



Broad Agency Announcement

Multipath Exploitation Radar (MER)

STRATEGIC TECHNOLOGY OFFICE

DARPA-BAA-09-01

13 March 2009

TABLE OF CONTENTS

Part One: Overview Information4

Part Two: Full Text of Announcement5

1. FUNDING OPPORTUNITY DESCRIPTION.....5

 1.1. PROGRAM OVERVIEW 5

 1.1.1. Problem Definition..... 5

 1.1.2. DARPA Vision and Goals 5

 1.1.3. Scope and Tasks..... 6

 1.2 PROGRAM METRICS 7

2. AWARD INFORMATION8

3. ELIGIBILITY INFORMATION9

 3.1 ELIGIBLE APPLICANTS 9

 3.1.1 Procurement Integrity, Standards of Conduct, Ethical Considerations, and
 Organizational Conflicts of Interest..... 10

 3.2 COST SHARING/MATCHING..... 10

 3.3 OTHER ELIGIBILITY REQUIREMENTS..... 11

 3.3.1 Collaborative Efforts..... 11

4. APPLICATION AND SUBMISSION INFORMATION11

 4.1 ADDRESS TO REQUEST APPLICATION PACKAGE..... 11

 4.2 SECURITY AND PROPRIETARY ISSUES..... 11

 4.3 CONTENT AND FORM OF APPLICATION SUBMISSION 13

 4.3.1 Proposal Information 13

 4.3.2 Restrictive Markings on Proposals 14

 4.4 FORMATTING CHARACTERISTICS..... 14

 4.4.1 Proposal Format..... 14

 4.5 SUBMISSION DATES AND TIMES..... 19

 4.6 INTERGOVERNMENTAL REVIEW..... 19

 4.7 FUNDING RESTRICTIONS 19

5. APPLICATION REVIEW INFORMATION.....19

 5.1 EVALUATION CRITERIA 19

 5.1.1 Ability to Meet Program Go/No-Go Metrics..... 20

 5.1.2 Overall Scientific and Technical Merit..... 20

 5.1.3 Potential Contribution and Relevance to the DARPA Mission..... 20

 5.1.4 Realism of Proposed Schedule..... 20

 5.1.5 Proposer’s Capabilities and/or Related Experience..... 20

 5.1.6 Plans and Capability to Accomplish Technology Transition 21

 5.1.7 Cost Realism 21

 5.2 REVIEW AND SELECTION RECOMMENDATION PROCESS..... 21

6. AWARD ADMINISTRATION INFORMATION.....22

 6.1 AWARD NOTICES..... 22

6.2 MEETING AND TRAVEL REQUIREMENTS	22
6.3 HUMAN USE.....	22
6.4 ANIMAL USE.....	23
6.5 PUBLIC RELEASE OR DISSEMINATION OF INFORMATION.....	23
6.6 EXPORT CONTROL.....	24
6.7 SUBCONTRACTING	25
6.8 ELECTRONIC AND INFORMATION TECHNOLOGY.....	25
6.9 REPORTING	25
6.9.1 Central Contractor Registration (CCR)	26
6.9.2 Representations and Certifications	26
6.9.3 Wide Area Work Flow (WAWF)	26
6.10 i-EDISON	26
6.11 AGENCY CONTACTS.....	26
7. OTHER INFORMATION	26
7.1 INTELLECTUAL PROPERTY	26
7.1.1 Procurement Contract Proposers.....	27
7.1.2 NonProcurement Contract Proposers.....	28
7.2 PROPOSERS DAY	28

Part One: Overview Information

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Strategic Technology Office (STO)
- **Funding Opportunity Title** – Multipath Exploitation Radar
- **Announcement Type** – Initial announcement
- **Funding Opportunity Number** – Broad Agency Announcement (BAA) DARPA-BAA-09-01
- **Catalog of Federal Domestic Assistance Numbers (CFDA)** Not applicable
- **Dates**
 - Proposers' Day: 17 April 2009
 - Proposal Due Date for Initial Selection: 22 May 2009
 - BAA Closing Date: 12 March 2010
- **Concise Description of the Funding Opportunity** – DARPA is soliciting innovative research proposals to increase persistent coverage over a large urban terrain by extending the tracking capabilities of existing radar sensor architectures beyond line-of-sight (LOS) using both multipath energy that represents nuisance signals for current radar system and knowledge of the urban scattering surfaces.
- **Anticipated Individual Awards** – Multiple awards are anticipated, but not required. The Government reserves the right for one, several, or no awards on this BAA.
- **Types of Instruments that may be Awarded** – Procurement contract or other transaction.
- **Any Cost Sharing Requirements** – Not required
- **Agency Contact** – The BAA Coordinator for this effort can be reached at
DARPA/STO
ATTN: DARPA-BAA-09-01
3701 North Fairfax Drive
Arlington, VA 22203-1714
Electronic Mail: DARPA-BAA-09-01@darpa.mil
Fax: (703) 812-3314

Part Two: Full Text of Announcement

1. FUNDING OPPORTUNITY DESCRIPTION

The Defense Advanced Research Projects Agency often selects its research efforts through the Broad Agency Announcement (BAA) process. The BAA will appear first on the FedBizOpps website, <http://www.fedbizopps.gov/>. The following information is for those wishing to respond to the BAA.

DARPA is soliciting innovative research proposals in the area of urban radar. 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.

