phase II award all, some, one, or none of the Phase I performers.

1.7. PHASE II (PRICED OPTION, MONTHS 22-30)

Efforts will focus on development of a second brassboard system that meets Phase II metrics (Table I) based on scale up of the Phase I brassboard system. The culmination of Phase II will be a performer-conducted 30-day long technology field demonstration of a brassboard system that meets the Phase II metrics (Table 1) at the performer field site (see Section 1.2.3). Ability of the system to meet the Phase II metrics will project out to 1 year based on extrapolation of any decay in power generation, degradation in system integrity due to operation in the marine environment, and on rate of utilization of any consumable materials that occur during the demonstration. Following the demonstration, the brassboard system will be delivered to a supporting Government team for subsequent deployment and evaluation (see Section 1.2.4).

Phase II (Option) Milestones and Associated Deliverables where indicated:

• *Month 22:* In-Person, Phase II Kickoff Meeting. To be attended by all key members of the performer team to include a presentation (deliverable) of the technical approach (Location and date TBD; use Arlington, VA USA for cost determination).

- *Month 24:* Phase II Design Review. Presentation of engineered drawings (deliverable) for first iteration brassboard system designed to meet Phase II performance metrics (Table 1).
- Month 26-30: Host a site visit by DARPA and supporting Government teams.
- *Month 28:* Technology Field Demonstration. Completion of a 30-day long technology field demonstration of the Phase II brassboard system operating in a real marine environment that meets the Phase II metrics (Table 1). A successful demonstration system must self-capture and convert input materials to electrical power while fully submerged without being serviced or resupplied. Performance of the brassboard system should demonstrate sustained operation with only negligible deterioration in power output due to depletion of any consumables, fouling, clogging, or other relevant challenges of the operational environment. Successful operation should be projected out to at least one year of continuous operation in which Phase II performance metrics are achieved.
- *Month 28:* Design Lock. Design lock in the form of revised engineered drawings (deliverable) of the brassboard system after completion of the 30-day long technology field demonstration.
- *Month 28:* Technology Handoff. Transfer of the brassboard system (deliverable) to a supporting Government team for subsequent evaluation (see Section 1.2.4).
- *Month 30:* End-of-Phase Report. Submit an end-of-phase report summarizing technical progress against all tasks and metrics, technical challenges, and lessons learned. This report should act as a comprehensive, standalone record of the Phase II effort and include detailed descriptions of technical accomplishments and failures.
- *Month 30:* End of-Phase Technical Interchange Meeting. To be attended by key members of each performer team and include a presentation (deliverable) of results and progress. (Location TBD; use Arlington, VA for cost determination.)
- *Monthly*: MSRs. Technical and financial MSRs in the form of slides (deliverables) submitted and presented to the DARPA BLUE program team and supporting Government provided teams via monthly online meetings (see Section 1.6). A schedule for MSR meetings will be established at the Phase II kickoff meeting.

Selectable proposals must specifically and separately identify tasks proposed to achieve Phase II performance metrics in the SOW and the cost proposal documents.

1.8. PROGRAM METRICS

For the Government to evaluate how effectively a proposed solution will achieve the stated program objectives, the Government hereby promulgates the following program metrics that will serve as the basis for determination of satisfactory progress to warrant continued funding. Although the desired program metrics are specified (Table 1), proposers should note that the Government has identified these goals with the intention of bounding the scope of effort while affording the maximum flexibility, creativity, and innovation to proposed solutions to the stated

problem. Proposals should cite the quantitative and qualitative success criteria that the effort will achieve by each Phase's program milestone and intermediary metric measurement. The criteria put forward by proposers should outline the metrics that their strategy will attain, not simply reflect the aspirational objectives set forward below.

Progress towards the goals of the BLUE program will be determined through the evaluation of minimally required metrics (Table 1) and milestones and deliverables specified above (Sections 1.6 and 1.7). Proposals must address all metrics below as well as define additional quantitative and qualitative success criteria, as needed. Proposers must clearly itemize tasks needed to accomplish planned milestones and deliverables in the SOW, including ocean engineering tasks. Tests and demonstrations will be subject to the phase-level metrics below and will be evaluated by the Government at the end of each phase.

	Phase I	Phase II
Average Net Continuous Power Output ²	≥0.01 kW	≥0.1 kW
Volume	≤45 L	≤180 L
Mass	≤50 kg	≤200 kg
Duration	≥30 d	≥30 d
Depth ³	1-100 m	1-100 m
Brassboard lifetime extrapolation ⁴	1 year	1 year

Table 1. BLUE End-of-Phase Program Metrics¹

- 1. Achieved by brassboard systems during performer-conducted, end-of-phase technology field demonstrations operating fully submerged that self-capture and convert input materials to electrical power without user intervention.
- 2. Raw power output (e.g., 0.6 V DC), does not need to be conditioned.
- 3. While field demonstrations can be performed at between 1- and 100-m depth, brassboard systems must be able to operate at up to 100-m depth for subsequent deployment and evaluation a supporting Government team.
- 4. Based on extrapolation of any decay in power generation, degradation in system integrity due to operation in the marine environment, and rate of utilization of any consumable materials.

1.9. GENERAL REQUIREMENTS

Proposing Teams

It is expected that proposals will involve teams that include expertise from multiple complementary disciplines (e.g., ocean engineering, marine ecology, hydrodynamics, electrochemistry, molecular biology, synthetic biology, biochemistry, and bio production). It is also expected that teams include an administrative and/or financial manager. Specific content, communications, networking, and team formation are the sole responsibility of the proposer teams. Proposer teams must submit a single, integrated proposal led by a single program integrator/manager or prime contractor that addresses all program phases as applicable.

Data Sharing

The BLUE program will require that performer data, analysis, and software executables (or source code) be shared with DARPA, the Government teams, and U.S. Government stakeholders. Performers are strongly encouraged to establish the appropriate agreements to enable collaboration and data sharing beyond these organizations. DARPA encourages sharing of pre-existing data, including those generated through funding from other sources, although this is not a requirement of the program.

