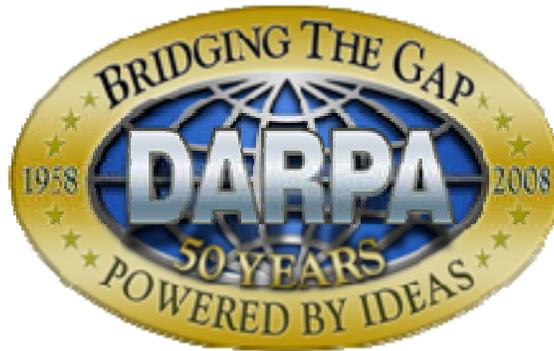


BAA 08-16

**Spin Torque Transfer-Random
Access Memory (STT-RAM)**



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Part One: Overview Information

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Microsystems Technology Office (MTO)
- **Funding Opportunity Title** – Spin Torque Transfer-Random Access Memory (STT-RAM)
- **Announcement Type** – Initial announcement
- **Funding Opportunity Number** – Broad Agency Announcement (BAA) 08-16
- **Catalog of Federal Domestic Assistance Numbers (CFDA)** – 12.910 Research and Technology Development
- **Dates**
 - Proposal Due Date: April 11, 2008 (4:00 PM EST)

- **Concise description of the funding opportunity** - DARPA is soliciting innovative research and development proposals in the area of Spin-Torque Transfer Random Access Memory technologies. The goal of this program is to develop materials and processes to fully exploit the spin-torque transfer (STT) phenomenon for creating “universal” memory elements.
- **Anticipated individual awards** – Multiple awards are anticipated.
- **Types of instruments that may be awarded** -- Procurement contract, grant, cooperative agreement or other transaction.
- **Agency contact**
 - Dr. Devanand Shenoy
The BAA Coordinator for this effort can be reached at, fax: (703) 696-2206, electronic mail: baa08-16@darpa.mil.
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Part Two: Full Text of Announcement

I. 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/>, and Grants.gov website at <http://www.grants.gov/>. The following information is for those wishing to respond to the BAA.

DARPA is soliciting innovative research and development (R&D) proposals in the area of Spin-Torque Transfer Random Access Memory technologies. The goal of this program is to develop materials and processes to fully exploit the spin-torque transfer (STT) phenomenon for creating “universal” memory elements. A universal memory element is one that exhibits scalability for high capacity of storage per unit volume, as well as high read/write speed, compatibility with CMOS processes, and non-volatility. 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.

Prior research in micro-magnetics and spintronics has led to the exploitation of giant magnetoresistance (GMR) effects for rotating magnetic disk drive memories, as well as magnetic tunneling junctions (MTJ) for magnetic random access memory (MRAM). The spin-torque transfer (STT) effect is a recent discovery that exploits magnetic spin states to electrically change the magnetic orientation of a material (*Science* 285, 867 (1999)). Components based on the STT effect can have the properties of a universal memory, high density, high speed, non-volatility, high endurance, and can also be well suited for harsh environments such as those with exposure to ionizing radiation. In addition, they can operate from a single power supply voltage level greatly simplifying associated circuitry.

This program is aimed at developing the core technology for exploiting spin-torque transfer and related phenomena for producing large-scale memories. Compatibility and stability with expected mainstream processes for semiconductor electronics and patterned media is an important attribute that should enable significant leverage for these new technologies in delivering early demonstrations and in gaining wider acceptance.