1.1. PROGRAM OVERVIEW

1.1.1. Problem Definition

The ability of current radar sensors to engage and persistently track targets in urban environments is limited by Line-of-Sight (LOS) blockage due to buildings. This forces the sensors to very high aspect angles to avoid shadows, thus incurring a significant reduction in the coverage area the radars can persistently monitor. Sensor architectures that are dependent on LOS propagation can only maintain persistent area coverage in a topography-rich urban terrain by dramatically increasing the number of sensors so that any area has a LOS view to at least one sensor. For a ground-based system, sensors may be required for every street necessitating hundreds or thousands of sensors to fully cover a metropolitan area. Airborne system coverage may be limited to a few kilometers of range, requiring scores of aircraft for persistent coverage over a metropolitan area. The cost of wide area persistent surveillance is dominated by platform logistics and support, so this type of coverage would be prohibitively expensive.

While objects such as buildings cast large RF shadows in urban environments, much of the radar energy blocked by buildings is actually reflected back into the street below. This multipath energy illuminates the urban environment within the LOS shadows and provides an opportunity to greatly extend the persistent area coverage of an airborne radar sensor.

1.1.2. DARPA Vision and Goals

DARPA's intent is to provide persistent surveillance capabilities over a large urban terrain using a small number of airborne platforms. The Multipath Exploitation Radar system will increase persistent coverage over a large urban terrain by extending the tracking capabilities of existing radar sensor architectures beyond (LOS). This will be accomplished by accounting for the beyond-LOS energy that represents nuisance signals for current radar systems in conjunction with knowledge of the urban scattering surfaces. This program will use multipath energy to improve visibility into the urban environment and exploit knowledge of the distinctive urban scattering signatures to improve detection, localization, and tracking of targets.

This exploitation is possible because the urban scattering surfaces – buildings -- are visible and can be used to predict energy illumination and multipathing. At sufficiently high radar frequencies, buildings provide large specular scattering surfaces that allow ray-tracing

approaches to predict indirect propagation paths to street-level targets. This can be used to predict target occlusions from building blockages as well as multipath energy that may reflect into urban canyons for a specific radar platform location. The positions of target occlusions, LOS-illumination, and multipath returns are potentially unique to the urban terrain and platform location, providing powerful constraints to maintain persistent tracks.

DARPA has collected airborne radar data for a controlled environment consisting of instrumented and non-instrumented ground vehicles driving through a representative urban terrain. The radar was mounted on a helicopter platform, and data was collected while the platform was both nearly stationary and moving.

This BAA, Multipath Exploitation Program, will develop and validate algorithms to demonstrate the increased tracking persistence attainable by accounting for target illumination by multipath energy. The extensive urban radar collection data sets and LIDAR maps will be processed to demonstrate the detection and tracking of vehicles moving through various urban terrain scenarios. Proposers will exploit a priori knowledge of the terrain and radar locations to predict propagation effects and demonstrate dramatic improvements in detection range and cross-track accuracy consistent with unique location-specific urban propagation effects. Such gains must be demonstratable for both a stationary and moving collection platform.

A representative sample of the data (comprised of radar data, radar specifications, collection geometry, and LIDAR imagery) will be made available to interested bidders. (Note: The data sets will be FOUO and distribution and use is restricted to US citizens. However, non-citizens may develop component technology and simulations even though they will be prevented from applying this to the actual collected data sets. The data set may be obtained by contacting the BAA Administrative Coordinator identified in paragraph 4.3.1 of this BAA.)

1.1.3. Scope and Tasks

The proposer will develop, demonstrate, and quantify the performance of algorithms for non-LOS detection and tracking of multiple vehicles through urban canyons using the Ku-band airborne radar data provided by DARPA. The metrics to quantify performance and their expected increase are provided in Section 1.2 Program Metrics. Neither hardware development nor radar data collection is expected to be required. Airborne radar data collected in an urban environment will be provided as Government Furnished Information (GFI), in addition to a LIDAR map of all terrain and building data in the collection data. Approaches to multipath detection tracking should incorporate knowledge of the urban terrain (with accuracies readily achievable using commercial-grade LIDAR data) in order to predict and exploit the multipath reflections that are expected. Detection and tracking of multiple ground vehicles that exploits multipath will be demonstrated on data from both a nearly stationary and moving airborne platform which will be provided as GFI.

1.1.3.1. Task 1: Target and Clutter Signature Development

The performer will demonstrate the detection states (occluded, LOS, non-LOS) of moving vehicles driving through urban terrain using the DARPA-provided Ku-band radar data. As part of this demonstration, error bounds on detection and localization performance will be developed based upon the precision of urban models and radar registration. This analysis will be done

using the collected data when the helicopter was hovering as well as when it was moving. This task will also address the development of Space-time adaptive processing (STAP) clutter-nulling approaches that are appropriate for multipath environments. The accuracy requirements on urban terrain knowledge necessary to achieve the program goals will be determined.

1.1.3.2. Task 2: Tracking Algorithm Development

The performer will develop tracking algorithms for handling unique multipath-dependent range-Doppler profiles, incorporating knowledge of the urban terrain and accounting for multipath propagation conditions. A key challenge of this task will be to determine the uniqueness and separability of target tracks using urban multipath fingerprinting, and the resulting localization accuracy that is achievable. The performer will also ultimately determine limits on track accuracy, persistence, and density that can be achieved. Performance of tracking algorithms developed in this task will be evaluated using the airborne radar data made available as GFI.

1.1.3.3. Task 3: System Concept Development

The performer will develop an architecture concept that is extendable to persistent wide-area urban tracking over 1000 sq. km with less than five radar platforms. The performer will quantify the requirements for both the radar and data processing systems and identify potential platforms that meet these requirements.