Biocontainment / Biosafety

If proposing to use non-native biological materials including engineered microorganisms, performers must: 1) develop robust biocontainment or deactivation strategies, which will be independently assessed and verified to conform to all applicable regulations by a Government provided team; and 2) engage with and receive approval from any authority with jurisdiction over locations where the technology is developed and tested by the performers.

Permits and Compliance

It is the proposing team's responsibility to obtain all necessary federal, state, and local government permits and approvals, and abide by all applicable laws where necessary for the proposed work to be conducted. Proposing teams are expected to design their proposals so that they minimize the potential adverse impact on the environment.

Ethical, Legal, and Social Implications (ELSI) Activities

Proposers are expected to engage with relevant regulatory bodies to identify and mitigate challenges to the transition of resulting technology and in anticipation of future deployment. The proposers should plan to support ELSI engagement activities with DARPA, potentially including semi-annual teleconference calls with the BLUE Program ELSI Group and consideration of feedback from the group regarding research activities. ELSI activity outcomes will be reported regularly to DARPA.

Other Requirements

Performers are expected to attend Technical Interchange Meetings to provide scientific and technical updates to the other performers on the BLUE program. These presentations will include progress towards the milestones and scientific goals and a summary of outstanding challenges and limitations that must still be overcome to achieve the overarching goals of the program. Technical Interchange Meetings will include relevant Government stakeholders and may be held at the kick-off of each phase, as well as mid-phase or end-of-phase for the program duration (see Sections 1.6 and 1.7).

2. Award Information

2.1. GENERAL AWARD INFORMATION

Multiple awards are possible. The amount of resources made available under this BAA will depend on the quality of the proposals received, and the availability of funds.

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.

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 VI.B.2., "Representations and Certifications"). The Government reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions, and/or cost/price within a reasonable time, and the proposer fails to timely provide requested additional information. Proposals identified for negotiation may result in a procurement contract, 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.

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

2.2. DARPA FUNDAMENTAL RESEARCH RISK-BASED SECURITY REVIEW PROCESS

This process was formerly known as the Countering Foreign Influence Program (CFIP). Senior/Key Personnel proposed under all grants and cooperative agreements are subject to the

DARPA Fundamental Research Risk-Based Security Review Process. This new risk-based security review process provides consistency in policy and procedures across all DoD Components. DARPA will conduct risk-based security reviews of all covered individuals (i.e., Senior/Key Personnel) submitted with fundamental research proposals that a DARPA Program Manager (PM) identifies as "selectable and recommended for funding." The risk-based security reviews will be conducted by reviewing the Standard Form (SF) 424, "Senior/Key Person Profile (Expanded)," its accompanying or referenced documents, and the Research Performance Progress Reports (when applicable), in concert with the <u>OUSD (R&E) Countering Unwanted</u> Influence in Department Funded Research at Institutions of Higher Education.

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 expects that program goals as described herein may be met by proposers intending to perform fundamental research and does not anticipate applying publication restrictions of any kind to individual awards for fundamental research that may result from this solicitation. Notwithstanding this statement of expectation, the Government is not prohibited from considering and selecting research proposals that, while perhaps not qualifying as fundamental research under the foregoing definition, still meet the solicitation criteria for submissions. If proposals are selected for award that offer other than a fundamental research solution, the Government will either work with the proposer to modify the proposed statement of work to bring the research back into line with fundamental research or else the proposer will agree to restrictions in order to receive an award.

University or non-profit research institution performance under this solicitation will 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. On June 8, 2023, the Undersecretary of Defense for Research and Engineering (OUSD (R&E)) released a memorandum, "Policy on Risk-Based Security Reviews on Fundamental Research," directing Components to establish a risk-based security review program to identify and mitigate undue foreign influence in fundamental research consistent the requirements mandated by NSPM-33. In accordance with these requirements, DARPA will assess all Covered Individuals proposed to support DARPA under all fundamental research proposals, selected for award, 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 Covered Individuals may have with foreign countries of concern (FCOC) (i.e., The Peoples Republic of China, the Russian Federation, the Islamic Republic of Iran, and the Democratic People's Republic of North Korea) or FCOC connected entities.

b. 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 consistent with USD(R&E) direction. The academic or non-profit research performer or recipient must also utilize due diligence to identify Foreign Components or participation by Covered Individuals 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.

- a. DARPA's risk-based security review process takes into consideration the entirety of the Covered Individual's SF-424, current and pending support, and biographical sketch. These potential risk factors, along with any publicly available validation information, are then compared to the "DoD Risk Decision Matrix" to determine the level of mitigation that may be required to proceed, if possible.
 - i. The risk-based security review process will leverage publicly available lists or reports published by the U.S. federal government. Those lists and reports include, but are not limited to:
 - 1. FY22 Lists Published in Response to Section 1286 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115-232), as amended.
 - 2. Executive Order 13959 "Addressing the Threat From Securities Investments That Finance Communist Chinese Military Companies": <u>www.govinfo.gov/content/pkg/FR-</u> 2020-11-17/pdf/2020-25459.pdf
 - 3. The U.S. Department of Commerce, Bureau of Industry and Security, List of Parties of Concern: <u>www.bis.doc.gov/index.php/policy-</u> <u>guidance/lists-of-parties-of-concern</u>
 - 4. Director of National Intelligence (DNI) "World Wide Threat Assessment of the US Intelligence

Community": <u>www.dni.gov/files/ODNI/documents/assess</u> <u>ments/ATA-2023-Unclassified-Report.pdf</u>

