



Broad Agency Announcement
Ocean of Things Phase 2 Data Analytics
STRATEGIC TECHNOLOGY OFFICE
HR001120S0042
March 31, 2020

TABLE OF CONTENTS

PART I: OVERVIEW INFORMATION	3
PART II: FULL TEXT OF ANNOUNCEMENT	4
I. Funding Opportunity Description	4
A. Program Overview	4
B. Program Metrics.....	8
II. Award Information	9
A. General Award Information	9
B. Fundamental Research	10
III. Eligibility Information	11
A. Eligible Applicants.....	11
B. Organizational Conflicts of Interest.....	11
C. Cost Sharing/Matching	13
IV. Application and Submission Information.....	13
A. Address to Request Application Package	13
B. Content and Form of Application Submission.....	13
V. Application Review Information	22
A. Evaluation Criteria	22
B. Review of Proposals.....	23
VI. Award Administration Information	24
A. Selection Notices and Notifications.....	24
B. Administrative and National Policy Requirements.....	24
C. Reporting.....	25
D. Electronic Systems	25
VII. Agency Contacts	25
VIII. Other Information	26
IX. APPENDIX 1: PROPOSAL SLIDE SUMMARY	27
X. APPENDIX 2: VOLUME 1 COVER SHEET TEMPLATE	30
XI. APPENDIX 3: VOLUME 2 COVER SHEET, CHECKLIST AND SAMPLE TEMPLATES	31

PART I: OVERVIEW INFORMATION

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Strategic Technology Office (STO)
- **Funding Opportunity Title** – Ocean of Things Phase 2 Data Analytics
- **Announcement Type** – Initial Announcement
- **Funding Opportunity Number** – HR001120S0042
- **Catalog of Federal Domestic Assistance Numbers (CFDA)** – Not applicable
- **Dates**
 - Posting Date: March 31, 2020
 - Proposers’ Day: April 7, 2020 (webinar)
 - Questions Due Date: April 17, 2020, 4:00 PM, ET
 - Proposal Due Date: May 15, 2020, 4:00 PM, ET
- The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative proposals for the second phase of a two-phase program to develop analytical techniques to derive insights from an autonomous float field and produce mission products from the many, concise float data reports. The program, Ocean of Things, is a vital part of the Mosaic Warfare end-state vision. Proposed solutions should develop innovative approaches that enable revolutionary advances in science, devices, or systems and innovative approaches to apply existing technology not previously applied to the maritime domain. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.
- Multiple awards are anticipated.
- Total Budgeted Award Amount (for all performers): \$8 million
- Types of instruments that may be awarded -- Procurement Contract or Other Transaction.
- Agency Contact
 - Points of Contact:
The BAA Coordinator for this effort can be reached at:
HR001120S0042@darpa.mil
DARPA/STO
ATTN: HR001120S0042
675 North Randolph Street
Arlington, VA 22203-2114

PART II: FULL TEXT OF ANNOUNCEMENT

I. 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 Defense Advanced Research Projects Agency (DARPA) is soliciting innovative proposals for the second phase of a two-phase program to develop analytical techniques to derive insights from an autonomous float field and produce mission products from the many, concise float data reports. The program, Ocean of Things, is a vital part of the Mosaic Warfare end-state vision. Proposed solutions should develop innovative approaches that enable revolutionary advances in science, devices, or systems and innovative approaches to apply existing technology not previously applied to the maritime domain. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

A. Program Overview

The complexity of the ocean environment and operations therein has previously encouraged the use of exquisite systems to understand maritime dynamics and activity. The Ocean of Things program is an opportunity to provide affordable ocean sensing at large scales and high resolution. Improved maritime analysis provides detailed understanding of the ocean environment, informs regulatory commitments to protect natural resources, and enables the military to operate more effectively on the high seas.

The Ocean of Things program provides environmental sensing and operational surveillance missions by composing data from a distribution of heterogeneous floats. Each float characterizes the physical environment through periodic sampling of local ocean properties, while also reporting significant maritime events. A primary technical objective of the program is to develop edge-processing methods to identify and report the essential information from any “interesting” events within a float’s communication and energy constraints to allow for robust processing and mission analysis once the limited data reaches the cloud. Ocean of Things will also investigate the selection of sensors and sampling rates to maximize system performance.

The stored reports should contain sufficient information for data analytics performers to apply advanced processing techniques (e.g., filtering, clustering, and machine learning). Performers must utilize techniques to process this sparse data to develop vessel tracks, characterize vessel behaviors, identify new signatures and signal associations in the data provided, and conduct other mission analytics supported by onboard float hardware. The Ocean of Things program will visualize float sensor coverage, predict float field performance, and control individual floats to deliver resultant capabilities as a field comprising thousands of floats.

To achieve these research objectives, DARPA divides the program into two technical efforts. Technical Area 1 (TA-1) includes the design and production of floats; Technical Area 2 (TA-2)

includes the development of advanced data analytics to generate mission products. At this time, DARPA seeks innovative proposals for TA-2 advanced data analytics only.

