

# **Broad Agency Announcement**

Social Media in Strategic Communication (SMISC)

DARPA-BAA-11-64

July 14, 2011



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**Defense Advanced Research Projects Agency**

3701 North Fairfax Drive

Arlington, VA 22203-1714

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## Part I: Overview

- **Federal Agency Name:** Defense Advanced Research Projects Agency (DARPA), Information Innovation Office (I2O)
- **Funding Opportunity Title:** Social Media in Strategic Communication (SMISC)
- **Announcement Type:** Initial Announcement
- **Funding Opportunity Number:** DARPA-BAA-11-64
- **Catalog of Federal Domestic Assistance Numbers (CFDA):** 12.910 Research and Technology Development
- **Dates**
  - Posting Date: see announcement at [www.fbo.gov](http://www.fbo.gov)
  - Proposal Due Date
    - Initial Closing: August 30, 2011, 12:00 noon (ET)
    - Final Closing: October 11, 2011, 12:00 noon (ET)
  - Industry Day: Tuesday, August 2, 2011
- **Anticipated Individual Awards:** Multiple awards are anticipated in Technical Area 1 and single awards for Technical Areas 2 and 3.
- **Total Funding Available for Award:** The SMISC research effort under this solicitation is estimated at \$42M of 6.1 funding over a period of approximately three years.
- **Types of Instruments that May be Awarded:** Procurement contract, grant, cooperative agreement or other transaction.
- **Technical POC:** Dr. Rand Waltzman, Program Manager, DARPA/I2O
- **BAA EMail:** [DARPA-BAA-11-64@darpa.mil](mailto:DARPA-BAA-11-64@darpa.mil)
- **BAA Mailing Address:**
  - DARPA/I2O  
ATTN: DARPA-BAA-11-64  
3701 North Fairfax Drive  
Arlington, VA 22203-1714
- **I2O Solicitation Website:**  
[http://www.darpa.mil/Opportunities/Solicitations/I2O\\_Solicitations.aspx](http://www.darpa.mil/Opportunities/Solicitations/I2O_Solicitations.aspx)

## Part II: Full Text of Announcement

### I. FUNDING OPPORTUNITY DESCRIPTION

DARPA is soliciting innovative research proposals in the area of social media in strategic communication. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

This BAA is being issued, and any resultant selection will be made, using procedures under FAR Part 35.016 (DoDGARS Part 22 for Grants and Cooperative Agreements). Any negotiations and/or awards will use procedures under FAR 15.4, Contract Pricing, as specified in the BAA (including DoDGARS Part 22 for Grants and Cooperative Agreements). Proposals received as a result of this BAA shall be evaluated in accordance with evaluation criteria specified herein through a scientific review process. The BAA will appear first on the Federal Business Opportunities website, <http://www.fedbizopps.gov/>, and Grants.gov website at <http://www.grants.gov/>. The following information is for those wishing to respond to the BAA.

#### Introduction

The conditions under which our Armed Forces conduct operations are rapidly changing with the spread of blogs, social networking sites, and media-sharing technology (such as YouTube), and further accelerated by the proliferation of mobile technology. Changes to the nature of conflict resulting from the use of social media are likely to be as profound as those resulting from previous communications revolutions. The effective use of social media has the potential to help the Armed Forces better understand the environment in which it operates and to allow more agile use of information in support of operations.

The general goal of the Social Media in Strategic Communication (SMISC) program is to develop a new science of social networks built on an emerging technology base. In particular, SMISC will develop automated and semi-automated operator support tools and techniques for the systematic and methodical use of social media at data scale and in a timely fashion to accomplish four specific program goals:

1. Detect, classify, measure and track the (a) formation, development and spread of ideas and concepts (memes), and (b) purposeful or deceptive messaging and misinformation.
2. Recognize persuasion campaign structures and influence operations across social media sites and communities.
3. Identify participants and intent, and measure effects of persuasion campaigns.
4. Counter messaging of detected adversary influence operations.

#### Background

Events of strategic as well as tactical importance to our Armed Forces are increasingly taking place in social media space. We must, therefore, be aware of these events as they are

happening and be in a position to defend ourselves within that space against adverse outcomes. For example, in one case rumors about the location of a certain individual began to spread in social media space and calls for storming the rumored location reached a fever pitch. By chance, responsible authorities were monitoring the social media, detected the crisis building, sent out effective messaging to dispel the rumors and averted a physical attack on the rumored location. This was one of the first incidents where a crisis was (1) formed (2) observed and understood in a timely fashion and (3) diffused by timely action, entirely within the social media space.

Events in social media space involve many-to-many interactions among numbers of people at a compressed scale of time that is unprecedented. Entirely new phenomena are emerging that require thinking about social interactions in a new way. The tools that we have today for awareness and defense in the social media space are heavily dependent on chance. We must eliminate our current reliance on a combination of luck and unsophisticated manual methods by using systematic automated and semi-automated human operator support to detect, classify, measure, track and influence events in social media at data scale and in a timely fashion.

### **Program Scope**

The development of a new science of social networks and the solutions to the problems posed by SMISC will require the confluence of several technologies including, but not limited to, information theory, massive-scale graph analytics and natural language processing. While SMISC will not directly support natural language processing development efforts, it will certainly use the results of previous programs as well as contribute new challenges to further stimulate ongoing efforts.

Technology areas particularly relevant to SMISC are shown here grouped to correspond to the four basic goals of the program as described above:

1. Linguistic cues, patterns of information flow, topic trend analysis, narrative structure analysis, sentiment detection and opinion mining;
2. Meme tracking across communities, graph analytics/probabilistic reasoning, pattern detection, cultural narratives;
3. Inducing identities, modeling emergent communities, trust analytics, network dynamics modeling;
4. Automated content generation, bots in social media, crowd sourcing.

Recent research has shown that traditional approaches to understanding social media through static network connectivity models often produce misleading results. It is, therefore, necessary to take into account the *dynamics of behavior* and SMISC is interested in a *wide variety of techniques* for doing so.

### **Areas of Interest**

The SMISC program includes three technical areas. Proposals may be submitted individually to Technical Areas 1, 2 or 3 OR both Technical Areas 1 and 2 OR both areas 2 and 3. A single proposal may *not* be submitted that covers both areas 1 and 3. See Section III.D for further

information. Proposers are cautioned that the proposal page limits are the same regardless of the number of technical areas addressed, which may negatively impact the clarity and completeness of proposals covering multiple technical areas unless there are significant synergies in the proposed approach.

Performers in all three areas will be expected to work cooperatively with one another to develop, implement, test, and evaluate SMISC capabilities.

#### *Technical Area 1 (TA 1): Algorithm/Software Development*

TA1 performers will develop automated and semi-automated operator support tools and techniques for the systematic and methodical use of social media at data scale and in a timely fashion to:

1. detect, classify, measure and track the
  - formation, development and spread of ideas and concepts (memes) and,
  - purposeful or deceptive messaging and misinformation;
2. recognize persuasion campaign structures and influence operations across social media sites and communities;
3. identify participants and intent, and measure effects of persuasion campaigns; and
4. counter messaging of detected adversary influence operations.

TA 1 performers are required to define and validate appropriate performance metrics for algorithms and techniques developed. This will require TA 1 performers to also develop measures of the effectiveness of strategic communication and influence operations.

#### *Technical Area 2 (TA 2): Data Provision/Management*

The TA2 performer will create a closed and controlled environment where large amounts of data will be collected and experiments will be performed in support of the development and testing of TA 1 algorithms. One example of such an environment could be a closed social media network made up of two to five thousand people where participants have agreed to conduct a significant portion of their social media based activities within the network and agree to participate in the required data collection and experiments. Such a network might be formed within a single government, industrial or academic organization or across multiple such organizations. Another example of such an environment would be a massively multiplayer on-line role playing game where the use of social media is of central importance to game play and with tens of thousands of players that agree to participate in the required data collection and experiments.