- 5. Various Defense Counterintelligence and Security Agency (DCSA) products regarding targeting of US technologies, adversary targeting of academia, and the exploitation of academic experts: <u>www.dcsa.mil</u>
- ii. The DoD has explicitly stated in policy that there are foreign influence risks that are not able to be mitigated and thus would require denial of award. They are:
 - 1. BEGINNING IN FISCAL YEAR (FY) 2024 (1 **OCTOBER 2023) PROSPECTIVE, NO U.S. INSTITUTION OF HIGHER LEARNING THAT** HOSTS A CONFUCIUS INSTITUTE* MAY **RECEIVE DOD FUNDING UNLESS THE INSTITUTION OF HIGHER EDUCATION HAS BEEN ISSUED A WAIVER BY THE SECRETARY OF DEFENSE PURSUANT TO SECTION 1062 OF** THE WILLIAM M. (MAC) THORNBERRY NATIONAL DEFENSE AUTHORIZATION ACT FOR FY 2021. INSTITUTIONS HOSTING A **CONFUCIUS INSTITUTE ARE AUTOMATICALLY CLASSIFIED AS "PROHIBITED" UNDER OUSD(R&E) "POLICY ON RISK-BASED SECURITY REVIEWS ON FUNDAMENTAL RESEARCH**"
 - 2. AS OF 9 AUGUST 2024. THE DOD IS PROHIBITED FROM FUNDING OR MAKING AN AWARD OF A FUNDAMENTAL RESEARCH PROJECT **PROPOSAL IN WHICH A COVERED INDIVIDUAL IS PARTICIPATING IN A MALIGN FOREIGN** TALENT RECRUITMENT PROGRAM (MFTRP) **OR TO A PROPOSING INSTITUTION THAT DOES** NOT HAVE A POLICY ADDRESSING MFTRP **PURSUANT TO SECTION 10632 OF THE CHIPS** AND SCIENCE ACT OF 2022. INDIVIDUALS **PARTICIPATING IN A MFTRP, AND INSTITUTIONS WITOUT A POLICY ADDRESSING MFTRP, ARE AUTOMATICALLY CLASSIFIED AS "PROHIBITED" UNDER OUSD(R&E) "POLICY ON RISK-BASED** SECURITY REVIEWS ON FUNDAMENTAL **RESEARCH**"

* The term "Confucius Institute" means a cultural institute directly or indirectly funded by the Government of the People's Republic of China.

- iii. Any changes to covered individuals will require submission of an SF 424 and its attachments, a security-based risk assessment, and approval by the contracting officer and program manager.
- iv. Security-based risk assessments will also be conducted if changes to covered individuals reporting criteria are reflected in the Research Performance Progress Reports.
- v. To the greatest extent practicable, DARPA will work with the proposing institution to ensure that if the risk is able to be mitigated, it will make every effort to do so. If the proposing institution refuses to, or is unable to mitigate the identified risks, it may result in a denial of award.
- vi. Proposing institutions who have their fundamental research proposal rejected due to the risk-based security review process or the inability to come to agreement concerning proposed mitigation strategies may challenge DARPA's risk-based security review decision. In that instance, DARPA shall refer the challenge to the OUSD(R&E) for mediation.
- vii. This process, to include negotiation of risk mitigation measures, is not to be considered as part of the time-to-award.
- b. 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 Covered Individuals are involved in the subject award are participating in a Malign Foreign Government Talent Program or have a Foreign Component with FCOC or FCOC-connected entity 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 Covered Individuals, or applicable team members or subtier performers on this award are or are believed to be participants in a malign foreign government talent program or exhibiting behaviors/actions identified in the DoD Component Decision Matrix (i.e., funding from a FCOC or FCOC-connected entity, patents resulting from U.S. government funded research that were filed with a FCOC or on behalf of a FCOC-connected entity, and associations or affiliations with foreign government connected entities), 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 factfinding or discussion with the performer or recipient.

- 2. Such disclosure could result in a termination of 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.

DARPA's analysis and assessment of affiliations and associations of Covered Individuals 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. University or non-profit research institutions with proposals selected for negotiation that have been assessed as having potential undue foreign influence risk factors, as defined by the DoD Decision Matrix, 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 potential risk factors or proposed risk mitigation strategies.

c. Definitions: Definitions can be found in the June 08, 2023 USD(R&E) memorandum, "Policy for Risk Based Security Reviews of Fundamental Research," or as it is amended.

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.

3. Eligibility Information

3.1. ELIGIBLE APPLICANTS

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.

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

FFRDCs and Government entities interested in participating in the BLUE program or proposing to this BAA should first contact the Technical Point of Contact (POC) and Contracting Officer listed in Part I prior to the Abstract or Full Proposal due dates listed in Part I to discuss eligibility.

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.

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.

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.

3.1.2. Non-U.S. Organizations

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.

3.2. 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.

3.3. 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.

4. Application and Submission Information

4.1. ADDRESS TO REQUEST APPLICATION PACKAGE

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 <u>http://www.darpa.mil</u>, contact the administrative contact listed herein.

4.2. CONTENT AND FORM OF APPLICATION SUBMISSION

All submissions, including abstracts and proposals, must be written in English with type no smaller than 12-point font. Smaller font may be used for figures, tables, and charts. The page limitation includes all figures, tables, and charts. All pages shall be formatted for printing on 8-1/2 by 11-inch paper. Margins must be 1-inch on all sides. Copies of all documents submitted must be clearly labeled with the DARPA BAA number, proposer organization, and proposal title/proposal short title.

4.2.1. Proposal Abstract Format

Proposers are strongly encouraged to submit an abstract in advance of a proposal to minimize effort and reduce the potential expense of preparing an out-of-scope proposal. DARPA will respond to abstracts providing feedback and indicating whether, after preliminary review, there is interest within BTO for the proposed work. DARPA will attempt to reply within **14** calendar days of receipt. Proposals may be submitted irrespective of comments or feedback received in response to the abstract. Proposals are reviewed without regard to feedback given as a result of abstract review. Proposers should note that a favorable response to an abstract is not a guarantee that a proposal based on the abstract will ultimately be selected for award negotiation. The time and date for submission of proposal abstracts are specified in Part I above.

The abstract is a concise version of the proposal comprising a maximum of **3** pages, including all figures, tables, and charts. All submissions must be written in English with type no smaller than 12-point font. Smaller font may be used for figures, tables, and charts. All pages shall be formatted for printing on 8-1/2 by 11-inch paper. Margins must be 1-inch on all sides. Copies of all documents submitted must be clearly labeled with the DARPA BAA number, proposer organization, and proposal abstract title.

The page limit does NOT include:

- Official transmittal letter (optional);
- Cover sheet;
- Executive summary slide;
- Resumes (optional); and
- Bibliography (optional).