1. System Description

Ocean of Things consists of a large number of persistent, low-cost floats; satellite communications linked to a cloud data storage system; and advanced data analytics. Float design and development performers (NOT solicited by this BAA) will develop the float hardware. Floats sense both the physical and operational environment utilizing existing commercial hardware. Small, low-cost floats are necessary to deploy large numbers economically over wide areas at resolutions required to meet program goals, where 50,000 floats can cover approximately one million square kilometers. Data analytics performers, as solicited by this BAA, will mine the data cloud filled by these floats to deliver useful data products, such as smart inferences about the sea state, inferences about upwellings, current or wind based on float motion, and mission products such as track-generating algorithms or oil spill drift predictions.

Floats characterize the environment by employing sensors across various modalities to detect physical characteristics and activity. A variety of float types – based on the selected mission sensor – compose an Ocean of Things field with its composite sensor reports, resulting in a large heterogeneous dataset suitable for analysis and generation of relevant mission products.

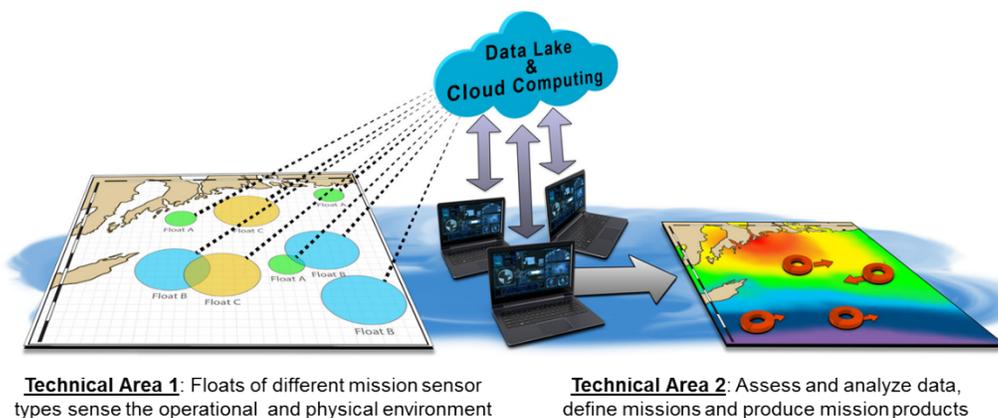


Figure 1 – Graphical System Concept

The float design and development is a separate and distinct effort from the data analytics performers; however, the data analytics proposers must take a holistic system view and appreciate the float design decisions made by existing float development performers. Data analytics proposers should efficiently utilize the information collected from the environment through application of sophisticated software and algorithms to create data products useful to the scientific and oceanographic communities as a whole. Proposers must include how they will apply data analytic techniques to accomplish relevant missions and produce appropriate products in their proposals.

At a minimum, system performance must satisfy both physical and operational environment characterization. Multiple missions within these categories or additional missions supplementary to these two categories are of interest to DARPA. Examples of physical environment characterization include, but are not limited to, sea surface/air temperature, acoustic ambient noise, wind speed, wave dynamics, and float motion. Examples of activity characterization include the generation of vessel tracks, multi-spectral vessel signatures, and vessel behavior.

2. Phase Execution (15 Months)

During Phase 1, performer teams developed User Interfaces and back-end infrastructure to analyze data sets for multiple small float deployments in Southern California and the Gulf of Mexico, thus far culminating in a roughly 100 float sample of a transect of the Loop Current. Phase 2, the design refinement phase consisting of a 15 month base period only, similarly requires performers to utilize an existing User Interface, advanced algorithms, and analytic techniques to analyze all data. Phase 2 looks to solicit additional analytical approaches that have not been explored in Phase 1 of TA2. DARPA thinks the novel data stream provided by floating sensors is ripe for new algorithmic approaches. Anticipated data includes, but is not limited to, Phase 1 deployments, Phase 2 validation tests, and the 8-month at sea deployment scheduled to begin 7 months into the Phase 2 Data Analytics effort.

Phase 2 data analytics performers will improve analytic results by working towards a refined set of desired metrics to complete battlespace-sensing missions based on the float hardware and software. The effort will include one Technical Interchange Meeting (TIM) as well as a single Critical Design Review (CDR) to occur five months after contract award. Figure 2 shows a general layout of Phase 2.