The TA 2 performer will work closely with TA 1 and TA 3 performers to support the type of data collection, experimentation and evaluation required.

The type of data required for SMISC research potentially contains Personally Identifiable Information (PII). The TA 2 performer will be required to certify that no PII for U.S. persons was collected, stored or created in contravention to federal privacy laws, regulations and Department of Defense (DOD) policies. Proposers must address the collection and use of PII, if

any, in their technical proposal. PII will not be provided to SMISC from another Government agency or from an outside source.

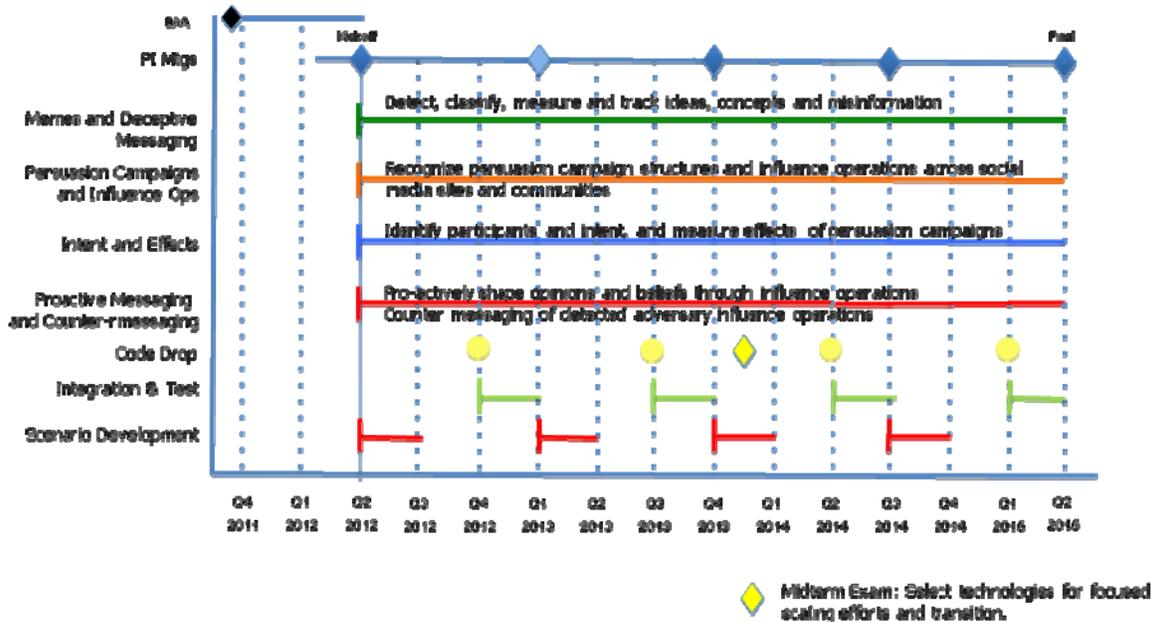
*Technical Area 3 (TA 3): Algorithm Integration, Test and Evaluation*

The TA 3 performer will work with TA 1 performers to develop appropriate performance metrics and develop, execute and evaluate the results of corresponding test and evaluation procedures. Test and evaluation procedures will include red team activity involving strategic communication and influence operations in the closed environment developed by the TA 2 performer.

**Schedule and Milestones**

The schedule listed herein contains notional estimates. Proposers should propose a detailed schedule that is consistent with the maturity of their approaches and the risk reduction required for their concepts. These schedules will be synchronized across performers, as required, and monitored/ revised as necessary throughout the SMISC program’s period of performance. A start date of December 15, 2011, should be assumed for budgeting purposes. Subject to the availability of funding, the program is intended to run approximately three years. During this period, there will be 4 evaluation milestones. At each milestone, algorithms developed will be tested and evaluated and progress will be measured against:

- customized metrics defined jointly by each TA 1 team in consultation with TA 3 and TA 2 performers based on the types of algorithms being developed by the team, and
- performance metrics on strategic communication activity inserted into live data sets by a TA 3 red team in the closed and controlled environment developed by the TA 2 performer.



## **Deliverables**

Performers shall be required to provide the following deliverables:

- Technical papers and reports.
- Slide Presentations. Annotated slide presentations shall be submitted within 1 month after the program kickoff meeting and after each annual review.
- Implementation Documentation. Documentation shall be provided within 1 month after each code drop documenting any algorithms, source code, hardware descriptions, language specifications, system diagrams, part numbers, and other data necessary to replicate and test the designs.
- Monthly Progress Reports. A monthly progress report describing progress made, resources expended, and any issues requiring the attention of the Government team shall be provided within 10 days after the end of each month.
- Final Report. The final report shall concisely summarize the effort conducted.
- Reporting as described in Section VI.C.

## II. AWARD INFORMATION

Multiple awards are anticipated for Technical Area 1 and single awards for Technical Areas 2 and 3. The level of funding for individual awards made under this BAA has not been predetermined and will depend on the quality of the proposals received and the availability of funds. Awards will be made to proposers whose proposals are determined to be the most advantageous and provide the best value to the Government, all factors considered, including the potential contributions of the proposed work, overall funding strategy, and availability of funding for the effort. See Section V.B. for further information.

Proposals selected for award negotiation may result in a procurement contract, grant, cooperative agreement, or other transaction depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors. In all cases, the contracting officer shall have sole discretion to select award instrument type and to negotiate all instrument provisions with selectees.

As of the date of publication of this BAA, DARPA expects that program goals for this BAA may be met by proposers intending to perform 'fundamental research,' i.e., basic or applied research performed on campus 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. Notwithstanding this statement of expectation, DARPA is not prohibited from considering and selecting research proposals that, while perhaps not qualifying as 'fundamental research' under the foregoing definition, still meet the BAA criteria for submissions. If proposals are selected for award that offer other than a fundamental research solution, then DARPA 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. See Section VI.B.5 for further information on fundamental, non-fundamental and restricted research.

The Government reserves the right to:

- Select for negotiation all, some, one, or none of the proposals received in response to this solicitation.
- Make awards without discussions with proposers.
- Conduct discussions if it is later determined to be necessary.
- Segregate portions of resulting awards into pre-priced options.
- Accept proposals in their entirety or to select only portions of proposals for award.
- Fund proposals in phases with options for continued work at the end of one or more

phases.

- Request additional documentation once the award instrument has been determined; such information may include but is not limited to representations and certifications.
- Remove proposers from award consideration should the parties fail to reach agreement on award terms within a reasonable time or the proposer fails to provide requested additional information in a timely manner.

### III. ELIGIBILITY

#### A. Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA.

**1. Historically Black Colleges and Universities, Small Businesses, Small Disadvantaged Businesses and Minority Institutions:** Historically black colleges and universities (HBCUs), small businesses, small disadvantaged businesses and minority institutions (MIs) are encouraged to submit proposals and team with others to submit proposals; however, no portion of this announcement will be set aside for these organizations due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

**2. Federally Funded Research and Development Centers (FFRDCs) and Government Entities:** Federally funded research and development centers (FFRDCs) and Government entities (e.g., Government/national laboratories and military educational institutions) are subject to applicable direct competition limitations and cannot propose to this BAA in any capacity unless the following conditions are met.

- FFRDCs must clearly demonstrate that the proposed work is not otherwise available from the private sector and must provide a letter on letterhead from their sponsoring organization citing the specific authority establishing eligibility to propose to Government solicitations and compete with industry and compliance with the associated FFRDC sponsor agreement and terms and conditions. This information is required for FFRDCs proposing as either prime contractors or subcontractors.
- Government entities must clearly demonstrate that the proposed work is not otherwise available from the private sector and provide written documentation citing the specific statutory authority (and contractual authority, if relevant) establishing the ability to propose to Government solicitations.