1.2 PROGRAM METRICS

In order for the Government to evaluate the effectiveness of a proposed solution in achieving the stated program objectives, proposers should note that the Government hereby promulgates the following program metrics that may serve as the basis for determining whether satisfactory progress is being made to warrant continued funding of the program. Although the following program metrics are specified, proposers should note that the government has identified these goals with the intention of bounding the scope of effort, while affording the maximum flexibility, creativity, and innovation in proposing solutions to the stated problem.

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

Table 1. Program Metrics

Task	Standard
Detection improvement	2.5 times increase in sensor range compared to LOS coverage measured at 50% probability of detection
Tracking of multiple vehicles	1 vehicle per 100 m of road
Cross-range localization	50 m at 10 km range
Track continuity	>50% track visibility over increased LOS and non-LOS coverage area
	Demonstrate sparse traffic tracking with dropouts less than 50 m in duration

2. AWARD INFORMATION

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

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation, and to make awards without discussions with proposers. The Government also reserves the right to conduct discussions if the Source Selection Authority later determines them 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. If the proposed effort is inherently divisible and nothing is gained from the aggregation, proposers should consider submitting it as multiple independent efforts. The Government reserves the right to fund proposals in phases with options for continued work at the end of one or more of the phases.

Awards under this BAA will be made to proposers on the basis of the evaluation criteria listed below (see section labeled “Application Review Information”, Sec. 5.), and program balance to provide overall value to the Government. Proposals identified for negotiation may result in a procurement contract, grant, cooperative agreement, or other transaction depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors. 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. The Government reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions and cost/price within a reasonable time or the proposer fails to timely provide requested additional information.

As of the date of publication of this BAA, DARPA expects that program goals for this BAA cannot be met by proposers intending to perform 'fundamental research,' i.e., 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. Notwithstanding this statement of expectation, DARPA is not prohibited from considering and selecting research proposals that, regardless of the category of research proposed, still meet the BAA criteria for submissions. In all cases, the contracting officer shall have sole discretion to select award instrument type and to negotiate all instrument provisions with selectees.

3. ELIGIBILITY INFORMATION

3.1 ELIGIBLE APPLICANTS

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA. Historically Black Colleges and Universities (HBCUs), Small Businesses, Small Disadvantaged Businesses and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals; however, no portion of this announcement will be set aside for these organizations' participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

Federally Funded Research and Development Centers (FFRDCs) and Government entities (Government/National laboratories, military educational institutions, etc.) are subject to applicable direct competition limitations and cannot propose to this BAA in any capacity unless they meet the following conditions. FFRDCs must clearly demonstrate that the work is not otherwise available from the private sector AND they also provide a letter on letterhead from their 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. This information is required for FFRDCs proposing to be prime or subcontractors. Government entities must clearly demonstrate that the work is not otherwise available from the private section and provide written documentation citing the specific statutory authority (as well as, where relevant, contractual authority) establishing their 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.

Foreign participants and/or individuals may participate to the extent that such participants comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws, and other governing statutes applicable under the circumstances.

Applicants considering classified submissions (or requiring access to classified information during the life-cycle of the program) shall ensure all industrial, personnel, and information system processing security requirements are in place and at the appropriate level (e.g., Facility Clearance (FCL), Personnel Security Clearance (PCL), certification and accreditation (C&A)) and any Foreign Ownership Control and Influence (FOCI) issues are mitigated prior to such submission or access. Additional information on these subjects can be found at: www.dss.mil.

3.1.1 Procurement Integrity, Standards of Conduct, Ethical Considerations, and Organizational Conflicts of Interest

Current federal employees are prohibited from participating in particular matters involving conflicting financial, employment, and representational interests (18 USC 203, 205, and 208.). The DARPA Program Manager for this BAA is Dr. Joseph Durek. As of the date of first publication of the BAA, the Government has not identified any potential conflicts of interest involving this program manager. Once the proposals have been received, and prior to the start of proposal evaluations, the Government will assess potential conflicts of interest and will promptly notify the proposer if any appear to exist. (Please note the Government assessment does NOT affect, offset, or mitigate the proposer's own duty to give full notice and planned mitigation for all potential organizational conflicts, as discussed below.) The Program Manager is required to review and evaluate all proposals received under this BAA and to manage all selected efforts. Proposers should carefully consider the composition of their performer team before submitting a proposal to this BAA.

All Proposers and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any DARPA technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the Proposer supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. 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. In accordance with FAR 9.503 and without prior approval or a waiver from the DARPA Director, a Contractor cannot simultaneously be a SETA and Performer. Proposals that fail to fully disclose potential conflicts of interests and/or do not have plans to mitigate this conflict will be rejected without technical evaluation and withdrawn from further consideration for award.

If a prospective Proposer believes that any conflict of interest exists or may exist (whether organizational or otherwise), the Proposer should promptly raise the issue with DARPA by sending Proposer's contact information and a summary of the potential conflict by email to the mailbox address for this BAA at DARPA-BAA-09-01@darpa.mil, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration for the circumstances, any conflict situation cannot be effectively mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

3.2 COST SHARING/MATCHING

Cost sharing is not required for this particular program; however, cost sharing will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument (e.g., for any Other Transactions under the authority of 10 U.S.C. § 2371). Cost sharing is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort.

3.3 OTHER ELIGIBILITY REQUIREMENTS

3.3.1 Collaborative Efforts

Collaborative efforts/teaming are encouraged. Specific content, communications, networking, and team formation are the sole responsibility of the participants.