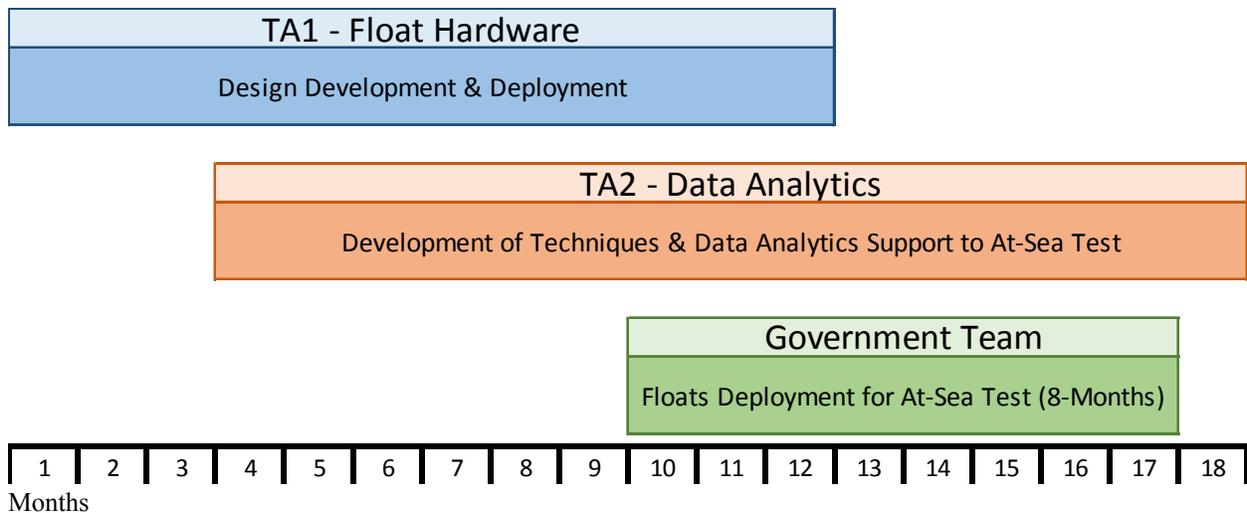


Figure 2 – General Phase Layout

Data analytics performers shall work closely with existing float production performers during software design and testing. Proposers are solely responsible for developing unique analytic approaches to the focus areas listed below. Successful proposers will design and implement creative data analytic solutions that use the float sensor data to produce data products and mission products useful to end customers.

Proposals should outline clearly and thoroughly the data analytic techniques that will be employed, and how these techniques will achieve the desired Program Metrics (Table 3).

The Government team support provided for Phase 2 will be funded directly by DARPA so these costs are not necessary to include in the proposal submission. The Government will provide the cloud-computing architecture hosting a micro-services architecture, containerized software, and virtual machine technologies. Proposers should plan to operate in a continuous integration / continuous delivery environment within the Government cloud vice on performer hosted systems. The Government will also provide float data consisting of: message decoding schemes; sensor modalities; and float hardware analysis resulting from phase 1 testing. All Government furnished materials will be provided after contract award at performer kickoff.

Three focus areas subdivide TA 2:

1. Field Performance & Command and Control (C²): Visualization of float location, health, and field capability. Predict field performance resulting from anticipated float movement. Provide commands to floats as needed (e.g., scuttle, activate/deactivate sensors, etc.),
2. Track Generation: Automation to associate float declarations, initiate a vessel track report, and discriminate between multiple vessels using multi-mode detections,
3. Data Discovery: Understanding of ocean signatures, identification of sensor associations across floats, and generation of many mission products available from the Ocean of Things data set. In addition to recognition of known phenomena, in Phase 2 the performers will identify and categorize new, unknown phenomena.

Proposals must address all three of the focus areas listed above.

During Phase 1, the data analytics teams worked to determine the required data density for effective Ocean of Things system performance. In Phase 2, the data analytics teams will continue to work toward effective deployment plans, efficient sensor usage, effective data analysis and visualization, and refining these techniques while enabling additional functionality.

The list below summarizes the Phase 2 objective capabilities that the contractor should demonstrate in the cloud-based user interface:

- Display float locations, health, and performance by capability and mission,
- Process and display environmental data for oceanographic and meteorological models,
- Analyze float motion in comparison to existing models, and forecast float positions,
- Develop automatic target detection and classification methods for vessel tracks,
- Generate tracks of vessels sensed in the Ocean of Things area of regard,
- Discover new target signatures and new missions capable from Ocean of Things data
- Satisfy other mission requirements as proposed.

Table 1. Milestones

Program Milestones	Venue	Months After Contract Award
Kick Off	DARPA	0.5
TIM	DARPA	2

Preliminary Design Review (PDR)/Quarterly Program Review (QPR) 1	Performer Location	3
CDR	DARPA	5
QPR 2	Performer Location	6
8-month at-sea test	*Southern California or Gulf of Mexico	7-14
Data Exploitation	-	7-14
QPR 3	DARPA	9
QPR 4	DARPA	12
Final Phase 2 Report	DARPA	15

*Locations tentative

Table 2. Deliverables

Deliverables	Format	Months After Contract Award
List of missions, preliminary design & agile sprint story	Slide presentation, annotated	2
List of missions, critical/final design & software architecture	Slide presentation, annotated	5
Final report, software, and user document	Document, source code, & executables	15
Biweekly Status Meeting	Phone Conference	Biweekly
Monthly Technical and Financial Status Report	Document	Monthly
Quarterly Progress Review	Slide Presentation, annotated	Quarterly

B. Program Metrics

In order for the Government to evaluate the achievement of program objectives, proposers should consider the following notional program metrics.

Proposals should cite the quantitative and qualitative success criteria that the proposed effort will achieve by the time of each Phase's program metric measurement.

Table 3. Program Metrics

Metric	Threshold	Goal
Field performance prediction	72-hour forecast	120-hour forecast
Multi-target discrimination	Clustered targets 2 or more	Clustered targets 4 or more
Track initiation:	≤ 4 geo-separated reports	≤ 3 geo-separated reports
	≥ 2 sensor types	≥ 3 sensor types

Track continuity	≥ 50% avg. float hold time	≥ 85% avg. float hold time
Track association:	75% if same sensor modality	90% if same sensor modality
	25% if different sensor modality	50% if different sensor modality
Data discovery	Recognition of new phenomena	
Additional missions	Technical performance measure for additional missions shall be detailed in proposals ¹	

II. Award Information

A. General Award Information

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

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.4., “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 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. § 2371b(f), the Government may award a follow-on production contract or Other Transaction (OT) for any OT awarded under this BAA if: (1) that participant in the OT, or a recognized successor in interest to the OT, successfully completed the entire prototype

¹ Note: DARPA strongly desires innovation in additional mission capabilities beyond track generation and target behavior characterization. Proposals must detail mission specifications and technical performance measure for each additional mission proposed.

project provided for in the OT, as modified; and (2) the OT provides for the award of a follow-on production contract or OT to the participant, or a recognized successor in interest to the OT.