Background

Early spintronic devices used magnetic field as the state variable for processing information. Rotating magnetic disk drives and magnetic RAM (MRAM) are commercialized examples of spintronic technologies. Most present day disk drives use GMR read/write heads. GMR has a large signal-to-noise and great sensitivity and has been a real advance in reducing physical size while boosting storage capacities of drives. On the other hand, MRAMs make use of the magnetic tunneling junction (MTJ) as the basic storage element. An MTJ is a sandwich of materials, consisting of two magnetic material layers separated by a thin insulating tunnel barrier layer. An MTJ essentially

stores a single bit of information in its state of relative magnetization. One of the magnetic layers, called the reference layer, has its magnetization fixed in one direction, while the second magnetic layer, the storage layer, can have its magnetization polarization state switched either parallel or anti-parallel to the reference layer. The state of the information stored in the MTJ is sensed by driving a current through the MTJ. Depending on the relative state of magnetization of the MTJ, the overall material stack exhibits a high intrinsic resistance or a low one. If the reference and storage layers are aligned in opposite directions the resistance of the MTJ is very high; it is low otherwise. The magnetic layers do not require power to retain their field orientations; thus, the state of the MTJ is preserved when power to the device is removed. The state of the MTJ storage layer is controlled by the currents in the bit and word lines. This concept makes for a compact storage cell for MRAM but has a fundamental issue when scaling down the size of the MTJ; higher currents are needed to switch the state of the cell resulting in increasing power dissipation.

Other spintronic devices use currents of spin-aligned electrons (spin-polarized currents) rather than fixed magnetic fields for processing and storing information. Spin-polarized currents can be generated by driving a current through a ferromagnetic layer. If the ferromagnetic electrode has a magnetization aligned in one direction, the magnetic moments of electrons passing through it become aligned in the same direction. It was theoretically predicted that such a spin-polarized current could transfer its angular momentum to a second magnetic layer and therefore switch the magnetization of this second layer into an alignment parallel with the reference layer, provided the dimensions of the device are about 100 nm or less. This new physics phenomenon, known as spin-torque transfer switching, was first demonstrated in metallic thin films at low temperature. It was also shown that, by passing a current through the layers in the opposite direction, the spin-polarized electrons reflected back from the reference layer can have sufficient angular momentum to switch the second layer into an anti-parallel alignment. Along with the low temperature needed for operation, the other major problems with this implementation have been the high current density needed for switching and the small difference in resistance between the two states.

Further research into the STT phenomena has led to new materials and the replacement of metallic films with MTJs. MTJ resistance levels can be adjusted through material selection and MTJs also provide greater difference between the resistance states of the cell. Operation at room temperature has been reported using Aluminum Oxide as the tunneling barrier, and more recent efforts with Magnesium Oxide have shown promise for a reduction in power. Based on innovations in the MTJ, it is quite possible to develop a very compact and scalable memory that exploits spin and avoids the circuit issues surrounding prior art. With the optimal choice of materials, this STT memory would have fast read/write and be non-volatile, low power, and scalable. It would also be uncomplicated to fabricate and could conceivably be done in a silicon foundry if the process and materials were designed for compatibility as well. This BAA seeks innovative research proposals for achieving a STT technology for dense solid-state memories for defense applications.

DARPA is interested in all aspects of this technology. The technical challenges to be addressed in this program include developing the science and technology necessary to fully understand STT effects and the optimal methods of exploitation for memories. This program seeks a combined theoretical and experimental approach, including extension and application of established physics and engineering knowledge for spin-torque transfer and related effects, materials composition and processing, cell creation and organization, testing, and verification.

Program Requirements

DARPA is seeking innovative research proposals for STT-RAM technologies that will lead to the ability to fabricate dense, high performance, cost-effective universal memories. DARPA believes that to achieve this objective, the following technical areas need to be addressed. Proposers are strongly encouraged to address all these areas of interest in a comprehensive proposal. The areas of interest are as follows:

Technical area One - STT Materials and Processes:

Research into optimal materials and processes for creating spin-torque transfer devices, focusing on scalability, performance, reliability, compatibility and stability. Materials and processes that are compatible with the future expectations of silicon CMOS processing are of greatest interest since this program aims to develop dense solid-state memories. Those materials must be stable in order to have long-term reliability and endurance in possibly harsh environments. Reliability and endurance is also a concern with new materials and should be addressed in any offered proposal.