4. APPLICATION AND SUBMISSION INFORMATION

4.1 ADDRESS TO REQUEST APPLICATION PACKAGE

This solicitation contains all information required to submit a proposal. No additional forms, kits, or other materials are needed. This notice constitutes the total BAA. No additional information is available, nor will a formal Request for Proposal (RFP) or additional solicitation regarding this announcement be issued. Requests for same will be disregarded.

4.2 SECURITY AND PROPRIETARY ISSUES

The Government anticipates proposals submitted under this BAA will be unclassified. However, if a proposal is submitted as “Classified National Security Information” as defined by Executive Order 12958 as amended, then the information must be marked and protected as though classified at the appropriate classification level and then submitted to DARPA for a final classification determination.

Proposers choosing to submit a classified proposal from other classified sources must first receive permission from the respective Original Classification Authority in order to use their information in replying to this BAA. Applicable classification guide(s) should also be submitted to ensure the proposal is protected at the appropriate classification level.

The applicable security classification guide is DARPA-CG-478, “Multipath Exploitation Radar Program”. The guide is FOUO and may be obtained by contacting the BAA Coordinator.

DARPA expects that processed GFI data could be classified at the SECRET level because it could reveal operational capabilities. Proposers should propose personnel, facilities and security at that level.

Classified submissions shall be appropriately and conspicuously marked with the proposed classification level and declassification date.

Classified submissions shall be in accordance with the following guidance:

Confidential and Secret Collateral Information: Use classification and marking guidance provided by previously issued security classification guides, the Information Security Regulation (DoD 5200.1-R), and the National Industrial Security Program Operating Manual (DoD 5220.22-M) when marking and transmitting information previously classified by another Original Classification Authority. Classified information at the Confidential and Secret level may be mailed via appropriate U.S. Postal Service methods (e.g., (USPS) Registered Mail or USPS Express Mail). All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. The inner envelope shall be address to:

Defense Advanced Research Projects Agency
ATTN: STO / DARPA-BAA-09-01
3701 North Fairfax Drive
Arlington, VA 22203-1714

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

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

All Top Secret materials: Top Secret information should be hand carried by an appropriately cleared and authorized courier to the DARPA CDR. Prior to traveling, the courier shall contact the DARPA CDR at 571 218-4842 to coordinate arrival and delivery.

Special Access Program (SAP) Information: SAP information must be transmitted via approved methods. Prior to transmitting SAP information, contact the DARPA SAPCO at 703-526-4052 for instructions.

Sensitive Compartmented Information (SCI): SCI must be transmitted via approved methods. Prior to transmitting SCI, contact the DARPA Special Security Office (SSO) at 703-248-7213 for instructions.

Proprietary Data: All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. It is the Proposer's responsibility to clearly define to the Government what is considered proprietary data.

Security classification guidance via a DD Form 254 will not be provided at this time since DARPA is soliciting ideas only. After reviewing the incoming proposals, if a determination is made that the award instrument may result in access to classified information a DD Form 254 will be issued and attached as part of the award.

Proposers must have existing and in-place prior to execution of an award, approved capabilities (personnel and facilities) to perform research and development at the classification level they propose. It is the policy of DARPA to treat all proposals as competitive information, and to disclose their contents only for the purpose of evaluation. Proposals will not be returned. The original of each proposal 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 at this office within 5 days after unsuccessful notification.

4.3 CONTENT AND FORM OF APPLICATION SUBMISSION

4.3.1 Proposal Information

Proposers are required to submit full proposals by the time and date specified in the BAA in order to be considered during the initial round of selections. DARPA may evaluate proposals received after this date for a period up to one year from date of posting on FedBizOpps. Selection remains contingent on availability of funds.

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.

Restrictive notices notwithstanding, proposals may be handled, for administrative purposes only, by a support contractor. This support contractor is prohibited from competition in DARPA technical research and is bound by appropriate nondisclosure requirements. Proposals may not be submitted by fax or e-mail; any so sent will be disregarded.

Proposals not meeting the format described in the BAA may not be reviewed.

Proposers must submit an original and two (2) electronic copies of the proposal [in PDF (preferred)] on a CD-ROM shall be submitted. Each copy must be clearly labeled with DARPA-BAA-09-01, proposer organization, proposal title (short title recommended), and Copy _ of 2.

All administrative correspondence and questions on this solicitation, including requests for information on how to submit a proposal to this BAA, should be directed to one of the administrative addresses below; e-mail or fax is preferred.

The BAA Coordinator for this effort can be reached at:

Electronic Mail: DARPA-BAA-09-01@darpa.mil
Unclassified fax: 703-812-3314

DARPA/STO
ATTN: STO / DARPA-BAA-09-01
3701 North Fairfax Drive

Arlington, VA 22203-1714

DARPA intends to use electronic mail and fax for administrative correspondence regarding DARPA-BAA-09-01. Proposals may not be submitted by fax or e-mail; any so sent will be disregarded. DARPA encourages use of the Internet for retrieving the BAA and any other related information that may subsequently be provided.

4.3.2 Restrictive Markings on Proposals

All proposals should clearly indicate limitations on the disclosure of their contents. Proposers who include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall-

(1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this proposer as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

Markings like "Company Confidential" or other phrases that may be confused with national security classifications shall be avoided. See Section 6.0, for additional information.

4.4 FORMATTING CHARACTERISTICS

4.4.1 Proposal Format

All proposals must be in the format given below. Nonconforming proposals may be rejected without review. Proposals shall consist of two volumes. All pages shall be printed on 8-1/2 by 11 inch paper with type not smaller than 12 point. Smaller font may be used for figures, tables and charts. The page limitation for proposals includes all figures, tables, and charts. Volume I, Technical and Management Proposal, may include an attached bibliography of relevant technical papers or research notes (published and unpublished) which document the technical ideas and approach upon which the proposal is based. Copies of not more than three (3) relevant papers can be included with the submission. The bibliography and attached papers are not included in the page counts given below. The submission of other supporting materials along with the proposals is strongly discouraged and will not be considered for review. Except for the attached bibliography and Section I, Volume I shall not exceed 30 (thirty) pages. All proposals must be written in English.