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 eligibility submissions on a case-by-case basis; however, the burden to prove eligibility for all team members rests solely with the proposer.

**3. Foreign Participation:** 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. Procurement Integrity and Organizational Conflicts of Interest**

Active Federal employees are prohibited from participating in particular matters involving conflicting financial, employment, and representational interests (18 USC 203, 205, and 208). Prior to the start of proposal evaluation, the Government will assess potential conflicts of interest and will promptly notify the proposer if any appear to exist. The Government assessment does not affect, offset, or mitigate the proposer's responsibility to give full notice and planned mitigation for all potential organizational conflicts, as discussed below.

Without the prior approval or a waiver from the DARPA Director, a contractor cannot simultaneously be a scientific, engineering, and technical assistance (SETA) contractor and a performer. (See Federal Acquisition Regulation (FAR) 9.503 at <https://www.acquisition.gov/FAR/>.) As part of the proposal submission, proposers, proposed subcontractors and consultants must affirm whether they (individuals and organizations) are providing SETA or similar support to any DARPA technical office(s) through an active contract or subcontract. Affirmations must state which office(s) the proposer and/or proposed subcontractor/consultant supports and must provide prime contract numbers. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the proposer has taken or proposes to take to avoid, neutralize, or mitigate such conflict. Proposals that fail to fully disclose potential conflicts of interest and/or do not have plans to mitigate this conflict may be rejected without technical evaluation and withdrawn from further consideration for award. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be effectively mitigated, a proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

If a prospective proposer believes a conflict of interest exists or may exist (whether organizational or otherwise) or has a question as to what constitutes a conflict, a summary of the potential conflict should be sent to DARPA-BAA-11-64@darpa.mil before preparing a proposal and mitigation plan.

## **C. Cost Sharing/Matching**

Cost sharing/matching is not required unless a statutory condition applies such as the conditions of 10 U.S.C. 2371 as they apply to Other Transactions (see section IV.B.2.e).

## **D. Other Eligibility Requirements**

- 1. Submission of Proposals to Multiple Technical Areas:** While proposers may submit proposals for all three technical areas, and all three proposals may be deemed selectable, proposers cannot be considered for award in both Technical Area 1 and Technical Area 3, whether as a prime, subcontractor or in any other capacity from an organizational to individual level. This is to avoid organizational conflict of interest situations between the technical areas and to ensure objective test and evaluation results. The decision as to which selectable proposal is considered for award is at the discretion of the Government.

## IV. APPLICATION

### A. Announcement

This announcement contains all information required to respond to this solicitation and constitutes the total BAA. No additional forms, kits, or other materials are needed. No request for proposal (RFP) or additional solicitation regarding this opportunity will be issued, nor is additional information available except as provided at the FedBizOpps website (<http://www.fbo.gov>) or referenced in this document.

### B. Proposals

Proposals consist of Volume 1: Technical and Management Proposal (including Appendix A) and Volume 2: Cost Proposal.

All pages shall be formatted for printing on 8-1/2 by 11-inch paper with a font size not smaller than 12 point. Font sizes of 8 or 10 point may be used for figures, tables, and charts.

Document files must be in Portable Document Format (.pdf, ISO 32000-1), OpenDocument (.odx, ISO/IEC 26300:2006), .doc, .docx, .xls, .or .xlsx formats.

Submissions must be written in English.

Proposals not meeting the format prescribed herein may not be reviewed.

#### 1. Volume 1: Technical and Management Proposal

The maximum count for Volume 1 is 40 pages, including all figures, tables and charts but not including the cover sheet, table of contents or appendices. A submission letter is optional and is not included in the page count. Appendix A does not count against the page limit and is mandatory.

Volume I must include the following components:

##### a. Cover Sheet:

- BAA number
- Technical area(s)
- Lead organization (prime contractor) name
- Type of business, selected from among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS,” “OTHER SMALL BUSINESS,” “HBCU,” “MI,” “OTHER EDUCATIONAL,” OR “OTHER NONPROFIT”
- Contractor’s reference number (if any)
- Other team members (if applicable) and type of business for each
- Proposal title
- Technical point of contact including name, mailing address, telephone, email, and fax
- Administrative point of contact including name, mailing address, telephone, email,

and fax

- Award instrument requested: cost-plus-fixed-fee (CPFF), cost-award—no fee, cost sharing contract – no fee, or other type of procurement contract (specify), grant, cooperative agreement or other transaction agreement. Information on award instruments can be found at [http://www.darpa.mil/Opportunities/Contract\\_Management/Contract\\_Management.aspx](http://www.darpa.mil/Opportunities/Contract_Management/Contract_Management.aspx).
- Place(s) and period(s) of performance
- Subcontractor information
- Proposal validity period (minimum 120 days)
- DUNS number ([http://www.dnb.com/US/duns\\_update](http://www.dnb.com/US/duns_update))
- Taxpayer identification number (<http://www.irs.gov/businesses/small/international/article/0,,id=96696,00.html>)
- CAGE code ([http://www.dlis.dla.mil/CAGESearch/cage\\_faq.asp](http://www.dlis.dla.mil/CAGESearch/cage_faq.asp))
- Label: “PROPOSAL: VOLUME 1”

## **b. Table of Contents**

**c. Executive Summary:** Provide a synopsis of the proposed project, including answers to the following questions:

- What are you trying to do?
- How is it done today and what are the limitations?
- Who will care and what will the impact be if you are successful?
- How much will it cost, and how long will it take?

The summary should include a description of the key technical challenges, a concise review of the technologies proposed to overcome these challenges and achieve the effort’s goal, and a clear statement of the novelty and uniqueness of the proposed idea.

**d. Goals and Impact:** Describe clearly 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. Discuss the mitigation of any issues related to sustainment of the technology over its entire lifecycle, assuming the technology transition plan is successful.

- e. Technical Plan:** Outline and address technical challenges inherent in the approach and possible solutions for overcoming potential problems. Provide appropriate measurable milestones (quantitative if possible) at intermediate stages of the effort to demonstrate progress, and a plan for achieving the milestones. Demonstrate a deep understanding of the technical challenges and present a credible (even if risky) plan to achieve the effort's goal. Discuss mitigation of technical risk.
- f. Management Plan:** Provide a summary of expertise of the team, including any subcontractors, and key personnel who will be doing the work. Resumes count against the proposal page count. Identify a principal investigator for the project. Provide a clear description of the team's organization including an organization chart that includes, as applicable, the relationship of team members; unique capabilities of team members; task responsibilities of team members; teaming strategy among the team members; and key personnel with the amount of effort to be expended by each person during each year. Include 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 effort.
- g. Capabilities:** Describe organizational experience in this area, existing intellectual property, specialized facilities, and any Government-furnished materials or data. Provide a discussion of any work in closely related research areas and previous accomplishments.
- h. Statement of Work (SOW):** The SOW should provide a detailed task breakdown, citing specific tasks and their connection to the interim milestones and effort metrics, as applicable. Each year of the effort should be separately defined.

For each defined task/subtask/activity, provide:

- General description of the objective.
- Detailed description of the approach to be taken to accomplish each defined task/subtask/activity.
- Identification of the primary organization responsible for task execution (prime contractor, subcontractor, team member, by name).
- Measurable milestone; i.e., a deliverable, demonstration, or other event that marks completion.
- Definition of all deliverables (e.g., reporting, data, reports, and software) to be provided to the Government in support of the proposed research tasks/subtasks/activities.
- Identify any tasks/subtasks/activities (by the prime or subcontractor) that will be accomplished on campus at a university.

The SOW must not include proprietary information.