Technical Area Two - STT Architecture, Devices, Circuit Blocks:

Research efforts into innovative devices that exploit STT and exhibit high speed read/write, error-free operation, with very low power dissipation. New architectures for combining STT memories with electronic logic devices is of interest, and offerors should provide initial designs and limitations as appropriate. Monolithic integration technologies for embedding STT memory devices with conventional electronic logic are of high interest.

Technical Area Three - STT Integrated Memory Arrays, Demonstration, Test, Verification:

Scale-up of basic materials devices, and processes into memory arrays, with associated read/write and addressing circuits. Demonstration of error detection and correction methods, as well as accelerated long term testing.

Program Scope

The STT program will consist of two phases. The length of each phase should be decided by the proposer based on the approach and effort needed. The focus of each phase is described below:

Phase I. STT Materials and Processes. In this phase, performers are expected to develop physical models for the STT effect for use in electronics, as well as complete basic materials and bulk processes research. This phase should result in demonstrations of a wafer yield with 40% operational memory bits whose performance parameters are shown in the table below.

Phase II. STT Memory Demonstration. In this phase, the materials, processes, and devices from phase I will be scaled up for implementation in a prototype technology. This phase is expected to result in fabrication of 1 Mbit memory arrays in processes compatible with other necessary read-out and logic circuitry. The yield expected in this phase is at least 40% operational 1 Mb memory die. The performance expected of such arrays are also shown in the table below.

Program Go/No-Go Goals (Metrics):

The following metrics relate to memory components and are of prime interest in this program. All proposers should consider and address this set at a minimum with their approach. Offerors are encouraged to include additional relevant metrics based on their individual approaches, but these basic parameters should be addressed within the proposal. It is expected that all processing will be performed at the 90 nm node.

	Phase 1	Phase 2
Write Energy	0.25 pJ/bit	0.06 pJ/bit
Write/Read Speed	5 ns/bit	5 ns/bit
Cell Size	0.24 sq. μm	0.12 sq. μm
Memory Bit Area	0.02 sq. μm	0.02 sq. μm
Thermal Stability (Δ)	60	80
Endurance (cycles)	1.00E+16	>3.00E+16
Wafer Yield	40% operational memory bits	40% operational 1 MB memory die

The thermal stability metric (Δ) is defined as the magnetic layer anisotropy (H_k) times the saturation magnetization (M_s) times the switching current density (J_c) times the resistance area product (RA) divided by the Boltzmann (k_B) constant times the temperature in Kelvin.

$$\Delta = \frac{H_k M_s J_c (RA)}{k_B T}$$

II. AWARD INFORMATION

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

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation, and to make awards without discussions with offerors. 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 offeror. If the proposed effort is inherently divisible and nothing is gained from the aggregation, offerors 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 offerors on the basis of the evaluation criteria listed below (see section labeled “Application Review Information”, Sec. V.), 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. Offerors should note that the required degree of interaction between parties, regardless of award instrument, will be high and continuous.

III. ELIGIBILITY INFORMATION

A. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA. 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. Independent proposals from Government/National laboratories may be subject to applicable direct competition limitations, though certain Federally Funded Research and Development Centers are excepted per P.L. 103-337§ 217 and P.L 105-261 § 3136. Proposers from Government/ National Laboratories must provide documentation to DARPA to establish that they are eligible to propose and have unique capabilities not otherwise available in private industry.

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.

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. Devanand Shenoy. 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 offeror if any appear to exist. (Please note the Government assessment does NOT affect, offset, or mitigate the offeror'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. Offerors 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 returned 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 BAA08-16@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 of the circumstances, any conflict situation cannot be effectively mitigated, the proposal may be returned without technical evaluation and withdrawn from further consideration for award under this BAA.

B. 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.

C. Other Eligibility Criteria

1. Collaborative Efforts

Collaborative efforts/teaming arrangements composed of partners from academia, industry, and national laboratories are encouraged and should be explained thoroughly in the full proposal. Integrated teams capable of addressing the different technological and scientific aspects of the STT-RAM program will be highly valued. A website (<http://www.davincinetbook.com/teams>) has been established to facilitate formation of teaming arrangements between interested parties. Specific content, communications, networking, and team formation are the sole responsibility of the participants. Neither DARPA nor the Department of Defense (DoD) endorses the destination web site or the information and organizations contained therein, nor does DARPA or the DoD exercise any responsibility at the destination. This website is provided consistent with the stated purpose of this BAA.

IV. APPLICATION AND SUBMISSION INFORMATION

A. 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.

B. Content and Form of Application Submission

1. Proposal Information

Proposers are required to submit full proposals at the time and date specified in the BAA 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 and Grants.gov. Full proposals submitted after the due date stated in the BAA or due date otherwise specified by DARPA after review of proposal abstracts may be selected contingent on the 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 and proposed abstracts 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.

For Proposers Posting to Grants.Gov:

Offerors may elect to use the Grants.gov APPLY function if the applicant is seeking a grant or cooperative agreement. The APPLY function replaces the proposal submission process that other offerors follow. The APPLY function does not affect the proposal content or format. The APPLY function is electronic; offerors do not submit paper proposals in addition to the Grants.gov APPLY electronic submission.

For All proposers:

All administrative correspondence and questions on this solicitation, including requests for information on how to submit a proposal abstract or full proposal to this BAA, should be directed to BAA08-16@darpa.mil. DARPA intends to use electronic mail and fax for correspondence regarding BAA 08-16. 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.

For Proposers Submitting proposals through T-FIMS

Proposals sent in response to BAA 08-16 must be submitted through T-FIMS. Attached to this BAA is a document entitled “User’s Guide to T-FIMS: DARPA’s BAA Submission System” (see Attachment 1). A thorough read of this section guarantees successful submission to T-FIMS and explains all the necessary steps to submitting proposals through T-FIMS. Because proposers using T-FIMS may encounter heavy traffic on the web server, and T-FIMS requires a registration and certificate installation for all proposers, proposers should not wait until the day the proposal is due to create an account in T-FIMS and submit the proposal. All proposers using T-FIMS must also encrypt the proposal, as per the instructions below.

For Proposers Submitting to an Electronic Business Application such as the T-FIMS BAA Tool:

All proposals submitted electronically by means of an Electronic Business Application Tool or proposal submission web site (not including Grants.gov) must be encrypted using Winzip or PKZip with 256-bit AES encryption. Only one zipped/encrypted file will be accepted per proposal and proposals not zipped/encrypted will be rejected by DARPA. An encryption password form must be completed and emailed to BAA08-16@darpa.mil

at the time of proposal submission. See <https://www.tfims.darpa.mil/baa/> for the encryption password form.

Note the word “PASSWORD” must appear in the subject line of the above email and there are minimum security requirements for establishing the encryption password. Failure to provide the encryption password may result in the proposal not being evaluated. For further information and instructions on how to zip and encrypt proposal files, see <https://www.tfims.darpa.mil/baa/>.

2. Full Proposal Format

All full 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. The page limitation for full 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 {55} number pages. Maximum page lengths for each section are shown in braces { } below. All full proposals must be written in English.

3. Volume I, Technical and Management Proposal

Section I. Administrative

A. {1} 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. {1} Official transmittal letter.

Section II. Summary of Proposal

- A. {3} Executive Summary. This should clearly and concisely summarize the following:
- A description of the innovative approaches and technical solutions proposed.
 - The quantitative end-of-program performance goals and the milestones associated with each Phase of the development effort. The milestones and performance goals should be listed in a single table (see above for an example table).
 - An explanation of how the above goals and milestones compare to what has already been demonstrated.
 - 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.

Section III. Detailed Proposal Information

- A. {20} Technical Rationale & Approach. A concise section outlining the scientific and technical challenges, unique approaches, and potential anticipated technical solutions to meet or exceed each program metric. This section should demonstrate that the proposer has a clear understanding of the state-of-the-art; and should provide sufficient technical details so as to permit complete evaluation of the feasibility of the idea. Comparison with other ongoing research indicating advantages and disadvantages of the proposed effort should be included.
- B. {8} Program Plan & Cost Schedules. A narrative explaining the explicit timelines, milestone achievements, and quantitative metrics by which progress toward the goals can be evaluated. This plan should include a specific and detailed test plan detailing how performance of milestones, particularly the program metrics, will be measured. **Note: Measurable critical milestones should occur at least every 6 months after start of effort.** These milestones should enable and support a go/no go decision for the next part of the effort. Milestones must be associated with demonstrable, quantitative measures of performance, and should be summarized in a single table. Additional interim non-critical management milestones are also highly encouraged at regular intervals. This section should also include 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. 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. The proposed period of performance of the overall program and specifically of each program phase and demonstration should be clearly stated. This section should also identify major technical risk elements specific to the proposed approach, estimate the risk magnitude for each such element, and describe specific plans to mitigate risk.

- C. {2} Teaming & Management Plan. 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; and (4) the teaming strategy among the team members.
- D. {5} Capabilities. A section describing relevant prior work, the background, qualifications and relevant experience of key individuals to be assigned to the program and the facilities and equipment to be utilized. Please do not attach supporting material (CDs, movies, etc.) to the proposal, except as noted in Section IV below.
- E. {5} Slide Summary. PowerPoint-type slides (i.e., landscape formatted for presentation) that succinctly highlight the major aspects of the proposal, including proposer-defined measurable metrics, in a manner suitable for presentation to DARPA management.
- F. {5} Technology Transition & Business Plan. A discussion outlining how the technology to be developed in this program will be commercialized and made available to DoD contractors. See also “Intellectual Property.”
- G. {5} Statement of Work (SOW). A document written in plain English, outlining the scope of the effort (by Phase) and citing specific tasks to be performed, contractor requirements, and data and/or material deliverables. 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 should be developed so that each Phase of the program is separately defined. Do not include any proprietary information in the SOW.

Section IV. Additional Information

A. A brief bibliography of relevant technical papers and research notes (published and unpublished) which document the technical ideas upon which the proposal is based may be provided. Copies of not more than three (3) relevant papers can be included in the submission. This Section does not count towards the overall page limit for Volume I.

4. 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*), grant, cooperative agreement, or other transaction;
- (11) Place(s) and period(s) of performance;
- (12) Total proposed cost separated by basic award and option(s) (if any);
- (13) Name, address, and telephone number of the 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.

Detailed cost breakdown to include: (1) total program cost broken down by major cost items (direct labor, including labor categories; subcontracts; materials; other direct costs, overhead charges, etc.) and further broken down task and phase; (2) major program tasks by year; (3) an itemization of major subcontracts and equipment purchases; (4) an itemization of any information technology (IT) purchase¹; (5) a summary of projected

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- ¹ IT is defined as “any equipment, or interconnected system(s) or subsystem(s) of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the agency. (a) For purposes of this definition, equipment is used by an agency if the equipment is used by the agency directly or is used by a contractor under a contract with the agency which – (1) Requires the use of such equipment; or (2) Requires the use, to a significant extent, or such equipment in the performance of a service or the furnishing of a product. (b) The term “information technology” includes computers, ancillary, software, firmware and similar procedures, services (including support services), and related resources. (c) The term “information technology” does not include – (1) Any equipment that is acquired by a contractor incidental to a contract; or (2) Any equipment that contains imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC

funding requirements by month; and (6) the source, nature, and amount of any industry cost-sharing; and (7) identification of pricing assumptions of which may require incorporation into the resulting award instrument (e.g., use of Government Furnished Property/Facilities/Information, access to Government Subject Matter Expert/s, etc.). 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. 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. NOTE: for IT and equipment purchases, include a letter stating why the offeror cannot provide the requested resources from its own funding.

Supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates in B. 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 offeror is seeking a procurement contract award of \$650,000 or greater unless the offeror request an exception from the requirement to submit cost of pricing data. “Cost or pricing data” are not required if the offeror proposes an award instrument other than a procurement contract (e.g., a grant, cooperative agreement, or other transaction.) All proprietary subcontractor proposal documentation, prepared at the same level of detail as that required of the prime, of which cannot be uploaded to TFIMS 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 offeror’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” dtd 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.

(heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology.”

C. Submission Dates and Times

1. Full Proposal Date

The full proposal (original and designated number of hard and electronic copies) must be submitted to DARPA/MTO, 3701 North Fairfax Drive, Arlington, VA 22203-1714 (Attn.: BAA 08-16) on or before 4:00 p.m., local time, April 11, 2008 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. Full proposals submitted after the due date specified in the BAA or due date otherwise specified by DARPA after review of proposal abstracts may be selected contingent upon the availability of funds.

The full proposal (original and two (2) hard and electronic copies) must be submitted in time to reach DARPA by April 11, 2008 (initial closing), in order to be considered during the initial evaluation phase; however, BAA 08-16 will remain open until 4:00 PM EST February 25, 2009). Proposals may be submitted at any time from issuance of this announcement through 4:00 PM EST February 25, 2009; however, offerors are warned that the likelihood of funding is greatly reduced for proposals submitted after the initial closing date deadline.

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.

D. Intergovernmental Review (if applicable)

Not Applicable

E. Funding Restrictions

Not Applicable

V. APPLICATION REVIEW INFORMATION

A. 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: (a) Ability to meet Program Go/No-Go Metrics; (b) Overall Scientific and Technical Merit;

(c) Potential Contribution and Relevance to the DARPA Mission; (d) Realism of Proposed Schedule; (e) Proposer's Capabilities and/or Related Experience; (f) Plans and Capability to Accomplish Technology Transition; and (g) 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:

(a) Ability to meet program Go/No-Go Goals

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. The proposed technical approach is feasible, achievable, complete and supported by a

(b) 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 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 identifies major technical risks and planned mitigation efforts are clearly defined and feasible. The proposal clearly explains the technical approaches that will be employed to meet or exceed each program metric listed in Section IV.B. Detailed Technical Proposal, [page 15](#). and provides ample justification as to why the approaches are feasible.

(c) 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.

(d) 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.

(e) Proposer's Capabilities and/or Related Experience

The proposer's prior experience in similar efforts must clearly demonstrate an ability to deliver products that meet the proposed technical performance within the proposed budget and schedule. The proposed team has the expertise to manage the cost and

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

(f) 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, to the extent to which intellectual property rights limitations creates or may create a barrier to technology transition.

(g) 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 selectable 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.

B. Review and Selection 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 Information”, Section IV.B.. 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.

VI. AWARD ADMINISTRATION INFORMATION

A. Award Notices

As soon as the evaluation of a proposal is complete, the offeror 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 U. S. mail and electronic mail to the Technical POC identified on the proposal coversheet.

B. Administrative and National Policy Requirements

1. Security

The Government anticipates that proposals submitted under this BAA will be unclassified. In the event that a proposer chooses to submit a classified proposal or submit any documentation that may be classified, the following information is applicable.

Security classification guidance on 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 choosing to submit a classified proposal must first receive permission from the Original Classification Authority to use their information in replying to this BAA. Applicable classification guide(s) should be submitted to ensure that the proposal is protected appropriately.

Classified submissions shall be in accordance with the following guidance:

Collateral Classified 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 only be mailed via U.S. Postal Service (USPS) Registered Mail or U.S. Postal Service 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: Microsystems Technical Office
Reference: (BAA 08-16)
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 should be hand carried via an authorized, two-person courier team to the DARPA CDR.