4.4.1.1 Volume I, Technical and Management Proposal

Section I. Administrative

- A. Cover sheet to include:
 - (1) BAA number
 - (2) Technical area
 - (3) Lead Organization Submitting proposal
 - (4) Type of business, selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”
 - (5) Contractor’s reference number (if any)
 - (6) Other team members (if applicable) and type of business for each
 - (7) Proposal title
 - (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available)
 - (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available), total funds requested from DARPA, and the amount of cost share (if any) and
 - (10) Date proposal was submitted.
- B. Official transmittal letter.

Section II. Summary of Proposal

- A. 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.
- B. 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 not proprietary claims, this should be stated.
- C. Cost, schedule and milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the prime and major subcontractors, total cost and company cost share, if applicable. Note: Measurable critical milestones should occur every three months after start of effort. These milestones should enable and support a go/no go decision for the next part of the effort. Additional interim non-critical management milestones are also highly encouraged at a regular interval.
- D. Technical rationale, technical approach, and constructive plan for accomplishment of technical goals in support of innovative claims and deliverable production. (In the proposal, this section should be supplemented by a more detailed plan in Section III.)
- E. General discussion of other research in this area.
- F. 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.

- G. A separate three slide summary of the proposal in PowerPoint that quickly and succinctly indicates the main objective, key innovations, expected impact, and other unique aspects of the proposal. The format is available from the BAA Coordinator (paragraph 6.10) upon request.

Section III. Detailed Proposal Information

- A. Statement of Work (SOW) - In plain English, clearly define the technical tasks/subtasks to be performed, their durations, and dependencies among them. The page length for the SOW will be dependent on the amount of the effort. 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 exit 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.

Note: It is recommended that the SOW be developed so that each Phase of the program is separately defined. Do not include any proprietary information in the SOW.

- B. Description of the results, products, transferable technology, and expected technology transfer path enhancing that of Section II. B.
- C. Detailed technical rationale enhancing that of Section II.
- D. Detailed technical approach enhancing and completing that of Section II.
- E. Comparison with other ongoing research indicating advantages and disadvantages of the proposed effort.
- F. Discussion of proposer's previous accomplishments and work in closely related research areas.
- G. Description of the facilities that would be used for the proposed effort.
- H. Detail support enhancing that of Section II, including formal teaming agreements which are required to execute this program.
- I. Cost schedules and milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the primes and major subcontractors, total cost, and any company cost share. **Note: Measurable critical milestones should occur every three months after start of effort.** These milestones should enable and support a go/no go 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. Proposers must clearly describe their plans to demonstrate the program metrics discussed in Section 1.2.

Section IV. Additional Information

A brief bibliography of relevant technical papers and research notes (published and unpublished) which document the technical ideas upon which the proposal is based. Copies of not more than three (3) relevant papers can be included in the submission. These relevant papers are for the reviewer's convenience only and are not considered as part of the proposal.

4.4.1.2 Volume II, Cost Proposal – {No Page Limit}

Cover sheet to include:

- (1) BAA number;
- (2) Technical area;
- (3) Lead Organization Submitting proposal;
- (4) Type of business, selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”;
- (5) Contractor’s reference number (if any);
- (6) Other team members (if applicable) and type of business 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-award—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 offeror’s cognizant Defense Contract Management Agency (DCMA) administration office (*if known*);
- (14) Name, address, and telephone number of the offeror’s cognizant Defense Contract Audit Agency (DCAA) audit office (*if known*);
- (15) Date proposal was prepared;
- (16) DUNS number;
- (17) TIN number; and
- (18) Cage Code;
- (19) Subcontractor Information; and
- (20) Proposal validity period
- (21) Any Forward Pricing Rate Agreement, other such approved rate information, or such other documentation that may assist in expediting negotiations (if available).

Detailed cost breakdown to include:

- (1) total program cost broken down by major cost items to include:
 - i. direct labor, including individual labor categories or persons, with associated labor hours and numbered direct labor rates

- ii. If consultants are to be used, proposer must provide consultant agreement or other document which verifies the proposed loaded daily/hourly rate
 - iii. Indirect costs including Fringe Benefits, Overhead, General and Administrative Expense, Cost of Money, etc. (Must show base amount and rate)
 - iv. Travel – Number of trips, number of days per trip, departure and arrival destinations, number of people, etc.
 - v. Other Direct Costs – Should be itemized with costs or estimated costs. Backup documentation should be submitted to support proposed costs.
- (2) major program tasks by year
- (3) an itemization of major subcontracts and equipment purchases, to include: a cost proposal as detailed as the Proposer's cost proposal; the subcontractor's cost proposal can be provided in a sealed envelope with the Proposer's cost proposal. Materials should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Please include a brief description of the Proposer's procurement method to be used;
- (4) an itemization of any information technology (IT) purchase including subcontractor cost (NOTE: For IT equipment purchases, include a letter stating why the proposer cannot provide the requested resources from its own funding)
- (5) a summary of projected funding requirements by month; and
- (6) the source, nature, and amount of any industry cost-sharing. 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; and identification of pricing assumptions of which may require incorporation into the resulting award instrument (e.g., use of Government Furnished / Facilities / Information, access to Government Subject Matter Expert/s, etc.