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

B. Fundamental Research

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

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

As of the date of publication of this BAA, the Government expects that program goals as described herein either cannot be met by proposers intending to perform fundamental research or the proposed research is anticipated to present a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense. Therefore, the Government anticipates restrictions on the resultant research that will require the awardee to seek DARPA permission before publishing any information or results relative to the program.

Proposers should indicate in their proposal whether they believe the scope of the research included in their proposal is fundamental or not. While proposers should clearly explain the intended results of their research, the Government shall have sole discretion to determine whether the proposed research shall be considered fundamental and to select the award instrument type. Appropriate language will be included in resultant awards for non-fundamental research to prescribe publication requirements and other restrictions, as appropriate. This language can be found at <http://www.darpa.mil/work-with-us/additional-baa>.

For certain research projects, it may be possible that although the research to be performed by a potential awardee is non-fundamental research, its proposed subawardee’s effort may be fundamental research. It is also possible that the research performed by a potential awardee is fundamental research while its proposed subawardee’s effort may be non-fundamental research. In all cases, it is the potential awardee’s responsibility to explain in its proposal which proposed efforts are fundamental research and why the proposed efforts should be considered fundamental research.

III. Eligibility Information

A. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA. United States Enterprises to Include:

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

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

a) FFRDCs

FFRDCs are subject to applicable direct competition limitations and cannot propose to this BAA 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.

b) Government Entities

Government Entities (e.g., Government/National laboratories, military educational institutions, etc.) are subject to applicable direct competition limitations. Government Entities must clearly demonstrate that the work is not otherwise available from the private sector and provide written documentation citing the specific statutory authority and contractual authority, if relevant, establishing their ability to propose to Government solicitations and compete with industry. This information is required for Government Entities proposing to be awardees or subawardees.

c) Authority and Eligibility

At the present time, DARPA does not consider 15 U.S.C. § 3710a to be sufficient legal authority to show eligibility. While 10 U.S.C. § 2539b 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.

(1) Non-U.S. organizations and/or individuals may participate to the extent that such participants comply with any necessary nondisclosure agreements, security regulations, export control laws, and other governing statutes applicable under the circumstances.

B. Organizational Conflicts of Interest

FAR 9.5 Requirements

In accordance with FAR 9.5, proposers are required to identify and disclose all facts relevant to potential OCIs involving the proposer's organization and *any* proposed team member (subawardee, consultant). Under this Section, the proposer is responsible for providing this disclosure with each proposal submitted to the BAA. 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 BAA evaluation criteria and funding availability.

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

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

C. Cost Sharing/Matching

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

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

IV. Application and Submission Information

A. 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 www.darpa.mil, contact the administrative contact listed herein.

B. Content and Form of Application Submission

All submissions must be written in English with type not smaller than 12-point font. Smaller font may be used for figures, tables, and charts. Copies of all documents submitted must be clearly labeled with the DARPA BAA number, proposer organization, and proposal title/proposal short title.

1. Proposals Format

All proposals must be unclassified and submitted in the format shown below. Classified submissions will be deemed non-conforming and will not be evaluated.

The typical proposal should express a consolidated effort in support of one or more related technical concepts or ideas. Disjointed efforts should not be included into a single proposal. Proposals shall consist of two volumes: 1) Volume I, Technical and Management Proposal (composed of three parts), and 2) Volume II, Cost Proposal. Bracketed numbers before each section denote recommended page limits. The total number of pages should not exceed 46.

NOTE: Non-conforming submissions that do not follow the instructions herein may be rejected without further review.

- a) Volume I, Technical and Management Proposal
 - (1) Section I: Administrative
 - (a) Cover Sheet to Include
 - (1) BAA number (HR001120S0042)
 - (2) Technical area;
 - (3) Lead Organization submitting proposal;
 - (4) Type of organization, selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”;

- (5) Proposer's reference number (if any);
- (6) Other team members (if applicable) and type of organization for each;
- (7) Proposal title;
- (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, electronic mail (if available);
- (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
- (10) Total funds requested from DARPA, and the amount of cost share (if any); AND
- (11) Date proposal was submitted.

(b) Official transmittal letter

(2) Section II: Summary of Proposal

- A. {3} Technical rationale, technical approach, and constructive plan for accomplishment of technical goals in support of innovative claims and deliverable creation. (In the full proposal, this section should be supplemented by a more detailed plan in Section III of the Technical and Management Proposal.)
- B. {2} Innovative claims for the proposed research. This section is the centerpiece of the proposal and should succinctly describe the uniqueness and benefits of the proposed approach relative to the current state-of-art alternate approaches.
- C. {1} Deliverables associated with the proposed research and the plans and capability to accomplish technology transition and commercialization. Include in this section all proprietary claims to the results, prototypes, intellectual property, or systems supporting and/or necessary for the use of the research, results, and/or prototype. If there are no proprietary claims, this should be stated. For forms to be completed regarding intellectual property, see Section IV.B.2.h of this BAA. There will be no page limit for the listed forms.
- D. {1} General discussion of other research in this area.
- E. {1} A clearly defined organization chart for the program team which includes, as applicable: (1) the programmatic relationship of team member; (2) the unique capabilities of team members; (3) the task of responsibilities of team members; (4) the teaming strategy among the team members; and (5) the key personnel along with the amount of effort to be expended by each person during each year.
- F. {3} A three-slide summary of the proposal in MS PowerPoint™ that quickly and succinctly indicates the concept overview, key innovations, expected impact, and other unique aspects of the proposal. The format for the summary slides is included as APPENDIX 1 to this BAA and does not count against the page limit.