Abstracts must include the following components:

A. Cover Sheet (does not count towards page limit): Include the administrative and technical points of contact (name, address, phone, fax, e-mail, lead organization). Also include the BAA number, title of the proposed project, primary subcontractors, estimated cost, duration of the project, and the label "ABSTRACT."

B. Goals and Impact: Clearly describe what is being proposed and what difference it will make (qualitatively and quantitatively), including brief answers to the following questions:

- 1. What is the proposed work attempting to accomplish or do?
- 2. How is it done today? And what are the limitations?
- 3. What is innovative in your approach, and how does it compare to the current state-of-the-art (SOA)?
- 4. What are the key technical challenges in your approach, and how do you plan to overcome these?
- 5. Who will care, and what will the impact be if you are successful?
- 6. How much will it cost, and how long will it take?

C. Executive Summary Slides: The slide template is provided as **Attachment 1** to the BAA posted at <u>https://SAM.gov</u>. Use of this template is required.

D. Technical Plan: Outline and address all technical areas and challenges inherent in the approach and possible solutions for overcoming potential problems. This section should provide specific objectives, metrics, and milestones at intermediate stages of the project to demonstrate a plan for accomplishment of the program goals. Propose additional appropriate qualitative and quantitative metrics specific to the approach, as needed. Outline of intermediary milestones should occur at no greater than 6-month increments.

E. Management and Capabilities: Provide a brief summary of expertise of the team, including subcontractors and key personnel.

A Principal Investigator for the project must be identified, and a description of the team's organization. All teams are strongly encouraged to identify a Project Manager/Integrator to serve as the primary point of contact to communicate with the DARPA Program Manager, T&E team, and Contracting Officer's Representative, coordinate the effort across co-performer, vendor, and subcontractor teams, organize regular performer meetings or discussions, facilitate data sharing, and ensure timely completion of milestones and deliverables.

Include a description of the team's organization including roles and responsibilities. Team member descriptions should address the Technical Plan, describe the time and percent effort divisions for members participating across multiple TAs, and delineate individuals to avoid duplication of efforts.

Describe the organizational experience in this area, existing intellectual property required to complete the project, and any specialized facilities to be used as part of the

project. List Government-furnished materials or data assumed to be available. Describe any specialized facilities to be used as part of the project, the extent of access to these facilities, and any certification requirements. Describe the team's plan to obtain and maintain the necessary the Institutional Review Board (IRB) and secondary Human Research Protection Office (HRPO) approvals to conduct human subjects research (HSR) during the course of the project. No Government-sponsored HSR can begin prior to HRPO approval.

F. Cost and Schedule: Provide a cost estimate for resources over the proposed timeline of the project, broken down by phase and major cost items (e.g., labor, materials, etc.). Include cost estimates for each potential subcontractor (may be a rough order of magnitude).

4.2.2. Proposal Format

As soon as the evaluation of all proposals 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 Administrative POC identified on the proposal coversheet.

All full proposals must be in the format given below. Proposals shall consist of two volumes: 1) **Volume I, Technical and Management Proposal**, and 2) **Volume II, Cost Proposal.** All submissions must be written in English with type no smaller than 12-point font. A smaller font may be used for figures, tables, and charts. The page limitation includes all figures, tables, and charts. All pages shall be formatted for printing on 8-1/2 by 11- inch paper. Margins must be 1-inch on all sides. Copies of all documents submitted must be clearly labeled with the DARPA BAA number, proposer organization, and proposal title/proposal short title. Volume I, Technical and Management Proposal, 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 counts given below. The submission of other supporting materials along with the proposals is strongly discouraged and will not be considered for review. The maximum page count for Volume I is 30 pages. The official transmittal letter is not included in the page count. Volume I should include the following components:

a. Volume I, Technical and Management Proposal

Section I. Administrative

A. Cover Sheet (LABELED "PROPOSAL: VOLUME I"):

- 1. BAA number (HR001124S0010);
- 2. Lead organization submitting proposal (prime contractor);
- 3. Type of organization, selected from among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL

BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," OR "OTHER NONPROFIT";

- 4. Proposer's reference number (if any);
- 5. Other team members (if applicable) and type of business for each;
- 6. Proposal title;
- 7. Technical point of contact (Program Manager or Principal Investigator) to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax, e-mail;
- 8. Administrative point of contact (Contracting Officer or Award Officer) to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax, e-mail;
- 9. Award instrument requested: cost-plus-fixed-free (CPFF), cost-contract—no fee, cost sharing contract no fee, or other type of procurement contract (*specify*), cooperative agreement, or other transaction for research;
- 10. Place(s) of performance, including all subcontractors and consultants;
- 11. Period of performance;
- 12. Total funds requested from DARPA, total funds requested per phase and the amount of any cost share (if any);
- 13. Proposal validity period; AND
- 14. Date proposal was submitted.

Information on award instruments is available at <u>http://www.darpa.mil/work-with-us/contract-management</u>.

B. Official Transmittal Letter.

C. Executive Summary Slides: The slide template is provided as Attachment 1 to the BAA posted at <u>https://SAM.gov</u>. Use of this template is required.

Section II. Detailed Proposal Information

- **A. Executive Summary:** Provide a synopsis of the proposed project, including answers to the following questions:
 - What is the proposed work attempting to accomplish or do?
 - How is it done today, and what are the limitations?
 - What is innovative in your approach?
 - What are the key technical challenges in your approach, and how do you plan to overcome these?
 - Who or what will be affected, and what will be the impact if the work is successful?
 - How much will it cost, and how long will it take?