The prime contractor is responsible for compiling and providing all subcontractor proposals for the Procuring Contracting Officer (PCO). Subcontractor proposals should include Interdivisional Work Transfer Agreements (ITWA) or similar arrangements.

Supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates in Section II C. above. Include a description of the method used to estimate costs and supporting documentation. Note: "cost or pricing data" as defined in FAR Subpart 15.4 shall be required if the proposer is seeking a procurement contract award of \$650,000 or greater unless the proposers request an exception from the requirement to submit cost of pricing data. "Cost or pricing data" are not required if the proposer proposes an award instrument other than a procurement contract (e.g., other transaction.) All proprietary subcontractor proposal documentation, prepared at the same level of detail as that required of the prime, shall be made immediately available to the Government, upon request, under separate cover (i.e., mail, electronic / email, etc.), either by the Proposer or by the subcontractor organization.

All proposers requesting an 845 Other Transaction Agreement for Prototypes (OTA) must include a detailed list of payment milestones. Each such payment milestone must include the following: milestone description, exit criteria, due date, milestone payment amount (to include, if cost share is proposed, contractor and government share amounts). It is noted that, at a minimum, such payable milestones should relate directly to accomplishment of program

technical go/no-go criteria as defined in the BAA and/or the proposer's proposal. Agreement type, fixed price or expenditure based, will be subject to negotiation by the Agreements Officer; however, it is noted that the Government prefers use of fixed price payable milestones to the maximum extent possible. If the proposer requests award of an 845 OTA as a nontraditional defense contractor, as so defined in the OSD guide entitled "Other Transactions (OT) Guide For Prototype Projects" dated January 2001 (as amended) (http://www.dau.mil/pubs/Online_Pubs.asp), information must be included in the cost proposal to support the claim. Additionally, if the proposer plans requests award of an 845 OTA, without the required one-third (1/3) cost share, information must be included in the cost proposal supporting that there is at least one non-traditional defense contractor participating to a significant extent in the proposed prototype project.

Proposers must submit an OCI Mitigation Plan (if applicable) to detail what steps the contractor is performing to mitigate an actual or perceived conflict of interest.

4.5 SUBMISSION DATES AND TIMES

The proposal (original and designated number of hard and electronic copies) must be submitted to DARPA, ATTN: STO / DARPA-BAA-09-01, 3701 North Fairfax Drive, Arlington, VA 22203-1714 on or before 4:00 p.m., local time, 22 May 2009, in order to be considered during the initial round of selections; however, proposals received after this deadline may be received and evaluated up to one year from date of posting on FedBizOpps. Proposals may be submitted at any time from issuance of this announcement through the closing date or due date otherwise specified by DARPA; however, proposers are warned that the likelihood of funding is greatly reduced for proposals submitted after the initial closing date deadline.

DARPA will post a consolidated Question and Answer response after 10 April 2009, before final full proposals are due. In order to receive a response to your question, submit your question by 7 April 2009 to the BAA Coordinator (See paragraph 6.10).

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

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

4.6 INTERGOVERNMENTAL REVIEW

Not Applicable.

4.7 FUNDING RESTRICTIONS

Not Applicable.

5. APPLICATION REVIEW INFORMATION

5.1 EVALUATION CRITERIA

Evaluation of proposals will be accomplished through a scientific/technical review of each proposal using the following criteria, in order of descending importance: (5.1.1) Ability to Meet Program Go/No Metrics, (5.1.2) Overall Scientific and Technical Merit; (5.1.3) Potential Contribution and Relevance to the DARPA Mission; (5.1.4) Realism of Proposed Schedule; (5.1.5) Proposer's Capabilities and/or Related Experience; (5.1.6) Plans and Capability to Accomplish Technology Transition; and (5.1.7) Cost Realism. 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. The following are descriptions of the above listed criteria:

5.1.1 Ability to Meet Program Go/No-Go Metrics

The proposal clearly explains the technical approach(es) that will be employed to meet or exceed each program metric listed in Section 1.2 Program Metrics. The feasibility and likelihood of the proposed approach for satisfying the program go/no-go metrics are explicitly described and clearly substantiated. The proposal reflects a mature and quantitative understanding of the performance go/no-go metrics, the statistical confidence with which they may be measured, and their relationship to the concept of operations that will result from successful performance in the program.

5.1.2 Overall Scientific and Technical Merit

The proposed approach is supported by a technical description and rationale showing it to be feasible, achievable, and complete. 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 planned mitigation efforts and provides ample justification as to why the approach(es) is / are feasible.

5.1.3 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 military use.

5.1.4 Realism of Proposed Schedule

The proposer's abilities to aggressively pursue performance metrics in the shortest timeframe and to accurately account for that timeframe will be evaluated, as well as proposer's ability to understand, identify, and mitigate any potential risk in schedule.

5.1.5 Proposer's Capabilities and/or Related Experience

The proposer's assembled technical team has the expertise and experience to accomplish their proposed tasks. The proposer's prior experience in similar efforts clearly demonstrates an ability to deliver products that meet the proposed technical performance within the proposed budget and schedule. The proposed team's expertise to manage the cost and schedule will be evaluated.

Similar efforts completed/ongoing by the proposer in this area are fully described including identification of other Government sponsors.

5.1.6 Plans and Capability to Accomplish Technology Transition

The capability to transition the technology to the research, industrial, and operational military communities in such a way as to enhance U.S. defense, and the extent to which intellectual property rights limitations creates a barrier to technology transition.