(3) Section III: Detailed Proposal Information

- A. {4} Statement of Work (SOW) - Clearly define the technical tasks/subtasks to be performed, their durations, and dependencies among them. For each task/subtask, provide:
 - A general description of the objective (for each defined task/activity);
 - A detailed description of the approach to be taken to accomplish each defined task/activity;

- Identification of the primary organization responsible for task execution (prime, sub, team member, by name, etc.);
- The completion criteria for each task/activity - a product, event or milestone that defines its completion.
- Define all deliverables (reporting, data, reports, software, etc.) to be provided to the Government in support of the proposed research tasks/activities; and
- Clearly identify any tasks/subtasks (to be performed by either an awardee or subawardee) that will be accomplished on-campus at a university, if applicable.

Do not include any proprietary information in the SOW.

- B. {3} Description of the results, products, transferable technology, and expected technology transfer path to supplement information included in the summary of the proposal. This should also address mitigation of life cycle and sustainment risks associated with transitioning intellectual property for U.S. military applications, if applicable. See also Section IV.B.2.h of this BAA, “Intellectual Property.”
- C. {12} Detailed technical approach enhancing and completing the Summary of Proposal.
- D. {2} Comparison with other ongoing research indicating advantages and disadvantages of the proposed effort.
- E. {3} Discussion of proposer’s previous accomplishments and work in closely related research areas.
- F. {2} Description of Security Management architecture and/or approach for the proposed effort. Detail unique additional security requirements regarding OPSEC, program protection planning, test planning, transportation plans, work being performed at different classification levels, and/or utilizing test equipment not approved at appropriate classification level.
- G. {1} Description of the facilities that would be used for the proposed effort.
- H. {2} Detail support enhancing that of Summary of Proposal, including formal teaming agreements which are required to execute this program.
- I. {3} Provide description of milestone cost and accomplishments.
- J. {3} Cost schedules and measurable milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the proposed awardee and major subawardees, total cost, and any company cost share. **Note: Measurable milestones should capture key development points in tasks and should be clearly articulated and defined in time relative to start of effort.** These milestones should enable and support a decision for the next part of the effort. Additional interim non-critical management milestones are also highly encouraged at regular intervals. 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. Additionally, proposals should clearly explain the technical approach(es) that will be employed to meet or exceed each program metric and provide ample justification as to why the approach(es) is/are feasible. The milestones must not include proprietary information.

b) Volume II, Cost Proposal

All proposers, including FFRDCs, must submit the following:

- (1) Cover sheet to include:
 - (1) BAA number (DARPA-BAA- HR001120S0042);
 - (2) Technical area;
 - (3) Lead Organization submitting proposal;
 - (4) Type of organization selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”;
 - (5) Proposer’s reference number (if any);
 - (6) Other team members (if applicable) and type of organization for each;
 - (7) Proposal title;
 - (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
 - (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available);
 - (10) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract—no fee, cost sharing contract – no fee, or other type of procurement contract (specify) or Other Transaction;
 - (11) Place(s) and period(s) of performance;
 - (12) Total proposed cost separated by basic award and option(s) (if any);
 - (13) Name, address, and telephone number of the proposer’s cognizant Defense Contract Management Agency (DCMA) administration office (if known);
 - (14) Name, address, and telephone number of the proposer’s cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
 - (15) Date proposal was prepared;
 - (16) DUNS number;
 - (17) TIN number;
 - (18) CAGE Code;
 - (19) Subawardee Information; and
 - (20) Proposal validity period.

(2) Additional Cost Proposal Information

(a) Supporting Cost and Pricing Data

The proposer should include supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates and should include a description of the method used to estimate costs and supporting documentation.

(b) Cost Breakdown Information and Format

Detailed cost breakdown to include:

- Total program costs broken down by major cost items (direct labor, including labor categories; subcontracts; materials; other direct costs; overhead charges, etc.) and further broken down by task/subtask and phase.
- Major program tasks by fiscal year.
- An itemization of major subcontracts and equipment purchases.
- Documentation supporting the reasonableness of the proposed equipment costs (vendor quotes, past purchase orders/purchase history, detailed engineering estimates, etc.) shall be provided.
- An itemization of any information technology (IT) purchase, as defined by FAR 2.101 – Documentation supporting the reasonableness of the proposed equipment costs (vendor quotes, past purchase orders/purchase history, detailed engineering estimates, etc.) shall be provided, including a letter stating why the proposer cannot provide the requested resources from its own funding for prime and all sub-awardees.
- A summary of projected funding requirements by month.
- The source, nature, and amount of any industry cost sharing.
- Identification of pricing assumptions of which may require incorporation into the resulting award instrument (e.g., use of Government Furnished Property/Facilities/Information, access to Government Subject Matter experts, etc.).

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

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. Certified cost or pricing data are not required if the proposer proposes an award instrument other than a procurement contract (e.g., other transaction.)