- **B. Goals and Impact:** Clearly describe what the team is trying to achieve and the difference it will make (qualitatively and quantitatively) if successful. Describe the innovative aspects of the project in the context of existing capabilities and approaches, clearly delineating the uniqueness and benefits of this project in the context of the state of the art, alternative approaches, and other projects from the past and present. Describe how the proposed project is revolutionary and how it significantly rises above the current state-of-the-art. Describe the deliverables associated with the proposed project and any plans to commercialize the technology, transition it to a customer, or further the work.
- **C. Technical Plan:** Outline and address technical challenges inherent in the approach and possible solutions for overcoming potential problems. This section should provide appropriate measurable milestones (quantitative if possible) at intermediate stages of the program to demonstrate progress, plan for achieving the milestones, and must include a simple process flow diagram of their final system concept. The technical plan should demonstrate a deep understanding of the technical challenges and present a credible (even if risky) plan to achieve the program goal. Discuss mitigation of technical risk. Describe the team's plan to obtain and maintain the necessary IRB and HRPO approvals to conduct human subjects research during the course of the project.
- D. Management Plan: Provide a summary of expertise of the team, including any subcontractors, and key personnel who will be doing the work. A Principal Investigator (PI) for the project must be identified, along with a description of the team's organization, including the breakdown by Technical Area. All teams are strongly encouraged to identify a Project Manager/Integrator to serve as the primary point of contact to communicate with the DARPA Program Manager, IV & V partner, and Contracting Officer's Representative, coordinate the effort across co-performer, vendor, and subcontractor teams, organize regular performer meetings or discussions, facilitate data sharing, and ensure timely completion of milestones and deliverables.

Provide a clear description of the team's organization including an organization chart that includes, as applicable: the programmatic relationship of team members; the unique capabilities of team members; the task responsibilities of team members, the teaming strategy among the team members; and key personnel with the amount of effort to be expended by each person during each year. Provide a detailed plan for coordination including explicit guidelines for interaction among collaborators/subcontractors of the proposed effort. Include risk management approaches. Describe any formal teaming agreements that are required to execute this program.

E. Capabilities: Describe organizational experience in relevant subject area(s), existing intellectual property, specialized facilities, and any Government-furnished materials or

information. Describe any specialized facilities to be used as part of the project, the extent of access to these facilities, and any and certification requirements. Discuss any work in closely related research areas and previous accomplishments.

F. Statement of Work (SOW) NOT INCLUDED IN PAGE COUNT: The SOW should provide a detailed task breakdown, citing specific tasks for each Technical Area, and their connection to the milestones and program metrics. Each phase of the program should be separately defined. The SOW must not include proprietary information. It is encouraged, though not required, to use the SOW template provided as **Attachment 2**. SOW is not included in the Volume 1 page count.

For each task/subtask, provide:

- A detailed description of the approach to be taken to accomplish each defined task/subtask.
- Identification of the primary organization responsible for task execution (prime contractor, subcontractor(s), consultant(s), by name).
- A measurable milestone, i.e., a deliverable, demonstration, or other event/activity that marks task completion. Include completion dates for all milestones. Include quantitative metrics.
- A definition of all deliverables (e.g., data, reports, software) to be provided to the Government in support of the proposed tasks/subtasks.

It is recommended that the SOW be developed so that each Phase of the program is separately defined.

- **G.** Schedule and Milestones: Provide a detailed schedule showing tasks (task name, duration, work breakdown structure element as applicable, performing organization), milestones, and the interrelationships among tasks. The task structure must be consistent with that in the SOW. Measurable milestones should be clearly articulated and defined in time relative to the start of the project.
- **H. Technology Transfer Plan:** Provide information regarding the types of partners (e.g., government, private industry) that will be pursued and submit a timeline with incremental milestones toward successful engagement. The plan should include a description of how DARPA will be included in the development of potential technology transfer relationships. If the Technology Transfer Plan includes the formation of a start-up company, a business development strategy must also be provided.

a. Volume II, Cost Management Proposal

Cover Sheet (LABELED "PROPOSAL: VOLUME II"):

- 1. BAA Number (HR001124S0010);
- 2. Lead Organization Submitting proposal;
- Type of organization, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", OR "OTHER NONPROFIT";
- 4. Proposer's reference number (if any);
- 5. Other team members (if applicable) and type of business for each;
- 6. Proposal title;
- 7. Technical point of contact (Program Manager or Principal Investigator) to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
- 8. Administrative point of contact (Contracting Officer or Award Officer) to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available);
- 9. Award instrument requested: cost-plus-fixed-free (CPFF), cost-contract—no fee, cost sharing contract no fee, or other type of procurement contract (*specify*), cooperative agreement, or other transaction for research;
- 10. Place(s) of performance, including all subcontractors and consultants;
- 11. Period of performance;
- 12. Total funds requested from DARPA, total funds requested per phase (as defined in Table 1), and the amount of any cost share (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. Unique Entity ID (<u>https://sam.gov/content/duns-uei</u>);
- 17. Taxpayer ID number (<u>https://www.irs.gov/Individuals/International-</u> Taxpayers/Taxpayer-Identification-Numbers-TIN);
- Commercial and Government Entity (CAGE) code (<u>https://cage.dla.mil/Home/UsageAgree</u>);
- 19. Proposal validity period

The Government requires that proposers* use the provided MS ExcelTM 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 <u>http://www.darpa.mil/work-with-us/contract-management</u> (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 ExcelTM DARPA Standard Cost Proposal Spreadsheet. Instead, a proposed budget and justification may be provided using the SF-424 Research & Related Budget forms provided via <u>https://www.grants.gov</u>.

- (1) Total program, per phase (Phase I and Phase II), and per task cost broken down by major cost items to include:
 - i. **Direct labor** provide an itemized breakout of all personnel, listed by name or TBD, with labor rate (or salary), labor hours (or percent effort), and labor category. All senior personnel must be identified by name.
 - ii. **Materials and Supplies** itemized list which includes description of material, quantity, unit price, and total price. If a material factor is used based on historical purchases, provide data to justify the rate.
 - iii. **Equipment** itemized list which includes description of equipment, unit price, quantity, and total price. Any equipment item with a unit price over \$5,000 must include a vendor quote.
 - iv. Travel provide an itemized list of travel costs to include purpose of trips, departure and arrival destinations, projected airfare, rental car and per GSA approved diem, number of travelers, number of days); provide screenshots from travel website for proposed airfare and rental car, as applicable; provide screenshot or web link for conference registration fee and note if the fee includes hotel cost. Conference attendance must be justified, explain how it is in the best interest of the project. Plan for two (2) DARPA program review meetings per year.
 - V. Other Direct Costs (e.g., computer support) Should be itemized with costs or estimated costs. Backup documentation and/or a supporting cost breakdown is required to support proposed costs with a unit price over \$5,000. An explanation of any estimating factors, including their derivation and application, must be provided. Please include a brief description of the proposers' procurement method to be used.
 - vi. **Other Direct Costs** Consultants: provide executed Consultant Agreement that describes work scope, rate and hours.
 - vii. **Indirect costs** including, as applicable, fringe benefits, overhead, General and Administrative (G&A) expense, and cost of money (see university vs. company specific requirements below).
 - viii. Indirect costs specific to a University performer: (1) Fringe Benefit Rate (provide current Department of Health and Human Services (DHHS) or Office of Naval Research (ONR) negotiated rate package; if calculated by other than a rate, provide University documentation identifying fringe costs by position or HR documentation if unique to each person); (2) F&A