Special Access Program (SAP) Information: Contact the DARPA Special Access Program Central Office (SAPCO) 703-526-4052 for further guidance and instructions prior to transmitting SAP information to DARPA. Top Secret SAP, must be transmitted via approved methods for such material. Consult the DoD Overprint to the National Industrial Security Program Operating Manual for further guidance. *Prior to transmitting SAP material*, it is strongly recommended that you coordinate your submission with the DARPA SAPCO.

Sensitive Compartmented Information (SCI) Data: Contact the DARPA Special Security Office (SSO) at 703-812-1994/1984 for the correct SCI courier address and instructions. All SCI should be transmitted through your servicing Special Security Officer (SSO). SCI data must be transmitted through SCI channels only (i.e., approved SCI Facility to SCI facility via secure fax).

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 Offeror's responsibility to clearly define to the Government what is considered proprietary data.

Offerors 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 that the formal request is received at this office within 5 days after unsuccessful notification.

2. Intellectual Property

a. Procurement Contract Proposers

i. 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)

ii. 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)

**b. Non-Procurement Contract Proposers –
Noncommercial and Commercial Items (Technical Data
and Computer Software)**

Proposers responding to this BAA requesting a Grant, Cooperative Agreement, Technology Investment Agreement, or Other Transaction for Prototype 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. 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."

c. 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.

d. 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, offerors 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. 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.

4. Human Use

Proposals selected for contract award are required to comply with provisions of the Common Rule (32 CFR 219) on the protection of human subjects in research (<http://www.dtic.mil/biosys/downloads/32cfr219.pdf>) and the Department of Defense Directive 3216.2 (<http://www.dtic.mil/whs/directives/corres/html2/d32162x.htm>). All proposals that involve the use of human subjects are required to include documentation of their ability to follow Federal guidelines for the protection of human subjects. This includes, but is not limited to, protocol approval mechanisms, approved Institutional Review Boards, and Federal Wide Assurances. These requirements are based on expected human use issues sometime during the entire length of the proposed effort.

For proposals involving "greater than minimal risk" to human subjects within the first year of the project, performers must provide evidence of protocol submission to a federally approved IRB at the time of final proposal submission to DARPA. For

proposals that are forecasted to involve “greater than minimal risk” after the first year, a discussion on how and when the offeror will comply with submission to a federally approved IRB needs to be provided in the submission. More information on applicable federal regulations can be found at the Department of Health and Human Services – Office of Human Research Protections website (<http://www.dhhs.gov/ohrp/>). Any aspects of a proposal involving human use should be specifically called out as a separate element of the statement of work and cost proposal to allow for independent review and approval of those elements.

5. 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); (ii) the guidelines described in National Institutes of Health Publication No. 86-23, "Guide for the Care and Use of Laboratory Animals"; (iii) DoD Directive 3216.01, “Use of Laboratory Animals in DoD Program.”

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. Publication Approval

Offerors are advised if they propose grants or cooperative agreements, DARPA may elect to award other award instruments. DARPA will make this election if it determines that the research resulting from the proposed program will present a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense. Any award resulting from such a determination will include a requirement for DARPA permission before publishing any information or results on the program.

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

When submitting material for written approval for open publication as described in subparagraph (a) above, the Contractor/Awardee must submit a request for public release 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/Awardee'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.

7. 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, 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.

8. 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.

C. Reporting

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

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>.

2. Representations and Certifications

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

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.

VII. AGENCY CONTACTS

Administrative, technical or contractual questions should be sent via e-mail to BAA08-16@darpa.mil. If e-mail is not available, fax questions to (703) 696-2206, Attention: BAA 08-16. All requests must include the name, email address, and phone number of a point of contact.

The technical POC for this effort is Dr. Devanand K. Shenoy
Fax: (703) 696-2206
PHONE (571) 218-4932

E-mail: baa08-16@darpa.mil.