(c) Subawardee Proposals

The awardee is responsible for compiling and providing all subawardee proposals for the Procuring Contracting Officer (PCO)/Agreement 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 reasonable 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 the prime, and which cannot be uploaded with the prime'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 awardee should

be submitted electronically using the DARPA BAA Tool and clearly labels the corresponding prime proposal number. See Section IV.B. of this BAA for proposal submission information.

(d) Other Transaction Requests

All proposers requesting an OT must include a detailed list of milestones. 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.

2. Additional Proposal Information

a) Proprietary Markings

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

b) Security Information

(1) Program Security Information

(a) Program Security

Proposers should include with their proposal any proposed solution(s) to program security requirements unique to this program. Common program security requirements include but are not limited to: operational security (OPSEC) contracting/sub-contracting plans; foreign participation or materials utilization plans; program protection plans (which may entail the following) manufacturing and integration plans; range utilization and support plans (air, sea, land, space, and cyber); data dissemination plans; asset transportation plans; classified test activity plans; disaster recovery plans; classified material / asset disposition plans and public affairs / communications plans.

(b) Unclassified Submissions

All submitted proposals must be unclassified. Classified submissions will be deemed non-conforming and will not be evaluated.

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

The following provisions and clause apply to all solicitations and contracts; however, the definition of “controlled technical information” clearly exempts work considered fundamental research and therefore, even though included in the contract, will not apply if the work is fundamental research.

DFARS 252.204-7000, “Disclosure of Information”

DFARS 252.204-7008, “Compliance with Safeguarding Covered Defense Information Controls”

DFARS 252.204-7012, “Safeguarding Covered Defense Information and Cyber Incident Reporting”

The full text of the above solicitation provision and contract clauses can be found at <http://www.darpa.mil/work-with-us/additional-baa#NPRPAC>.

Compliance with the above requirements includes the mandate for proposers to implement the security requirements specified by National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, “Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations” (see <https://doi.org/10.6028/NIST.SP.800-171r1>) that are in effect at the time the BAA is issued.

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

d) Human Subjects Research (HSR)/Animal Use

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

e) Approved Cost Accounting System Documentation

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

f) 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.

g) 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.

h) Intellectual Property

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

(1) For Procurement Contracts

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

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

(2) For All Non-Procurement Contracts

Proposers responding to this BAA requesting a Technology Investment 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 Paragraph (1) above. If no restrictions are intended then the proposer should state “NONE.”

i) 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 BAA. See <http://www.darpa.mil/work-with-us/additional-baa> for further information.

International entities can register in SAM by following the instructions in this link: <https://www.fsd.gov/fsd->

gov/answer.do?sysparm_kbid=dbf8053adb119344d71272131f961946&sysparm_search=KB0013221.

3. 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 HR001120S0042. **Submissions may not be submitted by fax or e-mail; any so sent will be disregarded.**

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 five (5) days after notification that a proposal was not selected.

Unclassified full proposals sent in response to this BAA should be submitted via DARPA's BAA Website (<https://baa.darpa.mil>). Note: If an account has already been created for the DARPA BAA Website, this account may be reused. 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 proposal. Proposers using the DARPA BAA Website may encounter heavy traffic on the submission deadline date; proposers should start this process as early as possible.

All unclassified concepts submitted electronically through DARPA's BAA Website **must be uploaded as one singular zip file** (.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, and submissions not uploaded as zip files will be rejected by DARPA.

After the proposal due date specified in this BAA has passed, proposals still may be submitted up to six months (180 days) from date of posting on beta.SAM.gov (formerly FedBizOpps). Proposals submitted after the due date specified in the BAA may be selected, but proposers are warned that the likelihood of available funding is greatly reduced for proposals submitted after the initial closing date deadline.

For proposal submission dates, see Part I., Overview Information.

Refer to Section VI.A.1. for how DARPA will notify proposers as to whether or not their proposal has been selected for potential award.

4. Funding Restrictions

Not Applicable.

5. Other Submission Requirements

Not Applicable.

DARPA will post a consolidated Frequently Asked Questions (FAQ) document. To access the posting go to: <http://www.darpa.mil/work-with-us/opportunities>. Under the HR001120S0042 summary will be a link to the FAQs. Submit your question/s by email to HR001120S0042@darpa.mil. Questions must be received by the Questions due date listed in Part I, Overview Information.

V. Application Review Information

A. Evaluation Criteria

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

1. Overall Scientific and Technical Merit

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

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 product that achieves the goal can be expected as a result of award. The proposal clearly identifies major technical risks and clearly defines feasible planned mitigation strategies and efforts to address those risks. The proposal clearly explains the technical approach(es) that will be employed to meet or exceed each program goal and system metric listed in Section I.B. and provides ample justification as to why the approach(es) is feasible. The Government will also consider the structure, clarity, and responsiveness to the statement of work; the quality of proposed deliverables; and the linkage of the statement of work, technical approach(es), risk mitigation plans, costs, and deliverables of the prime awardee and all subawardees through a logical, well structured, and traceable technical plan.

The proposer's prior experience in similar efforts must clearly demonstrate the ability to deliver analytic products in existing user interfaces that meet the proposed technical performance criteria. Similar efforts completed/ongoing by the proposer in this area are fully described including identification of other Government sponsors.

2. Potential Contribution and Relevance to the DARPA Mission

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

The proposer clearly demonstrates its capability to transition the technology to the research, industrial, and/or operational military communities in such a way as to enhance U.S. defense. In addition, the evaluation will take into consideration the extent to which the proposed intellectual

property (IP) rights structure will potentially impact the Government's ability to transition the technology.

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.

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

B. Review of Proposals

1. 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 BAA; proposals that fail to do so may be deemed non-conforming and may be removed from consideration. Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

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

2. Handling of Source Selection Information

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

3. Federal Awardee Performance and Integrity Information (FAPIIS)

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

VI. Award Administration Information

A. Selection Notices and Notifications

1. 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. These official notifications will be sent via email from the BAA inbox to the Technical POC and/or Administrative POC identified on the proposal coversheet.

B. Administrative and National Policy Requirements

1. Meeting and Travel Requirements

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

2. FAR and DFARS Clauses

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

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

Further information on Controlled Unclassified Information on Non-DoD Information Systems is incorporated herein can be found at <http://www.darpa.mil/work-with-us/additional-baa>.

4. Representations and Certifications

In accordance with FAR 4.1102 and 4.1201, proposers requesting a procurement contract must complete electronic annual representations and certifications at <https://www.sam.gov/>. In addition, resultant procurement contracts will require supplementary DARPA-specific representations and certifications. See <http://www.darpa.mil/work-with-us/additional-baa> for further information.

C. Reporting

The number and types of reports will be specified in the award document, but will include at a minimum monthly financial status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed on before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be continued under a follow-on vehicle.

D. Electronic Systems

1. Wide Area Work Flow (WAWF)

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

2. i-Edison

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

VII. Agency Contacts

Administrative, technical, or contractual questions should be sent via email to HR001120S0042@darpa.mil. All requests must include the name, email address, and phone number of a point of contact.

Points of Contact:

The BAA Coordinator for this effort may be reached at:

HR001120S0042@darpa.mil

DARPA/STO

ATTN: HR001120S0042

675 North Randolph Street
Arlington, VA 22203-2114

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

VIII. Other Information

A Proposers' Day for this effort will be held on April 7, 2020 via webinar. One on one meetings with the DARPA Ocean of Things Program Manager will also be available as part of the Proposers' Day. The Special Notice regarding this Proposers' Day can be found at https://beta.sam.gov/opp/6540c52aba7148fdad96b6a3c1d19744/view?keywords=DARPA-SN-20-45&sort=-relevance&index=&is_active=true&page=1.

Collaborative efforts/teaming are encouraged.

IX. APPENDIX 1: PROPOSAL SLIDE SUMMARY

Ocean of Things Summary Slide	
Proposal Title	Organization Name(s); Technical POC Name(s)
<p>Provide a visually compelling description that effectively and succinctly conveys the key innovations and unique aspects of the proposed approach</p> <p><i>This slide should stand alone in capturing the main objectives of your proposed approach:</i></p> <ul style="list-style-type: none"> • Include graphics and/or plots that highlight characteristics and performance of your approach • Include conceptual diagrams or process flows • Describe the advantage in terms of military utility (i.e. what DoD capability will be generated or enhanced) 	
<small>Source Selection Information – see FAR 2.101 & 3.104</small>	
1	

Ocean of Things Quad	
Proposal Title	Organization Name(s); Technical POC Name(s)
<p style="text-align: center;">CONCEPT</p> <p>What are you trying to do? Articulate your objectives using absolutely no jargon.</p> <p>Add graphic</p>	<p style="text-align: center;">APPROACH</p> <p>What's new in your approach and why do you think it will be successful?</p> <p>What are the risks and the payoffs? How will risk be measured?</p>
<p style="text-align: center;">IMPACT</p> <p>What is the problem? Why is it hard?</p> <p>Who cares? If you're successful, what difference will it make? What impact will success have?</p>	<p style="text-align: center;">CONTEXT</p> <p>How is it done today, and what are the limits of current practice?</p> <ul style="list-style-type: none"> • Existing approaches <p>How much will it cost? How long will it take?</p>
<small>Source Selection Information – see FAR 2.101 & 3.104</small>	
2	

Ocean of Things Key Personnel Table

Proposal Title

Organization Name(s); Technical POC Name(s)

Name	Brief Experience	Role	% by Phase
	<i>(ex: Degree, years of experience, relevance to Proposed Blackjack approach)</i>	<i>(ex: Principal Investigator, Program Manager, etc)</i>	<i>(ex: Phase 1: 10%; Phase 2: 50%; etc)</i>

Source Selection Information – see FAR 2.101 & 3.104

3

Organization Name Contract/Proposal Specifics

- Intellectual Property
- Data rights summary
- Deliverables

4

Organization Name Contract/Proposal Specifics

CLIN Description	Period of Performance	Total Proposed Amount
BASE	## Months	###M
PROGRAM TOTAL:	## Months	###M

- **Proposed Award Instrument** (FAR-based Procurement Contract or Other Transaction Agreement.)
- **Proposed Award Type** [i.e. Cost Plus Fixed Fee (CPFF), Cost Plus Award Fee (CPAF), Cost Plus Incentive Fee (CPIF), Firm Fixed Price (FFP), etc.]

X. APPENDIX 2: VOLUME 1 COVER SHEET TEMPLATE

Volume I, Technical and Management Proposal Cover Sheet

(1) BAA Number: HR001120S0042

(2) Technical Area: _____

(3) Lead Organization Submitting Proposal: _____

(4) Type of Organization, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", OR "OTHER NONPROFIT"

(5) Other team members (if applicable) and type of organization for each:

Company 1 (Other Small Business)

Company 2 (Large Business)

Company 3 (Large Business)

University (Other Educational)

(6) Proposer's reference number (if any): _____

(7) Proposal Title: _____

Proposal directed to the attention of (if applicable): _____

(8) Technical point of contact to include:

Salutation, last name first name

Street Address

Street Address 2

City, State, Zip Code

Telephone, Fax (if available)

Electronic mail (if available)

(9) Administrative point of contact to include:

Salutation, last name first name

Street Address

Street Address 2

City, State, Zip Code

Telephone, Fax (if available)

Electronic mail (if available)

(10) Date proposal submitted: _____

(11) Total funds requested from DARPA, and the amount of cost share (if any): _____

XI. APPENDIX 3: VOLUME 2 COVER SHEET, CHECKLIST AND SAMPLE TEMPLATES

**Volume II, Cost Proposal
Cover Sheet**

- (1) BAA Number: HR001120S0042
- (2) Technical Area: _____
- (3) Lead Organization Submitting Proposal: _____

- (4) Type of Organization, selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”

- (5) Other team members (if applicable) and type of organization for each:
Company 1 (Other Small Business)
Company 2 (Large Business)
Company 3 (Large Business)
University (Other Educational)

- (6) Proposer’s reference number (if any): _____

- (7) Proposal Title: _____
Proposal directed to the attention of (if applicable): _____

(8) Technical point of contact to include:	(9) Administrative point of contact to include:
Salutation, last name first name	Salutation, last name first name
Street Address	Street Address
Street Address 2	Street Address 2
City, State, Zip Code	City, State, Zip Code
Telephone, Fax (if available)	Telephone, Fax (if available)
Electronic mail (if available)	Electronic mail (if available)

- (10) Award Instrument Requested: cost-plus-fixed-fee (CPFF), cost-contract – no fee, cost sharing contract – no fee, or other type of procurement contract (specify), or other transaction

- (11) Place and period of performance: _____

- (12) Total proposed cost separated by basic award and option(s) (if any): _____

(13) Proposer’s Cognizant Defense Contract Management Agency (DCMA), Defense Contract Audit Agency (DCAA) Information:	
DCMA Administration Office (if known):	DCAA Audit Office (if known):
Salutation, last name first name	Salutation, last name first name
Street Address	Street Address
Street Address 2	Street Address 2

City, State, Zip Code
Telephone, Fax (if available)

City, State, Zip Code
Telephone, Fax (if available)

(14) Any Forward Pricing Rate Agreement, other such approved rate information, or such other documentation that may assist in expediting negotiations (if available).

(15) Date proposal submitted: _____

(16) DUNS number: _____

(17) TIN (Tax Information Number): _____

(18) CAGE Code: _____

(19) Subawardee Information: _____

(20) Proposal validity period: _____

**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 IV.B.1.b. beginning on Page 15 of HR001120S0042. This worksheet must be included with the coversheet of the Cost Proposal.

1. Are all items from Section IV.B.1.b. (Volume II, Cost Proposal) of HR001120S0042 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)

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

Indirect Costs/Rates (i.e., overhead charges, fringe benefits, G&A)

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

Materials and/or Equipment

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

Subcontracts/Consultants

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

Other Direct Costs

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

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 all 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 all 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 other team members? 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 team members 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 subawardee 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:

11. Does your cost proposal include copies of consultant agreements, if available?
 YES NO **Appears on Page(s)** [Type text]

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 subawardees) 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:

SAMPLE – SUMMARY PROPOSAL BUDGET

SAMPLE: COST ELEMENT SUMMARY

BASE			
COST ELEMENT	BASE	RATE	AMOUNT
DIRECT LABOR (List each direct labor category separately)	Hours	\$	\$
TOTAL DIRECT LABOR			\$
FRINGE BENEFITS	\$	%	\$
TOTAL LABOR OVERHEAD	\$	%	\$
SUBAWARDEE(S), CONSULTANT(S) (List Each Separately)			\$
MATERIALS & EQUIPMENT			\$
MATERIAL OVERHEAD	\$	%	\$
TRAVEL			\$
OTHER DIRECT COSTS (ODC)			\$
General and Administrative (G&A)	\$	%	\$
Independent Research and Development (IR&D)/Bid and Proposal (B&P)	\$	%	\$
SUBTOTAL COSTS			\$
COST OF MONEY (See DD Form 1861)			\$
TOTAL COST			\$
PROFIT/FEE	\$	%	\$
TOTAL PRICE/COST			\$
GOVERNMENT SHARE			\$
RECIPIENT SHARE (if applicable)			\$

SAMPLE: SUBAWARDEES & CONSULTANTS PRICE SUMMARY

A	B	C	D	E	F
Subawardee or Consultant Name	SOW Tasks to be performed*	Type of Award	Subawardee of Consultant Quoted Price	Cost Proposed by Prime for the Subawardee or Consultant	Difference (Column D - Column E) IF APPLICABLE
TOTALS					

* Identify Statement of Work, Milestone or Work Breakdown Structure paragraph or provide a narrative explanation as an addendum to this Table that describes the effort to be performed.