Indirect Overhead Rate (provide current DHHS or ONR negotiated rate package); (3) Tuition Remission (provide current University documentation justifying per-student amount); and (4) Health Insurance/Fee (provide current University documentation justifying per student amount, if priced separately from fringe benefits with calculations included in the EXCEL cost file).

Indirect costs specific to a Company performer: (1) Fee/Profit (provide rationale for proposed fee/profit percentage using criteria found in DFARS 215.404-70); and (2) Fringe Benefit/Labor OH/Material OH/G&A Rates (provide current Forwarding Pricing Rate Proposal (FPRP) or DCMA/DCAA Forward Pricing Rate Recommendation or Agreement (FPRR or FPRA). If these documents are not available, provide company historical data, preferably two years, minimum of one, to include both pool and expense costs used to generate the rates).

- (2) A summary of total program costs by phase and task.
- (3) An itemization of Subcontracts. All subcontractor cost proposal documentation must be prepared at the same level of detail as that required of the prime. Subcontractor proposals should include Interdivisional Work Transfer Agreements (IWTA) or evidence of similar arrangements (an IWTA is an agreement between multiple divisions of the same organization). The prime proposer is responsible for compiling and providing all subcontractor proposals for the Procuring Contracting Officer (PCO). The proposal must show how subcontractor costs are applied to each phase and task. If consultants are to be used, proposer must provide consultant agreement or other document that verifies the proposed loaded daily/hourly rate.
- (4) An itemization of any information technology (IT) purchase (including a letter stating why the proposer cannot provide the requested resources from its own funding), as defined in FAR Part 2.101.
- (5) A summary of projected funding requirements by month for all phases of the project.
- (6) A summary of tasks that have human use funding.
- (7) The source, nature, and amount of any industry cost-sharing. 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.
- (8) 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 Expert/s, etc.).
- (9) Any Forward Pricing Rate Agreement, DHHS rate agreement, other such approved rate information, or such documentation that may assist in expediting negotiations (if available).
- (10) Proposers with a Government acceptable accounting system who are proposing a cost-type contract must submit the DCAA document approving the cost accounting system.

Per FAR 15.403-4, certified cost or pricing data shall be required if the proposer is seeking a procurement contract award per the referenced threshold, unless the proposer requests and is granted an exception from the requirement to submit cost or pricing data. 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.)

Subawardee Proposals

The awardee is responsible for compiling and providing all subawardee proposals for the Procuring Contracting Officer (PCO)/Grants Officer (GO)/Agreements Officer (AO), as applicable. Subawardee proposals should include Interdivisional Work Transfer Agreements (ITWA) or similar arrangements. Where the effort consists of multiple portions which could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.

All proprietary subawardee proposal documentation, prepared at the same level of detail as that required of the awardee's proposal and which cannot be uploaded with the proposed awardee's proposal, shall be provided to the Government either by the awardee or by the subawardee organization when the proposal is submitted. Subawardee proposals submitted to the Government by the proposed subawardee should be submitted via e-mail to the address in Section I.

Other Transaction (OT) Requests

All proposers requesting an OT must include a detailed list of milestones for each phase of the program (I and II). Each milestone must include the following:

- milestone description,
- completion criteria,
- due date, and
- 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.

4.2.3. Additional Proposal Information

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" or "Company 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.

Unclassified Submissions

DARPA anticipates that submissions received under this BAA will be unclassified. However, should a proposer wish to submit classified information, an *unclassified* e-mail must be sent to the BAA mailbox requesting submission instructions from the Technical Office Program Security Officer (PSO). If a determination is made that the award instrument may result in access to classified information, a Security Classification Guide (SCG) and/or DD Form 254 will be issued by DARPA and attached as part of the award.

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.

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 <u>http://www.darpa.mil/work-with-us/additional-baa</u>, to include providing the information specified therein as required for proposal submission.

Approved Cost Accounting System Documentation

Proposers that do not have a Cost Accounting Standards (CAS) complaint 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/cas.html. To facilitate this process, proposers should complete the SF 1408 found at http://www.dcaa.mil/cas.html. 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.

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 and includes subcontractors might be required to submit a subcontracting plan with their proposal. The plan format is outlined in FAR 19.704.

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.

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.

For Procurement Contracts

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

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

For All Non-Procurement Contracts

Proposers responding to this BAA requesting a 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 to use a format similar to that described in the section above. If no restrictions are intended, then the proposer should state "NONE."

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

4.2.4. 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 HR001124S0010. <u>Submissions may not be sent by fax or e-mail; any so sent will be disregarded.</u>

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.

For abstract and proposal submission dates, see Part I., Overview Information. Submissions received after these dates and times may not be reviewed.

Proposal Abstract Submission

Proposal Abstracts submitted in response to HR001124S0010 must be submitted via DARPA's BAA Website (https://baa.darpa.mil). 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. 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 abstract. Proposers using the DARPA BAA Website may

encounter heavy traffic on the submission deadline date; it is highly advised that the submission process be started as early as possible.

All unclassified concepts submitted electronically through DARPA's BAA Website must be uploaded as zip files (.zip or .zipx extension). The final zip file should be no greater than 50 MB in size. Only one zip file will be accepted per submission. Classified submissions and proposals requesting or cooperative agreements should NOT be submitted through DARPA's BAA Website (https://baa.darpa.mil), though 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.