5.1.7 Cost Realism

The objective of this criterion is to establish that the proposed costs are realistic for the technical and management approach offered, as well as to determine the proposer's practical understanding of the effort. This will be principally measured by cost per labor-hour and number of labor-hours proposed. The evaluation criterion recognize 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. Cost reduction approaches that will be received favorably include innovative management concepts that maximize direct funding for technology and limit diversion of funds into overhead.

After selection and before award the contracting officer will negotiate cost/price reasonableness.

Award(s) will be made to proposers whose proposals are determined to be the most advantageous to the Government, all factors considered, including the potential contributions of the proposed work to the overall research program and the availability of funding for the effort. Award(s) may be made to any proposer(s) whose proposal(s) is determined advantageous to the Government regardless of its overall rating.

NOTE: PROPOSERS ARE CAUTIONED THAT EVALUATION RATINGS MAY BE LOWERED AND/OR PROPOSALS REJECTED IF SUBMITTAL INSTRUCTIONS ARE NOT FOLLOWED.

5.2 REVIEW AND SELECTION RECOMMENDATION PROCESS

It is the policy of DARPA to ensure impartial, equitable, comprehensive proposal evaluations and to select the source (or sources) whose offer meets the Government's technical, policy, and programmatic goals. Pursuant to FAR 35.016, the primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and fund availability. In order to provide the desired evaluation, qualified Government personnel will conduct reviews and (if necessary) convene panels of experts in the appropriate areas.

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. For evaluation purposes, a proposal is the document described in "Proposal Format", Section 4.4.1. Other supporting or background materials submitted with the proposal will be considered for the reviewer's convenience only and not considered as part of the proposal.

Restrictive notices notwithstanding, proposals may be handled for administrative purposes by support contractors. These support contractors are prohibited from competition in DARPA technical research and are bound by appropriate non-disclosure requirements.

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.

It is the policy of DARPA to treat all proposals as competitive information and to disclose their contents only for the purpose of evaluation. No proposals will be returned. Upon completion of the source selection process, the original of each proposal received will be retained at DARPA and all other copies will be destroyed.

6. AWARD ADMINISTRATION INFORMATION

6.1 AWARD NOTICES

As soon as the evaluation of a proposal is complete, the proposers will be notified that 1) the proposal has been selected for funding pending contract negotiations, or 2) the proposal has not been selected. These official notifications will be sent via mail to the Technical POC identified on the proposal coversheet.

6.2 MEETING AND TRAVEL REQUIREMENTS

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

6.3 HUMAN USE

All research involving human subjects, to include use of human biological specimens and human data, selected for funding must comply with the 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.dtic.mil/biosys/downloads/32cfr219.pdf>), 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/html2/d32162x.htm>).

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 also have a valid Assurance. In addition, personnel involved in human subjects research must provide documentation of completing appropriate training for the protection of human subjects.

For all proposed research that will involve human subjects in the first year or phase of the project, the institution must provide evidence of or a plan for review by an Institutional Review Board (IRB) upon final proposal submission to DARPA. The IRB conducting the review must

be the IRB identified on the institution's Assurance. 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. Consult the designated IRB for guidance on writing the protocol. The informed consent document must comply with federal regulations (32 CFR 219.116). A valid Assurance along with evidence of appropriate training 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 the 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. Note that confirmation of a current Assurance and appropriate human subjects protection training is required before headquarters-level approval can be issued.

The amount of time required to complete the IRB review/approval process may 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 one to three months, followed by a DoD review that could last between three to six months. No DoD/DARPA funding can be used towards human subjects research until ALL approvals are granted.

6.4 ANIMAL USE

Any Recipient performing research, experimentation, or testing involving the use of animals shall comply with the rules on animal acquisition, transport, care, handling, and use in: (i) 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); and (ii) the guidelines described in National Institutes of Health Publication No. 86-23, "Guide for the Care and Use of Laboratory Animals."

For submissions containing 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 PHS Policy on Humane Care and Use of Laboratory Animals, available at <http://grants.nih.gov/grants/olaw/olaw.htm>.

All Recipients must receive approval by a DoD certified veterinarian, in addition to an IACUC approval. No animal studies may be conducted using DoD/DARPA funding until the USAMRMC 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, which may be found at <https://mrmc.amedd.army.mil/AnimalAppendix.asp>

6.5 PUBLIC RELEASE OR DISSEMINATION OF INFORMATION

It is the policy of the Department of Defense for products of fundamental research to remain unrestricted to the maximum extent possible. Contracted fundamental research:

Includes research performed under grants and contracts that are (a) Basic Research”), whether performed by universities or industry or (b) applies research and performed on-campus at a university. The research shall not be considered fundamental in those rare and exception 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.

It is anticipated that the performance of research resulting from the BAA is not expected to be fundamental research.

The following provision will be incorporated into any resultant procurement contract or other transaction:

(a) 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 Technical Information Officer (DARPA/TIO). 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. Papers resulting from unclassified contracted fundamental research are exempt from prepublication controls and this review requirement, pursuant to DoD Instruction 5230.27 dated October 6, 1987.

(b) When submitting material for written approval for open publication as described in subparagraph (a) above, the Contractor must submit a request for public release request to the DARPA TIO and include the following information: 1) Document Information: document title, document author, short plain-language description of technology discussed in the material (approx 30 words), number of pages (or minutes of video) and document type (briefing, report, abstract, article, or paper); 2) Event Information: event type (conference, principle investigator meeting, article or paper), event date, desired date for DARPA's approval; 3) DARPA Sponsor: DARPA Program Manager, DARPA office, and contract number; and 4) Contractor's Information: POC name, e-mail and phone. Allow four weeks for processing; due dates under four weeks require a justification. Unusual electronic file formats may require additional processing time. Requests can be sent either via e-mail to tio@darpa.mil or via 3701 North Fairfax Drive, Arlington VA 22203-1714, telephone (571) 218-4235. Refer to www.darpa.mil/tio for information about DARPA's public release process.