**i. 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 effort.

**j. Cost Summary:** Provide the cost summary as described in Section IV.B.2.b.

**k. Appendix A:** This section is mandatory and must include all the following components.

- **Team Member Identification:** Provide a list of all team members (prime, subcontractors, consultants). Identify specifically whether any are a non-US organization or individual, FFRDC and/or Government entity as applicable.
- **Government or FFRDC Team Member:** Provide documentation (per Section III.A.2) citing the specific authority that establishes the applicable team member as eligible to propose to Government solicitations to include: 1) statutory authority; 2) contractual authority; 3) supporting regulatory guidance; and 4) evidence of agency approval for applicable team member participation. In addition, provide a statement that demonstrates the work being provided by the Government or Government-funded entity team member is not otherwise available from the private sector.

State “NONE” if none of the team member organizations (prime or subcontractor) belong to a Government entity or FFRDC.

- **Organizational Conflict of Interest Affirmations and Disclosure:** State “NONE” if neither the proposer nor any proposed subcontractor is currently providing SETA support as described in Section III.B.

Otherwise, provide the following information for the proposer and each proposed subcontractor, as applicable:

Prime Contract Number	DARPA Office supported	A description of the action the proposer has taken or proposes to take to avoid, neutralize, or mitigate the conflict

- **Intellectual Property:** Provide (per Section VI.B.2) a list of all technical data or computer software that will be furnished to the Government with other than unlimited rights. Include all proprietary claims to results, prototypes, deliverables or systems supporting and/or necessary for the use of the research, results, prototypes and/or deliverables. Provide documentation proving ownership or possession of appropriate licensing rights to all patented inventions (or inventions for which a

patent application has been filed) to be used for the proposed project. The Government will assume unlimited rights to all intellectual property not explicitly identified as restricted in the proposal.

State “NONE” if no restrictions are intended and patents are not applicable.

- **Human Use:** Provide evidence of or a plan for review by an institutional review board (IRB) for all proposed research that will involve human subjects in the first year of the project. For further information on this subject, see Section VI.B.3.

State “NONE” if human use is not a factor in a proposal.

- **Animal Use:** For submissions containing animal use, proposals must briefly describe plans for Institutional Animal Care and Use Committee (IACUC) review and approval. For further information on this subject, see Section VI.B.4.

State “NONE” If animal use is not a factor in a proposal.

- **Subcontractor Plan:** Prepare a subcontractor plan in accordance with FAR 19.702(a) (1) and (2). Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is Government policy to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to ensure that prime contractors and subcontractors carry out this policy. The plan format is outlined in FAR 19.704.

## 2. Volume 2: Cost Proposal

This section is mandatory and must include all the listed components. No page limit is specified for this volume.

- a. Cover Sheet:** Include the same information as the cover sheet for Volume I with the label “PROPOSAL: VOLUME 2.”
- b. Cost Summary:** Provide a single-page summary with cost totals for labor, materials, other direct charges (ODCs), indirect costs (overhead, fringe, general and administrative (G&A), and the proposed fee (if any) for the effort by year. Include costs for each task in each year of the effort by prime and major subcontractors, total cost and company cost share, if applicable. Include any requests for Government-furnished equipment or information with cost estimates (if applicable) and delivery dates.
- c. Detailed Cost Information:** Provide detailed cost information for direct labor (including labor categories), materials, and ODCs by month for each task of the project. Information provided for subcontractors must be at the same level of detail as that provided for prime contractors. Both labor rates and hours should be detailed.

A separate breakdown should be done for each proposed option.

Summarize task-level cost information to give total expenditures on labor, materials, indirect costs, and ODCs by month for prime and subcontractors. Identify cost sharing (if any). Itemize purchases of information technology (as defined in FAR 2.101). Provide totals for all cost categories.

The cost proposal should include a spreadsheet file (.xls, or equivalent format) that provides formula traceability among all components of the cost proposal. Costs must be traceable between prime and subcontractor as well as between the cost proposal and the statement of work. The spreadsheet file should be included as a separate component of the zipped submission package.

For information technology and equipment purchases that are equal to or greater than \$50,000 for a single item, a letter should be included justifying the purchase using resources other than from internal funding.

Supporting cost and pricing information shall include a description of the method used to estimate costs and supporting documentation. "Cost or pricing data" as defined in FAR Subpart 15.4 shall be required if the proposer is seeking a procurement contract award of \$700,000 or greater unless the proposer requests an exception from the requirement to submit this information. Cost or pricing data is not required if the proposer proposes an award instrument other than a procurement contract (e.g., a grant, cooperative agreement, or other transaction).

Pre-award costs are not reimbursable for awards under this BAA.

See Section III.C for information on cost sharing/matching.

See the cost proposal checklist provided in Section VIII.C for further information.

- d. Subcontractors:** The proposer is responsible for the compilation and submission of all subcontractor cost proposals. Proposal submissions will not be considered complete until the Government has received all subcontractor cost proposals.

Proprietary subcontractor cost proposals may be included as part of Volume II or submitted separately to [DARPA-BAA-11-64@darpa.mil](mailto:DARPA-BAA-11-64@darpa.mil) (not uploaded to the submission site). Email messages should include "Subcontractor Cost Proposal" in the subject line and identify the principal investigator and prime proposer organization in the message.

Subcontractor cost proposals should include interdivisional work transfer agreements or similar arrangements.

- e. Other Transactions:** If the proposer requests award of an 845 Other Transactions (OT) as a nontraditional defense contractor, as defined in the OSD guide "Other Transactions (OT) Guide For Prototype Projects" dated January 2001 (as amended)

(<http://www.acq.osd.mil/dpap/Docs/otguide.doc>), information must be included in the cost proposal to support the claim. If the proposer requests award of an 845 OT for Prototypes agreement without the required one-third cost share, information must be included in the cost proposal supporting the claim that there is at least one nontraditional Defense contractor participating to a significant extent in the proposed prototype project.

Proposers requesting an 845 OT for Prototypes agreement must include a detailed list of milestones including: milestone description, completion criteria, due date, and payment/funding schedule (to include, if cost share is proposed, contractor and Government share amounts). Milestones should relate directly to accomplishment of technical metrics as defined in the BAA and/or the proposal. Agreement type, fixed price or expenditure based, will be subject to negotiation with DARPA; however, the use of fixed price milestones with a payment/funding schedule is preferred. Proprietary information must not be included as part of the milestones.

For information on 845 OTs, refer to

[http://www.darpa.mil/Opportunities/Contract\\_Management/Other\\_Transactions\\_and\\_Technology\\_Investment\\_Agreements.aspx](http://www.darpa.mil/Opportunities/Contract_Management/Other_Transactions_and_Technology_Investment_Agreements.aspx)

### C. Proprietary and Classified Information

- 1. Proprietary Information:** DARPA policy is to treat all proposals as source selection information (see FAR 2.101 and 3.104) and to disclose the contents only for the purpose of evaluation.

Proposers are responsible for identifying proprietary information to DARPA. Proposals containing proprietary information must have the cover page and each page containing such information clearly marked. Proprietary information must not be included in the schedule, milestones, or SOW.

During the evaluation process, proposals may be handled by one or more 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.

- 2. Classified Information:** Proposers submitting classified proposals or requiring access to classified information during the lifecycle of the effort shall ensure all industrial, personnel, and information system processing security requirements (e.g., facility clearance (FCL), personnel security clearance (PCL), certification and accreditation (C&A)) are in place and at the appropriate level, and any foreign ownership control and influence (FOCI) issues are mitigated prior to submission or access. Proposers must have existing, approved capabilities (personnel and facilities) prior to award to perform research and development at the classification level proposed. Additional information on these subjects is at <http://www.dss.mil>.

If a proposal is submitted as “Classified National Security Information” as defined by Executive Order 13526 the information must be marked and protected as though classified at the appropriate classification level and submitted to DARPA for a final classification determination.