Technical support for BAA Website may be reached at <u>BAAT_Support@darpa.mil</u>, and is typically available during regular business hours, (9:00 AM- 5:00 PM EST Monday – Friday).

Proposers using the DARPA BAA Website may encounter heavy traffic on the submission deadline date; it is highly advised that the submission process be started as early as possible.

Proposal abstracts will not be accepted if submitted via Grants.gov.

Full Proposal Submission

For Other Transactions for Research only:

Proposers requesting an Other Transaction for Research (OT-R) awarded under 10 U.S.C.§ 4021 must include the completed form indicated below. This requirement only applies only to those who expect to receive an OT-R as their ultimate award instrument.

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 form below to collect the necessary information to satisfy these requirements.

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.
- o 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.

OT-R submissions should be completed via DARPA's BAA Portal (<u>https://baa.darpa.mil</u>). See <u>below</u> for further instructions.

For Cooperative Agreements only:

Proposers requesting cooperative agreements must submit proposals through one of the following methods: (1) electronic upload per the instructions at <u>https://www.grants.gov/applicants/apply-for-grants.html</u> (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 <u>https://apply07.grants.gov/apply/forms/sample/RR_SF424_2_0-V2.0.pdf</u>. *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: <u>Research and Related Personal Data</u>, available on the Grants.gov website at <u>https://apply07.grants.gov/apply/forms/sample/RR_PersonalData_1_2-V1.2.pdf</u>. 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.

<u>Grants.gov Submissions:</u> 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 <u>http://www.darpa.mil/work-with-us/additional-baa</u>.

<u>Hard copy Submissions</u>: Proposers electing to submit cooperative agreement proposals as hard copies must complete the SF 424 R&R form (Application for Federal Assistance), available on the Grants.gov website (<u>https://apply07.grants.gov/apply/forms/sample/SF424_2_1-V2.1.pdf</u>).

DARPA BAA Portal (Procurement Contract or Other Transaction submissions):

Proposers requesting procurement contracts or Other Transactions must submit proposals via DARPA's BAA Website (<u>https://baa.darpa.mil</u>). Proposers using <u>https://baa.darpa.mil</u> do not submit hard-copy proposals in addition to the electronic submission.

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. 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 abstract. Proposers using the DARPA BAA Website may encounter heavy traffic on the submission deadline date; it is highly advised that the submission process be started as early as possible.

All unclassified concepts submitted electronically through DARPA's BAA Website must be uploaded as zip files (.zip or .zipx extension). The final zip file should be no greater than 50 MB in size. Only one zip file will be accepted per submission. Classified submissions and proposals requesting or cooperative agreements should NOT be submitted through DARPA's BAA Website (https://baa.darpa.mil), though 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.

Technical support for BAA Website may be reached at <u>BAAT_Support@darpa.mil</u>, and is typically available during regular business hours, (9:00 AM- 5:00 PM EST Monday – Friday).

Proposers using the DARPA BAA Website may encounter heavy traffic on the submission deadline date; it is highly advised that the submission process be started as early as possible.

Failure to comply with the submission procedures may result in the submission not being evaluated. DARPA will acknowledge receipt of complete submissions via email and assign control numbers that should be used in all further correspondence regarding proposals.

4.3. FUNDING RESTRICTIONS

Not applicable.

4.4. OTHER SUBMISSION INFORMATION

DARPA will post a consolidated Frequently Asked Questions (FAQ) document. To access the posting go to <u>http://www.darpa.mil/work-with-us/opportunities</u>. A link to the FAQ will appear under the HR001124S0010 summary. Submit your question(s) via e-mail to <u>BLUE@darpa.mil</u>.

5. Application Review Information

5.1. EVALUATION CRITERIA

Proposals will be evaluated using the following criteria, listed in descending order of importance: 5.1.1 Overall Scientific and Technical Merit; 5.1.2 Potential Contribution and Relevance to the DARPA Mission; and 5.1.3 Cost Realism.

5.1.1. Overall Scientific and Technical Merit

The proposed technical approach is innovative, feasible, achievable, and complete. The proposed technical team has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements provided are complete and in a logical sequence with all proposed deliverables clearly defined such that a final outcome that achieves the goal can be expected as a result of award. The proposal identifies major technical risks, and planned mitigation efforts are clearly defined and feasible. The timeline for achieving major milestones is aggressive but rationally supported with a clear description of the requirements and risks. The proposer's prior experience in similar efforts must clearly demonstrate an ability to deliver products that meet the proposed technical performance within the proposed budget and schedule. The proposed team has the expertise to manage the cost and schedule.

5.1.2. 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.

5.1.3. Cost and Schedule 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).

It is expected that the effort will leverage all available relevant prior research in order to obtain the maximum benefit from the available funding. For efforts with a likelihood of commercial application, appropriate direct cost sharing may be a positive factor in the evaluation. DARPA recognizes that undue emphasis on cost may motivate proposers to offer low-risk ideas with minimum uncertainty and to staff the effort with junior personnel in order to be in a more competitive posture. DARPA discourages such cost strategies.

5.2. REVIEW OF PROPOSALS

Review Process

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

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.

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.

Responsibility/Qualification

Responsibility/qualification reports in SAM.gov contain all the information formerly available from the Federal Awardee Performance and Integrity Information System (FAPIIS). There is a 14-calendar day delay in publicly posting responsibility/qualification information on SAM.gov. 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.

6. Award Administration Information

6.1. SUBMISSION STATUS NOTIFICATIONS

Proposal Abstracts and Full Proposals submitted in response to HR001124S0010 will be evaluated following the submission deadlines listed in Part 1. DARPA will respond as described below. These official notifications will be sent via e-mail to the Technical Point of Contact (POC) and/or Administrative POC identified on the submission coversheet.

6.1.1. 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.

6.1.2. Full Proposals

As soon as 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.

6.2. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

6.2.1. Meeting and Travel Requirements

There will be a Phase I Kickoff meeting in the Arlington, VA vicinity 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 to the Arlington, VA vicinity. Proposers shall include within the content of their proposal details and costs of any travel or meetings they deem to be necessary throughout the course of the effort, to include periodic status reviews by the Government.