6.6 EXPORT CONTROL

Should this project develop beyond fundamental research (basic and applied research ordinarily published and shared broadly within the scientific community) with military or dual-use applications the following apply:

(1) The Contractor shall comply with all U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be

responsible for obtaining the appropriate licenses or other approvals, for obtaining the appropriate licenses or other approvals, if required, for exports of (including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.

(2) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person will have access to export-controlled technologies, including technical data or software.

(3) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(4) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

6.7 SUBCONTRACTING

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government 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 assure that prime contractors and subcontractors carry out this policy. Each proposer who submits a contract proposal and includes subcontractors is required to submit a subcontracting plan in accordance with FAR 19.702(a) (1) and (2) should do so with their proposal. The plan format is outlined in FAR 19.704.

6.8 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 proposer who submits a proposal 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.

6.9 REPORTING

The number and types of reports will be specified in the award document, but will include as 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.

6.9.1 Central Contractor Registration (CCR)

Selected proposers not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to any award under this BAA. Information on CCR registration is available at <http://www.ccr.gov>.

6.9.2 Representations and Certifications

In accordance with FAR 4.1201, prospective proposers shall complete electronic annual representations and certifications at <http://orca.bpn.gov>.

6.9.3 Wide Area Work Flow (WAWF)

Unless using another approved electronic invoicing system, performers will be required to submit invoices for payment directly via the Internet/WAWF at <http://wawf.eb.mil>. Registration to WAWF will be required prior to any award under this BAA.

6.10 i-EDISON

The award document for each proposal selected and funding will contain a mandatory requirement for patent reports and notifications to be submitted electronically through i-Edison (<http://s-edison.info.nih.gov/iEdison>) .

6.11 AGENCY CONTACTS

Administrative, technical or contractual questions should be sent to the BAA Coordinator at:

Electronic Mail: DARPA-BAA-09-01@darpa.mil
Unclassified fax: 703-812-3314
DARPA
ATTN: STO / DARPA-BAA-09-01
3701 North Fairfax Drive
Arlington, VA 22203-1714

All requests must include the name, email address, and phone number of a point of contact.

The technical POC for this effort is:

Joseph Durek
Electronic mail: joseph.durek@darpa.mil
Fax: 703-248-8059
DARPA
ATTN: STO \ DARPA-BAA-09-01
3701 North Fairfax Drive
Arlington, VA 22203-1714

7. OTHER INFORMATION

7.1 INTELLECTUAL PROPERTY

7.1.1 Procurement Contract Proposers

8.1.1.1 Noncommercial 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 noncommercial technical data, and noncommercial 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. In the event that proposers do not submit the list, the Government will assume that it automatically has “unlimited rights” to all noncommercial technical data and noncommercial computer software generated, developed, and/or delivered under any award instrument, unless it is substantiated that development of the noncommercial technical data and noncommercial computer software occurred with mixed funding. If mixed funding is anticipated in the development of noncommercial technical data, and noncommercial computer software generated, developed, and/or delivered under any award instrument, then 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 five (5) years in accordance with the applicable DFARS clauses, at which time the Government will acquire “unlimited rights” unless the parties agree otherwise. Proposers are admonished that the Government will use the list during the source selection 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, then the proposer should state “NONE.”

A sample list for complying with this request is as follows:

NONCOMMERCIAL			
Technical Data Computer Software To be Furnished With Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(LIST)	(LIST)	(LIST)

7.1.1.2 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 embedded in any noncommercial deliverables contemplated under the research effort, along with any applicable restrictions on the Government’s use of such commercial technical data and/or commercial computer software. In the event that proposers do not submit the list, the Government will assume that there are no restrictions on the Government’s use of such commercial items. The Government may use the list during the source selection 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, then the proposer should state “NONE.”

A sample list for complying with this request is as follows:

COMMERCIAL			
Technical Data Computer Software To be Furnished With Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(LIST)	(LIST)	(LIST)

7.1.2 NonProcurement Contract Proposers

7.1.2.1 Noncommercial and Commercial Items (Technical Data and Computer Software)

Proposers responding to this BAA requesting an Other Transaction for Prototype shall follow the applicable rules and regulations governing that instrument, but in all cases should appropriately identify any potential restrictions on the Government’s use of any Intellectual Property contemplated under that award instrument. This includes both Noncommercial Items and Commercial Items. Although not required, proposers may use a format similar to that described in Paragraphs 1.a and 1.b above. The Government may use the list during the source selection 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, then the proposer should state “NONE.”

7.1.2.2 All Proposers – Patents

Include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal for the DARPA program. If a patent application has been filed for an invention that your proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, you may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: 1) a representation that you own the invention, or 2) proof of possession of appropriate licensing rights in the invention.

7.1.2.3 All Proposers-Intellectual Property Representations

Provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized under your proposal for the DARPA program. Additionally, 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.

7.2 PROPOSERS DAY

A Proposer's Day will be held on 17 April 2009 at 8:00 AM at Analytic Services Inc., Conference Center, 2900 S. Quincy St. Suite 800, Arlington, VA 22206, phone (703)416-3222, fax (703) 416-8408. This meeting will be held at the unclassified level. Proposers wishing to attend should submit their name and organization via email to the BAA Coordinator prior to 30 March 2009.