Classified submissions must indicate the classification level of not only the proposal materials, but also the anticipated classification level of the award document.

After an incoming proposal is reviewed and a determination has been made that the award instrument may result in access to classified information, a DD Form 254, “DoD Contract Security Classification Specification,” will be issued and attached as part of the award. A DD Form 254 will not be provided at the time of submission. The DD Form 254 template is available at <http://www.dtic.mil/dtic/pdf/formsNguides/dd0254.pdf>.

Proposers choosing to submit a classified proposal from other classified sources must first receive permission from the respective original classification authority (OCA) to use this information in replying to this BAA. Applicable classification guide(s) must be submitted to ensure the proposal is protected at the appropriate classification level.

Classified submissions shall be appropriately and conspicuously marked with the proposed classification level and declassification date. Submissions requiring DARPA to make a final classification determination shall be marked as follows:

CLASSIFICATION DETERMINATION PENDING. Protect as though classified (insert the recommended classification level: Confidential, Secret, or Top Secret)

Classified proposals will not be returned. The original of each classified proposal received will be retained at DARPA, and all other copies destroyed. A destruction certificate will be provided if a formal request is received by DARPA within 5 days of notification of non-selection.

#### **D. Submission Instructions**

- 1. Due Dates:** The proposal package--full proposal [Volume 1 (including Appendix A) and Volume 2] and, as applicable, the encryption password, proprietary subcontractor cost proposals, classified appendices to unclassified proposals--must be submitted per the instructions outlined in this document and received by DARPA by the initial closing in order to be considered during the initial evaluation phase. Proposers are warned that submission deadlines as outlined herein are strictly enforced. While this solicitation will remain open until the final closing date/BAA expiration, proposers are warned that the likelihood of funding is greatly reduced for proposals submitted after the initial closing date.

DARPA will acknowledge receipt of complete submissions via email and assign control numbers that should be used in all further correspondence regarding proposals. Note:

These acknowledgements will not be sent until after the proposal due date.

Failure to comply with the submission procedures may result in the submission not being evaluated.

- 2. Unclassified Submission:** Proposers must submit their entire proposal via the same method; applications cannot be submitted in part via one method and in part via another method nor should duplicate submissions be sent via multiple methods. Email submissions will not be accepted.

- a. Procurement Contract or Other Transaction Agreement Proposers:** Unclassified proposals sent in response to DARPA-BAA-11-64 should be submitted electronically through the DARPA BAA Submission System (<https://www.tfims.darpa.mil/baa/>).

Because the DARPA BAA Submission System requires registration and certificate installation, adequate time before deadlines should be allowed to complete this process. Information regarding account request, proposal upload, and other functions is available at <https://www.tfims.darpa.mil/baa/>. If a proposer intends to submit more than one proposal, a separate account must be created for each submission. Otherwise, subsequent uploads will overwrite previous ones.

Proposals submitted through the DARPA BAA submission system must be compressed and submitted as a single zip file ([http://en.wikipedia.org/wiki/ZIP\\_\(file\\_format\)](http://en.wikipedia.org/wiki/ZIP_(file_format))). Only one file will be accepted per submission, and submissions not zipped will be rejected. All proposals submitted through the DARPA BAA Submission System (not including Grants.gov) must be encrypted using Winzip or PKZip with 256-bit AES encryption. Passwords should be emailed to [DARPA-BAA-11-64@darpa.mil](mailto:DARPA-BAA-11-64@darpa.mil) at the time of proposal submission.

- b. Grant or Cooperative Agreement Proposers:** Proposers applying for grants or cooperative agreements may submit through one of the following methods: 1) electronic upload per the instructions at [http://www.grants.gov/applicants/apply\\_for\\_grants.jsp](http://www.grants.gov/applicants/apply_for_grants.jsp) or 2) mailed directly to DARPA.

Technical support for Grants.gov submissions may be reached at 1-800-518-4726 and [support@grants.gov](mailto:support@grants.gov).

- 3. Classified Submission:** DARPA anticipates that submissions under this BAA will be unclassified; however, classified submissions will be accepted. Classified proposals must be appropriately marked and must not be submitted electronically by any means, including the electronic upload system or Grants.gov, as described above.

Classified materials must be submitted in accordance with the following guidelines:

- *Confidential and Secret Collateral Information*: Use classification and marking guidance provided by previously issued security classification guides, DoD 5200.1-R “Information Security Regulation” and DoD 5220.22-M “National Industrial Security Program Operating Manual,” when marking and transmitting information previously classified by another OCA. All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. Classified information at the Confidential or Secret level may be submitted via one of the following methods:
  - Hand carried by an appropriately cleared and authorized courier to DARPA. Prior to traveling, the courier shall contact the DARPA Classified Document Registry (CDR) at 703-526-4052 to coordinate arrival and delivery
  - Mailed via appropriate U.S. Postal Service methods (e.g., Registered Mail or Express Mail). All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee.

The inner envelope shall be addressed to:

Defense Advanced Research Projects Agency  
ATTN: I2O  
Reference: DARPA-BAA-11-64  
3701 North Fairfax Drive  
Arlington, VA 22203-1714

The outer envelope shall be sealed without identification as to the classification of its contents and addressed to:

Defense Advanced Research Projects Agency  
Security & Intelligence Directorate, Attn: CDR  
3701 North Fairfax Drive  
Arlington, VA 22203-1714

- *Top Secret Information*: Top Secret information must be hand carried by an appropriately cleared and authorized courier to DARPA. Prior to traveling, the courier must contact DARPA CDR at 703-526-4052 for instructions.
- *Special Access Program (SAP) Information*: SAP information must be transmitted via approved methods. Prior to submission, the courier must contact DARPA SAPCO at 703-526-4052 for instructions.
- *Sensitive Compartmented Information (SCI)*: SCI must be transmitted via approved methods. Prior to submission, contact DARPA CDR at 703-526-4052 for instructions.

**E. Intergovernmental Review**

Not applicable.

**F. Funding Restrictions**

Not applicable.

## V. EVALUATION

### A. Evaluation Criteria

Evaluation of proposals will be accomplished through a scientific/technical review of each proposal using the following criteria listed in descending order of importance: (a) Overall Scientific and Technical Merit; (b) Potential Contribution and Relevance to the DARPA Mission; and (c) Cost Realism.

- *Overall Scientific and Technical Merit:* The proposed technical approach is feasible, achievable, complete and supported by a proposed technical team that has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements are complete and in a logical sequence, with all proposed deliverables clearly defined such that a viable attempt to achieve effort goals is likely as a result of award. The proposal identifies major technical risks, and mitigation efforts are clearly well-defined and feasible.
- *Potential Contribution and Relevance to the DARPA Mission:* The potential contributions of the proposed effort with relevance to the national technology base will be evaluated. Specifically, DARPA's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security by sponsoring revolutionary, high-payoff research that bridges the gap between fundamental discoveries and their application. In addition, the evaluation will take into consideration the extent to which the proposed intellectual property (IP) rights will potentially impact the Government's ability to transition the technology.
- *Cost Realism:* The objective of this criterion is to establish that the proposed costs are realistic for the technical and management approach offered and to determine the proposer's practical understanding of the effort. The proposal will be reviewed to determine if the costs proposed are based on realistic assumptions, reflect a sufficient understanding of the technical goals and objectives of the BAA, and are consistent with the proposer's technical approach (to include the proposed SOW). At a minimum, this review will include, at the prime and subcontract level, the type and number of labor hours proposed per task, the types and quantity of materials, equipment and fabrication costs, travel and other various elements proposed. For efforts with a likelihood of commercial application, appropriate direct cost sharing may be a positive factor in the evaluation. The evaluation criterion recognizes that undue emphasis on cost may motivate proposers to offer low-risk ideas with minimum uncertainty and to staff the effort with junior personnel to be in a more competitive posture. Cost strategies such as these are discouraged.

### B. Review and Selection Process

DARPA policy is to ensure impartial, equitable, comprehensive proposal evaluations and to select sources whose offers meet the DARPA technical, policy, and programmatic goals. In order to provide the desired evaluation, qualified Government personnel will conduct reviews

and (if necessary) convene panels of experts in the appropriate areas. 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 appropriate nondisclosure requirements.

The review process identifies proposals that meet the established criteria and are, therefore, selectable for funding awards by the Government. Selections under this BAA will be made to proposers on the basis of the evaluation criteria listed in Section V.A. Proposals that are determined to be selectable will not necessarily receive awards due in part to fund availability. Selections may be made at any time during the period of solicitation.

Proposals are evaluated individually, not rated competitively against other proposals because they are not submitted in accordance with a common work statement. For purposes of evaluation, a proposal is defined to be the document and supporting materials as described in Section IV.

Failure to comply with the submission procedures may result in the submission not being evaluated. No proposals, classified or unclassified, will be returned. After proposals have been evaluated and selections made, the original of each proposal will be retained at DARPA. Hard copies will be destroyed.

## VI. AWARD ADMINISTRATION

### A. Selection Notices

After proposal evaluation is complete, proposers will be notified whether their proposals are selectable as determined by the review process. The Government may initiate contract negotiations if the proposal has been selected for immediate funding. Notification will be sent by email to the technical and administrative POCs identified on the proposal coversheet.

### B. Administrative and National Policy Requirements

- 1. Meeting and Travel Requirements:** Two principal investigator (PI) meetings will be held each year at roughly six-month intervals, with the first PI meeting occurring at program initiation. These meetings will focus on open technical interchange and the definition of architectures and interfaces, as appropriate, that will facilitate technology demonstrations and integration. Difficulties encountered and possible solutions will also be discussed. Participants are expected to maintain active collaboration with other members of the program community where relevant and should expect to be involved in frequent working group meetings by either travel or teleconferencing. DARPA and other Government personnel will be actively involved in these meetings. The goals of the PI meetings will be to: (a) review and discuss plans and options for technology demonstrations and prototypes; (b) review and discuss results from experiments; (c) review and share innovations/accomplishments of each team; (d) demonstrate prototypes; and (e) plan for the next six month period.

The locations for PI meetings and other events will be specified by the Government. Assume that PI meetings will be held alternately at east and west coast locations. In addition to site visits, regular teleconference meetings are encouraged to enhance communications with the Government team. Should important issues arise between program reviews, the Government team will be available to support informal interim technical interchange meetings.

- 2. Intellectual Property:** It is desired that all noncommercial software (including source code), software documentation, hardware designs and documentation, and technical data generated under the program be provided as a deliverable to the Government, with a minimum of Government Purpose Rights. Therefore, to the greatest extent feasible, proposers should not include background proprietary software and technical data as the basis of their proposed approach. If proposers desire to use proprietary software or technical data or both as the basis of their proposed approach, in whole or in part, they should: 1) clearly identify such software/data and its proposed particular use(s); 2) explain how the Government will be able to reach its program goals (including transition) within the proprietary model offered; and 3) provide possible nonproprietary alternatives in any area that might present transition difficulties or increased risk or cost to the Government under the proposed proprietary solution.

Proposers expecting to use, but not to deliver, commercial open source tools or other materials in implementing their approach may be required to indemnify the Government against legal liability arising from such use.

All references to "Unlimited Rights" or "Government Purpose Rights" are intended to refer to the definitions of those terms as set forth in the Defense Federal Acquisition Regulation Supplement (DFARS) Part 227.

**a. Procurement Contracts**

- **Noncommercial Items (Technical Data and Computer Software):** Proposers responding to this BAA requesting a procurement contract shall identify all noncommercial technical data and computer software that it plans to generate, develop, and/or deliver under any proposed award instrument in which the Government will acquire less than unlimited rights and to assert specific restrictions on those deliverables. Proposers shall follow the format under DFARS 252.227-7017 for this stated purpose (information on DFARS is at <http://farsite.hill.af.mil/vfdfara.htm>).

The following format may be used for this list:

NONCOMMERCIAL				
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)

In the event proposers do not submit the list, the Government will claim unlimited rights to all noncommercial technical data and computer software generated, developed, and/or delivered under any award instrument, unless it is substantiated that development of the noncommercial technical data and computer software occurred with mixed funding. If mixed funding is anticipated in the development of noncommercial technical data and computer software generated, developed, and/or delivered under any award instrument, proposers should identify the data and software in question as subject to Government purpose rights (GPR). In accordance with DFARS 252.227-7013, "Rights in Technical Data - Noncommercial Items," and DFARS 252.227-7014, "Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation," the Government will automatically assume that any such GPR restriction is limited to a period of 5 years in accordance with the applicable DFARS clauses, at which time the Government will acquire unlimited rights unless the parties agree otherwise. The Government will use the list during the evaluation process to evaluate the impact of any identified restrictions and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions.

If no restrictions are intended, the proposer should state "NONE."

- **Commercial Items (Technical Data and Computer Software):** Proposers responding to this BAA requesting a procurement contract to be issued under the FAR/DFARS shall identify all commercial technical data and commercial computer software that may be included in any noncommercial deliverables contemplated under the research effort, with any applicable restrictions on the Government’s use of such commercial technical data and/or computer software. In the event proposers do not submit the list, the Government will assume there are no restrictions on the Government’s use of such commercial items. The Government may use the list during the evaluation process to evaluate the impact of any identified restrictions and may request additional information from the proposer to evaluate the proposer’s assertions.

If no restrictions are intended, the proposer should state “NONE.”

The following format may be used for this list:

COMMERCIAL				
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)

**b. Other Types of Awards**

Proposers responding to this BAA requesting a grant, cooperative agreement, technology investment agreement, or other transactions 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 those award instruments in question. This includes both noncommercial Items and commercial Items. Proposals may use a format similar to that described above. The Government may use the list as part of the evaluation process to assess the impact of any identified restrictions, and may request additional information from the proposer, to evaluate the proposer’s assertions.

If no restrictions are intended, the proposer should state “NONE.”

**c. Patents**

Proposers must include documentation proving ownership or possession of appropriate licensing rights to all patented inventions to be used for the proposed project. This includes inventions for which a patent application has been filed, may include proprietary information and is not yet publicly available. Documentation must include: the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and summary of the patent title, with either: a representation of invention ownership, or proof of possession of appropriate licensing

rights in the invention (i.e., an agreement from the owner of the patent granting license to the proposer).

#### **d. Intellectual Property Representations**

Proposers should provide a good faith representation of either ownership or possession of appropriate licensing rights to all other intellectual property to be used for the proposed project. Proposers shall provide a short summary for each item asserted with less than unlimited rights that describes the nature of the restriction and the intended use of the intellectual property in the conduct of the proposed research.

- 3. Human Use:** All research involving human subjects, to include use of human biological specimens and human data, selected for funding must comply with Federal regulations for human subject protection. Further, research involving human subjects that is conducted or supported by the DoD must comply with 32 CFR 219, “Protection of Human Subjects” [http://www.access.gpo.gov/nara/cfr/waisidx\\_07/32cfr219\\_07.html](http://www.access.gpo.gov/nara/cfr/waisidx_07/32cfr219_07.html), and DoD Directive 3216.02, “Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research” (<http://www.dtic.mil/whs/directives/corres/pdf/321602p.pdf>).

Institutions awarded funding for research involving human subjects must provide documentation of a current Assurance of Compliance with Federal regulations for human subject protection, for example a Department of Health and Human Services, Office of Human Research Protection Federal Wide Assurance (<http://www.hhs.gov/ohrp>). All institutions engaged in human subject research, to include subcontractors, must have a valid assurance. In addition, personnel involved in human subjects research must document the completion of appropriate training for the protection of human subjects.

For all research that will involve human subjects in the first year of the project, the institution must submit evidence of a plan for review by an institutional review board (IRB) as part of the proposal. The IRB conducting the review must be the IRB identified on the institution’s Assurance of Compliance. The protocol, separate from the proposal, must include a detailed description of the research plan, study population, risks and benefits of study participation, recruitment and consent process, data collection, and data analysis. The designated IRB should be consulted for guidance on writing the protocol. The informed consent document must comply with Federal regulations (32 CFR 219.116). A valid Assurance of Compliance and evidence of appropriate training by all investigators should all accompany the protocol for review by the IRB.

In addition to a local IRB approval, a headquarters-level human subjects regulatory review and approval is required for all research conducted or supported by DoD. The Army, Navy, or Air Force office responsible for managing the award can provide guidance and information about their component’s headquarters-level review process. Confirmation of a current Assurance of Compliance and appropriate human subjects protection training is required before headquarters-level approval can be issued.

The time required to complete the IRB review/approval process will vary depending on

the complexity of the research and/or the level of risk to study participants; ample time should be allotted to complete the approval process. The IRB approval process can last between 1 to 3 months, followed by a DoD review that could last 3 to 6 months. No DoD/DARPA funding may be used toward human subjects research until all approvals are granted.

**4. Animal Use:** Award recipients performing research, experimentation, or testing involving the use of animals shall comply with the rules on animal acquisition, transport, care, handling, and use in:

- 9 CFR parts 1-4, Department of Agriculture rules that implement the Laboratory Animal Welfare Act of 1966, as amended, (7 U.S.C. 2131-2159);
- Guidelines described in National Institutes of Health Publication No. 86-23, "Guide for the Care and Use of Laboratory Animals"; and
- DoD Directive 3216.01, "Use of Laboratory Animals in DoD Program."

For projects anticipating animal use, proposals should briefly describe plans for Institutional Animal Care and Use Committee (IACUC) review and approval. Animal studies in the program will be expected to comply with the "Public Health Service Policy on Humane Care and Use of Laboratory Animals" at <http://grants.nih.gov/grants/olaw/olaw.htm>.

All award recipients must receive approval by a DoD-certified veterinarian, in addition to IACUC approval. No animal studies may be conducted using DoD/DARPA funding until the U.S. Army Medical Research and Materiel Command Animal Care and Use Review Office (ACURO) or other appropriate DoD veterinary office(s) grant approval. As a part of this secondary review process, the recipient will be required to complete and submit an ACURO Animal Use Appendix ([https://mrmc.amedd.army.mil/index.cfm?pageid=Research\\_Protections.acuroAnimalAppendix](https://mrmc.amedd.army.mil/index.cfm?pageid=Research_Protections.acuroAnimalAppendix)).

**5. Publication Approval:** It is DoD policy that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. Contracted fundamental research:

"... includes [research performed under] grants and contracts that are (a) funded by budget category 6.1 (Basic Research), whether performed by universities or industry or (b) funded by budget category 6.2 (Applied Research) and performed on-campus at a university. The research shall not be considered fundamental in those rare and exceptional circumstances where the applied research effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or

grant.”

Such research is referred to by DARPA as “Restricted Research.”

Pursuant to DoD policy, research performed under grants, cooperative agreements and contracts that are (a) funded by budget category 6.2 (Applied Research) and not performed on-campus at a university or (b) funded by budget category 6.3 (Advanced Research) does not meet the definition of fundamental research. Publication restrictions will be placed on all such research.

Research to be performed as a result of this BAA is expected to be Fundamental. DARPA does not anticipate applying publication restrictions of any kind.

Proposers are advised that, if grants or cooperative agreements are proposed as the award instrument, DARPA may determine that 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 and may elect to use other award instruments. Any award resulting from such a determination will include a requirement for DARPA permission before publishing any information or results on the effort and will be considered restricted research.

For certain projects, even if the effort being performed by the prime contractor is restricted research, a subcontractor may be performing contracted fundamental research. In these cases, it is the prime contractor’s responsibility to explain in the proposal why the subcontractor’s effort will be contracted fundamental research.

The following statements or similar provisions will be incorporated into any resultant restricted research or non-fundamental research procurement contract or other transaction:

There shall be no dissemination or publication, except within and between the contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval of the DARPA Public Release Center (PRC). All technical reports will be given proper review by appropriate authority to determine which distribution statement is to be applied prior to the initial distribution of these reports by the contractor. With regard to subcontractor proposals for contracted fundamental research, papers resulting from unclassified contracted fundamental research are exempt from prepublication controls and this review requirement, pursuant to DoD Instruction 5230.27 “Presentation of DoD-Related Scientific and Technical Papers at Meetings”.

When submitting material for written approval for open publication, the contractor/awardee must submit a request for public release to the DARPA PRC and include the following information: 1) Document Information: title, author, short plain-language description of technology discussed in the material (approximately 30

words), number of pages (or minutes of video) and document type (briefing, report, abstract, article, or paper); 2) Event Information: type (conference, principle investigator meeting, article or paper), date, and desired date for DARPA's approval; 3) DARPA Sponsor: DARPA program manager, DARPA office, and contract number; and 4) Contractor/Awardee's information: POC name, email and telephone. Four weeks should be allowed for processing; due dates under 4 weeks may require justification. Unusual electronic file formats may require additional processing time. Requests can be sent either via email to [prc@darpa.mil](mailto:prc@darpa.mil) or mail to 3701 North Fairfax Drive, Arlington VA 22203-1714, 571-218-4235.

More information regarding DARPA's public release process may be found at [http://www.darpa.mil/NewsEvents/Public\\_Release\\_Center/Public\\_Release\\_Center.aspx](http://www.darpa.mil/NewsEvents/Public_Release_Center/Public_Release_Center.aspx).

- 6. Export Control:** Per DFARS 204.7304, all procurement contracts and other transactions, as deemed appropriate, resultant from this solicitation will include the DFARS Export Control clause (252.204-7008).
- 7. Electronic and Information Technology:** All electronic and information technology acquired through this solicitation must satisfy the accessibility requirements of Section 508 of the Rehabilitation Act (29 U.S.C. 794d) and FAR Subpart 39.2. Each project team involving the creation or inclusion of electronic and information technology must ensure that Federal employees with disabilities will have access to and use of information that is comparable to the access and use by Federal employees who are not individuals with disabilities, and members of the public with disabilities seeking information or services from DARPA will have access to and use of information and data that is comparable to the access and use of information and data by members of the public who are not individuals with disabilities.
- 8. Employment Eligibility Verification:** Per FAR 22.1802, recipients of FAR-based procurement contracts must enroll as Federal contractors in E-verify (<http://www.uscis.gov/portal/site/uscis>) and use the system to verify employment eligibility of all employees assigned to the award. All resultant contracts from this solicitation will include a clause from FAR 52.222-54, "Employment Eligibility Verification." This clause will not be included in grants, cooperative agreements, or other transactions.
- 9. Reporting Executive Compensation and First-Tier Subcontract Awards:** Per FAR 4.1403, FAR-based procurement contracts of \$25,000 or more will include a clause from FAR 52.204-10, "Reporting Executive Compensation and First-Tier Subcontract Awards." A similar award term will be used in grants, cooperative agreements, and other transactions. This clause is not required in classified contracts.
- 10. Updates of Information Regarding Responsibility Matters:** FAR clause 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matters, will be included in all

contracts valued at \$500,000 where the contractor has current active Federal contracts and grants with total value greater than \$10,000,000.

### C. Reporting

The number and types of technical and financial reports required under the contracted effort will be specified in the award document, and will include, as a minimum, monthly financial status reports and a yearly status summary. The reports shall be prepared and submitted in accordance with the procedures contained in the award document. A final report that summarizes the project and tasks will be required at the conclusion of the performance period for the award.

### D. Electronic Systems

- 1. Central Contractor Registration (CCR) and Universal Identifier Requirements:** Unless the proposer is exempt from this requirement, as per FAR 4.1102 or 2 CFR 25.110, as applicable, all proposers must be registered in the Central Contractor Registration (CCR) and have a valid Data Universal Numbering System (DUNS) number. Information on CCR registration is available at <http://www.ccr.gov>. All proposers must provide the DUNS number in each proposal they submit.

Proposers requesting an assistance instrument (e.g., Grants, Cooperative Agreements) must be registered in CCR prior to submitting a proposal. DARPA cannot make an assistance award to an proposer until the proposer has provided a valid DUNS number and has maintained an active CCR registration with current information. All other proposers must be registered prior to award. All proposers must maintain an active CCR registration with current information at all times during which they have an active Federal award.

- 2. Representations and Certifications:** In accordance with FAR 4.1201, prospective proposers shall complete electronic annual representations and certifications. Information may be found at [http://www.darpa.mil/Opportunities/Contract\\_Management/Representations\\_and\\_Certifications.aspx](http://www.darpa.mil/Opportunities/Contract_Management/Representations_and_Certifications.aspx).
- 3. Wide Area Work Flow (WAWF):** Performers are required to submit invoices for payment directly at <https://wawf.eb.mil/#>. WAWF registration is required prior to any award under this BAA.
- 4. i-Edison:** The award document for each proposal selected for funding will contain a requirement for patent reports and notifications to be submitted electronically through the i-Edison Federal patent reporting system at (<http://s-edison.info.nih.gov/iEdison>).

## VII. AGENCY CONTACTS

DARPA will use email for all technical and administrative correspondence regarding this BAA.

- Technical POC: Dr. Rand Waltzman, Program Manager, DARPA I2O
- Email: [DARPA-BAA-11-64@darpa.mil](mailto:DARPA-BAA-11-64@darpa.mil)
- Mailing address:
  - DARPA I2O
  - ATTN: DARPA-BAA-11-64  
3701 North Fairfax Drive  
Arlington, VA 22203-1714
- Website: [http://www.darpa.mil/Opportunities/Solicitations/I2O\\_Solicitations.aspx](http://www.darpa.mil/Opportunities/Solicitations/I2O_Solicitations.aspx)

## VIII. OTHER INFORMATION

### A. Frequently Asked Questions (FAQs)

Administrative, technical, and contractual questions should be sent via email to [DARPA-BAA-11-64@darpa.mil](mailto:DARPA-BAA-11-64@darpa.mil). All requests must include the name, email address, and the phone number of a point of contact.

DARPA will attempt to answer questions in a timely manner; however, questions submitted within 7 days of initial closing may not be answered. If applicable, DARPA will post FAQs to [http://www.darpa.mil/Opportunities/Solicitations/I2O\\_Solicitations.aspx](http://www.darpa.mil/Opportunities/Solicitations/I2O_Solicitations.aspx).

### B. Industry Day

The Industry Day will be August 2, 2011 in Arlington, VA. Please register at <http://www.caci-conferences.com/Default.aspx/smisc201108> by July 29, 2011.

Non-U.S. citizens are required to submit a DARPA Form 60 "Foreign National Visit Request" to DARPA no later than July 29, 2011 via the BAA mailbox.

All attendees will be required to present a Government-issued photo identification upon entry to the event. Attendance at the Industry Day is voluntary and is not required to propose to this solicitation. DARPA will not provide reimbursement for costs incurred in participating in this Industry Day.

### C. Submission Checklist

The following items apply prior to proposal submission:

✓	Item	BAA Section	Applicability	Comment
	Obtain DUNS number	IV.B.1.a	Required on proposal cover page	<a href="http://fedgov.dnb.com/webform/index.jsp">http://fedgov.dnb.com/webform/index.jsp</a> The DUNS Number is the Federal Government's contractor identification code for all procurement-related activities.
	Enroll in Central Contractor Registration (CCR) database	IV.B.1.a	Required of all proposers Note, proposers requesting an assistance instrument (e.g., Grants, Cooperative Agreements) must be registered in CCR prior to proposal submission. All other proposers must be registered prior to award.	<a href="https://www.bpn.gov/CCR/default.aspx">https://www.bpn.gov/CCR/default.aspx</a> The CCR is the primary registrant database for the U.S. Federal Government.
	Obtain Taxpayer Identification Number (TIN)	IV.B.1.a	Required on proposal cover page	<a href="http://www.irs.gov/businesses/small/international/article/0,,id=96696,00.html">http://www.irs.gov/businesses/small/international/article/0,,id=96696,00.html</a> A TIN is used by the Internal Revenue Service in the administration of tax laws.

	Obtain CAGE code	IV.B.1.a	Required on proposal cover page	<a href="http://www.dlis.dla.mil/CAGESearch/cage_faq.asp">http://www.dlis.dla.mil/CAGESearch/cage_faq.asp</a>  A CAGE Code identifies companies doing or wishing to do business with the Federal Government.
	Enroll in E-Verify	VI.B.8	Applies to FAR-based contracts, not to grants, cooperative agreements, or other transactions	<a href="http://www.uscis.gov/e-verify">http://www.uscis.gov/e-verify</a>  E-Verify is an Internet-based system that allows businesses to determine the eligibility of their employees to work in the United States.
	Ensure representations and certifications are up to date	VI.D.2	Required of all proposers	<a href="https://orca.bpn.gov/">https://orca.bpn.gov/</a>  Online Representations and Certifications Application (ORCA) is an e-Government initiative designed by the Integrated Acquisition Environment to replace the paper-based representations and certifications process.
	Ensure eligibility of all team members	III	Required of all proposers (primes and subcontractors)	Verify eligibility, as applicable, for FFRDCs, Government entities, organizational conflict of interest

The following items apply as part of the submission package:

✓	Item	BAA Section	Applicability	Comment
	Encryption password	IV.E.2.a	Required of proposers using the DARPA BAA Submission System	Email to <a href="mailto:DARPA-BAA-11-34@darpa.mil">DARPA-BAA-11-34@darpa.mil</a>
	Volume 1 (Technical and Management)	IV.C.1	Required of all proposers	40 page limit
	Appendix A	IV.C.1.k	Required of all proposers	<ul style="list-style-type: none"> <li>- Information on team member identification</li> <li>- Government/FFRDC team members</li> <li>- Organizational conflict of interest (SETA) affirmations</li> <li>- Intellectual property</li> <li>- Human use</li> <li>- Animal use</li> <li>- Subcontractor plan</li> </ul>
	Volume 2 (Cost)	IV.C.2	Required of all proposers	<ul style="list-style-type: none"> <li>- Cover Sheet</li> <li>- Cost summary by year</li> <li>- Detailed cost information by task/month</li> <li>- Include costs for direct labor, indirect costs/rates, materials/equipment, subcontractors/ consultants, travel, other direct costs</li> <li>- Justification for labor costs, categories and hours</li> <li>- Cost spreadsheet file (.xls or equivalent format)</li> </ul> <p>If applicable, be sure to include:</p> <ul style="list-style-type: none"> <li>- List of milestones for 845 OTA agreements</li> <li>- Subcontractor cost proposals if not sent directly to DARPA</li> <li>- Consultant agreements, teaming agreements or letters of intent</li> <li>- Itemized list of material and equipment items to be purchased</li> <li>- Vendor quotes or engineering estimates for material and equipment more than \$50,000</li> <li>- Travel cost estimate to include purpose,</li> </ul>

				departure and arrival destinations, and sample airfare
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