6.2.1. 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 <u>http://www.darpa.mil/work-with-us/additional-baa</u>.

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

Further information on Controlled Unclassified Information identification, marking, protecting, and control, to include processing on Non-DoD Information Systems, is incorporated herein and can be found at <u>http://www.darpa.mil/work-with-us/additional-baa</u>.

6.2.3. 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 <u>https://www.sam.gov/</u>. 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 <u>http://www.darpa.mil/work-with-us/reps-certs</u> 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.

6.2.4. 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 <u>http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions</u> and the supplemental DARPA-specific terms and conditions at <u>http://www.darpa.mil/work-with-us/contract-management#GrantsCooperativeAgreements</u>.

6.3. REPORTING

The number and types of reports will be specified in the award document, but will include as a minimum monthly financial and technical status reports, quarterly technical status reports, and end-of-phase 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.

6.4. ELECTRONIC SYSTEMS

6.4.1. Wide Area Work Flow (WAWF)

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

6.4.2. **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 (http://public.era.nih.gov/iedison).

6.5. DARPA EMBEDDED ENTREPRENEURSHIP INITIATIVE

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 product to the 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 Investor Working Groups; and (3) Additional funding on an awardee's contract for the awardee to hire an embedded entrepreneur to achieve specific milestones in a Go-to-Market strategy for transitioning the technology to products that serve 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 milestones to achieve 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 Commercial Strategy.

DARPA Commercial Strategy 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 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 technology transition plan 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.

7. Agency Contacts

Administrative, technical or contractual questions should be sent via e-mail to the mailbox listed below.

Points of Contact The BAA Coordinator for this effort may be reached at: <u>BLUE@darpa.mil</u> DARPA/BTO ATTN: HR001124S0010 675 North Randolph Street Arlington, VA 22203-2114

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

8. Other Information

8.1. PROPOSERS DAY

DARPA will host a Virtual Proposers Day in support of the BLUE program on **February 29**, **2024**. The purpose is to provide potential proposers with information on the BLUE program, promote additional discussion on this topic, address questions, provide a forum to present their capabilities, and encourage team formation.

Interested proposers are not required to attend to respond to the BLUE BAA, and relevant information and materials discussed at Proposers Day will be made available to all potential proposers in the form of a FAQ posted on the DARPA Opportunities Page.

DARPA will not provide cost reimbursement for interested proposers in attendance. An online registration form and various other meeting details can be found at the registration website, <u>https://events.sa-meetings.com/BLUEPD</u>.

Participants are required to register no later than **February 26, 2024.** This event is not open to the Press. The Proposers Day will be open to members of the public who have registered in advance for the event; there will be no onsite registration.

Proposers Day Point of Contact: <u>BLUE@darpa.mil</u>

8.2. UNIVERSITY FUNDING

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.
- 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.

9. APPENDIX 1 – Volume II checklist

Volume II, Cost Proposal Checklist and Sample Templates

The following checklist and sample templates are provided to assist the proposer in developing a complete and responsive cost volume. Full instructions appear in Section 4.2.2 of HR001124S0010. This worksheet must be included with the coversheet of the Cost Proposal.

1. Are all items from Section 4.2.2 (Volume II, Cost Proposal) of **HR001124S0010** included on your Cost Proposal cover sheet?

• YES • NO Appears on Page(s) [Type text] If reply is "No", please explain:

2. Does your Cost Proposal include (1) a summary cost buildup by Phase, (2) a summary cost buildup by Year, and (3) a detailed cost buildup of for each Phase that breaks out each task and shows the cost per month?

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

3. Does your cost proposal (detailed cost buildup #3 above in item 2) show a breakdown of the major cost items listed below:

Direct Labor (Labor Categories, Hours, Rates)		
fo YES	• NO	Appears on Page(s) [Type text]
Indirect Costs/Ra	ates (i.e., overhe ° NO	ad charges, fringe benefits, G&A) Appears on Page(s) [Type text]
Materials and/or • YES	Equipment • NO	Appears on Page(s) [Type text]
Subcontracts/Cor • YES	nsultants • NO	Appears on Page(s) [Type text]
Other Direct CostsAppears on Page(s) [Type text]• YES• NO		
Travel • YES	• NO	Appears on Page(s) [Type text]

If reply is "No", please explain:

4. Have you provided documentation for proposed costs related to travel, to include purpose of trips, departure and arrival destinations and sample airfare?

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

5. Does your cost proposal include a complete itemized list of <u>all</u> material and equipment items to be purchased (a priced bill-of-materials (BOM))?

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

6. Does your cost proposal include vendor quotes or written engineering estimates (basis of estimate) for <u>all</u> material and equipment with a unit price exceeding \$5000?

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

7. Does your cost proposal include a clear justification for the cost of labor (written labor basis-of-estimate (BOE)) providing rationale for the labor categories and hours proposed for each task?
• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

- 8. Do you have subcontractors/consultants? If YES, continue to question 9. If NO, skip to question 13. • YES • NO Appears on Page(s) [Type text]
- 9. Does your cost proposal include copies of all subcontractor/consultant technical (to include Statement of Work) and cost proposals?

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

10. Do all subcontract proposals include the required summary buildup, detailed cost buildup, and supporting documentation (SOW, Bill-of-Materials, Basis-of-Estimate, Vendor Quotes, etc.)?
• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

If reply is "No", please explain:

12. If requesting a FAR-based contract, does your cost proposal include a tech/cost analysis for all proposed subcontractors?

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

13. Have all team members (prime and subcontractors) who are considered a Federally Funded Research & Development Center (FFRDC), included documentation that clearly demonstrates work is not otherwise available from the private sector AND provided a letter on letterhead from the sponsoring organization citing the specific authority establishing their eligibility to propose to government solicitations and compete with industry, and compliance with the associated FFRDC sponsor agreement and terms and conditions.

• YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

14. Does your proposal include a response regarding Organizational Conflicts of Interest? • YES • NO Appears on Page(s) [Type text]

If reply is "No", please explain:

15. Does your proposal include a completed Data Rights Assertions table/certification? ○ YES ○ NO Appears on Page(s) [Type text]

If reply is "No", please explain: