



Broad Agency Announcement

Transformative Apps

Transformational Convergence Technology Office
(TCTO)

DARPA-BAA-10-41

March 3, 2010

Table of Contents

Part One: Overview Information 3

Part Two: Full Text of Announcement

Sec. I. - Funding Opportunity Description..... 4

Sec. II. - Award Information 9

Sec. III. - Eligibility Information

 Eligible Applicants 10

Procurement Integrity, Standards of Conduct, Ethical Considerations, and

Organizational Conflicts of Interest 9

 Cost Sharing and Matching..... 11

Sec. IV. - Application and Submission Information

 Address to Request Application Package 11

 Content and Form of Application Submission..... 11

 Submission Dates and Times 24

 Funding Restrictions 24

 Other Submission Requirements 25

Sec. V. - Application Review Information

 Evaluation Criteria..... 25

 Review and Recommendation Process 26

Sec. VI. - Award Administration Information

 Abstract Encourage/Discourage 27

 Award Notices 27

 Administrative and National Policy Requirements..... 27

 Reporting 32

Sec. VII. - Agency Contacts 33

Sec. VIII. - Other Information

 Intellectual Property..... 33

 Solicitation Web Site 35

Part One: Overview Information

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA)
- **Funding Opportunity Title** – Transformative Apps
- **Announcement Type** – Initial Broad Agency Announcement
- **Funding Opportunity Number** – Broad Agency Announcement (BAA) DARPA-BAA-10-41
- **Catalog of Federal Domestic Assistance Numbers (CFDA)** – 12.910 Research and Technology Development
- **Dates**
 - Posting Date: See announcement at www.fbo.gov
 - Abstracts
 - Due Date – 1200 noon (ET), 17 March 2010
 - Proposals
 - Initial Closing – 1200 noon (ET), 19 April 2010
 - Final Closing – 1200 noon (ET), 30 August 2010
- **Anticipated Individual Awards** – Multiple awards are anticipated.
- **Types of Instruments That May Be Awarded** – Procurement contract, grant, cooperative agreement or other transaction.
- **Technical POC** – Dr. Mari Maeda, Program Manager, DARPA
 - EMAIL: DARPA-BAA-10-41@darpa.mil
 - FAX: (703) 248-1880
 - ATTN: DARPA-BAA-10-41
3701 North Fairfax Drive
Arlington, VA 22203-1714

Part Two: Full Text of Announcement

I. FUNDING OPPORTUNITY DESCRIPTION

The Defense Advanced Research Projects Agency (DARPA) is soliciting proposals for innovative research in the area of tactical application development, evaluation, and enhancements.

Introduction



Today’s military handhelds, and the supporting network infrastructure, are designed to be highly robust and secure. Unfortunately, they are also fairly inflexible and very costly. New applications, and modifications to existing applications, can take years to field. Development is hampered by tight integration of hardware and software that is often generations behind commercial technology. Further complicating matters is the standard DoD practice to segregate users, requirements, and procurement in a highly disciplined process which does not permit a quick reaction in the face of rapidly changing user needs.

The goal of the Transformative Apps program is to place the right mobile software applications (“apps”) into the hands of warfighters as the apps are needed. As a result of this program, a diverse array of apps of national security relevance will be realized using an innovative new development and acquisition process. A military apps marketplace will be created to enable rapid innovation to meet user needs based on a direct collaboration between a vibrant and highly competitive development community and involved communities of end-users. The program will address all the challenges – technical, business, and operational – faced to make the new capabilities available for use in the field. The end objective is to transition the resulting systems to the end users in the Services, and to foster a new model for rapidly and effectively acquiring, introducing, maintaining, and enhancing software.

The starting point of the program will build on commercial standards and practices with military-specific modifications in order to produce secure, affordable, and rapidly deployable solutions for the warfighters. As an effort to reduce costs and expedite initial

development, the program will leverage existing commercial handhelds for the initial development efforts and subsequent evaluations. Total cost is a very important consideration in the program. The end goal will result in the handheld devices and apps broadly available to the lowest military echelons, a user base comprising of hundreds of thousands of individuals. Current commercial smartphone marketplaces have demonstrated several characteristics consistent and essential to meeting this goal including: a low barrier to entry for new application innovators; transparency allowing developers and users to discover and test out apps; open development environments; and a compensation model that is tied to end-user utility and adoption. Most importantly, the commercial marketplace does not rely solely on a requirement driven process, but instead rewards its developers for producing innovative applications.

A centralized marketplace for military apps will be created which will include infrastructure allowing collaboration and innovation between the development and end-user communities. Since it is of key importance that the resulting apps meet the evolving requirements of the field, the end-users will be included in the innovation process to allow them to screen the initial applications and guide the ongoing software enhancements. Some of the most successfully fielded systems have relied on this style of interactive user feedback. For example, enhancements to the DARPA-developed TIGR system are guided by direct user feedback from end-users in Afghanistan and Iraq. The marketplace infrastructure will nurture the dynamic innovation process, allowing military users to communicate new ideas easily and openly with one another and with the development community at large. We intend to support both frequent user workshops and beta testing of apps by a significant number of users both inside and outside the continental United States. Mechanisms for collecting feedback from the end-users and detailed application usage statistics will also be put in place.

Initially, at least two distinct repositories are envisioned: one holding beta apps that are queued for initial app evaluations, and a separate repository holding apps that have been vetted, certified and approved for use. While the certification process will ultimately involve government organizations, new tools and ideas are needed to streamline and effectively evaluate and mitigate security risks, network impacts etc.

As part of creating the military apps marketplace, we will be aggressively exploring business models that can support this effort and are alternatives to the traditional acquisition paradigm. While many of the apps developed for this program may have originated through a contract from the government (through this BAA or other vehicles), we are strongly encouraging participation from nontraditional sources by lowering the existing barriers to entry (e.g. long proposal writing, DOD contracting). New business arrangements and processes will be created that encourage broad participation from numerous development teams. We will explore appropriate rewards for the developers that are based on number of downloads, usage statistics or other measures of value to end-users. The program will also explore alternative models for sustaining and enhancing the software in an efficient and cost-effective manner.

Military use of information technology poses additional unique challenges. Tactical networks are significantly less reliable than commercial networks. Issues such as frequent link disconnections, as well as limited bandwidth availability, must be taken into consideration when designing application services and backend architectures.

Applications will not be able to connect reliably to large centralized servers, but instead will need to rely on distributed compute/storage nodes in vehicles or outposts. Critical aspects of security vulnerabilities must also be carefully examined, taking into account tradeoffs in usability, performance, and complexity. The program will leverage state-of-the-art commercial enterprise security and overlay DoD-specific security enhancements as required.

DARPA seeks proposals for new and innovative technologies in the following Areas of Interest.

Apps Marketplace Architecture

A new architecture for apps marketplace and collaboration infrastructure is required. Of particular interest are: tools and processes (spanning the range from automated code validation tools to quality assurance management processes) to be used in vetting new apps, social networking platforms for promoting innovation and idea sharing between users and developers, schemes to incentivize user feedback and participation, and new business models for creating and maintaining apps.

Applications Development

DARPA is seeking applications to fill a diverse set of needs, including the tactical battlefield, humanitarian missions, disaster recovery, and other mission areas. Example functionalities include command and control, reporting, mission planning, intelligence/surveillance/reconnaissance, real-time collaboration, geospatial visualization, analysis, language translation, training, and logistics tracking. For the initial implementation, all apps should target the *Android*¹ platforms. Special attention must be paid to the apps' user interfaces and usability functions, as well as striving towards general simplicity and ease-of-use. While some apps will function without network access (except for occasional synchronization or updates), other apps may require more consistent network connectivity. For apps that rely heavily on network connectivity, the emphasis must be placed on minimal bandwidth consumption and application robustness in spite of frequent network disconnection. In all cases, any server infrastructure requirements needed to support the apps should be included as part of the proposal.

Middleware Services and Libraries

Middleware services and libraries are required to facilitate shared capabilities and accelerate app development. Examples technologies include map viewing, time services, data synchronization, speech recognition, information assurance, peer-to-peer services, and apps management. Of particular importance are middleware and tools to enable

¹ The program may consider alternative platforms in future solicitations.

secure, robust operation of apps on tactical networks in spite of limited backend computing/storage resources and dynamically changing connectivity. Data compression, synchronization, pre-fetch and caching will play a key role in many of the applications. Tools for monitoring, managing and analyzing individual apps and network traffic will also be developed as part of this program.

Network Infrastructure

An affordable, robust, and secure mobile tactical network capability compatible with commercial smartphones will be developed. Infrastructure kits that allow for light-weight mobile base stations need to be easily deployed in multiple variants (e.g. for a large fixed site location, an outpost, a vehicle on-the-move or at-the-halt) and will be used to reach mobile dismounted users. The program will leverage, to the greatest extent possible, commercial components and standards and focus on demonstrating “good enough” solutions with appropriate security and functionality enhancements for tactical users. Non-developmental commercial off-the-shelf (COTS) hardware should be favored when available. The nodes must be sufficiently low-cost and affordable for wide deployment to the lowest tactical echelons and have a desired target network node cost of \$5,000 per vehicle. Solutions that build on open cellular standards (3GPP) should be considered as well as open source implementations of those standards (e.g. OpenBTS). Proposals should describe the hardware and software design, trade-offs in cost/size/reach/power, and approaches in network discovery, control, provisioning and management, routing and inter-networking. Special attention must be given to the software modifications required to address key security vulnerabilities in commercial devices and wireless networks. If hardware modifications are recommended, a justification must be clearly articulated and the approach must be consistent with the program goal of affordable per-unit cost and rapid execution. The Transformative Apps program will primarily focus on the use of apps in **unclassified** environments and networks. Any efforts that specifically focus on enabling apps on classified networks should be described as part of options.

Other Considerations

DARPA is also interested in proposals outside the Areas of Interest described above, including vulnerability analysis, security architecture, and other topics related to apps development and deployment. The following are additional considerations for the proposers:

- Proposed schedules should be very aggressive, with initial proof-of-concept demonstration targeted within the first 6 months, and iterative enhancements thereafter.
- Proposers should submit separate proposals if they are interested in more than one Area of Interest.
- Proposals with efforts involving development of multiple apps (or multiple services) should describe each of the apps (or services) in separate tasks that are individually costed out or, alternatively, write separate proposals.

- An organization that is proposing to implement an apps store will be expected to maintain full fairness and impartiality, and hence are strongly discouraged from developing apps under this BAA.

The Defense Advanced Research Projects Agency (DARPA) often selects its research efforts through the Broad Agency Announcement (BAA) process. This BAA is being issued, and any resultant selection for negotiation and/or award will be made, using procedures under FAR Part 35.016. Proposals received as a result of this BAA shall be evaluated in accordance with evaluation criteria specified herein through a scientific review process. The BAA will appear on the Federal Business Opportunities website, <http://www.fedbizopps.gov/>, and the Grants.gov website at <http://www.grants.gov/>. The following information is for those wishing to respond to the BAA.

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 proposers. The Government also reserves the right to conduct discussions if it is later determined to be necessary. If warranted, portions of resulting awards may be segregated into pre-priced options. Additionally, DARPA reserves the right to accept proposals in their entirety or to select only portions of proposals for award. In the event that DARPA desires to award only portions of a proposal, negotiations may be opened with that proposer. The Government reserves the right to fund proposals in phases with options for continued work 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 V - Application Review Information), 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 may 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, while perhaps not qualifying as 'fundamental research' under the foregoing definition, 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.

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.

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 sector 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.

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. Mari Maeda.

Once the proposals have been received, and prior to the start of proposal evaluations, the Government will assess potential conflicts of interest in regards to the DARPA Program Manager, as well as those individuals chosen to evaluate proposals received under this BAA, 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.)

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 the proposer's contact information and a summary of the potential conflict by email to the mailbox address for this BAA at DARPA-BAA-10-41@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 rejected 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 Technology Investment Agreement 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.

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. Security and Proprietary Issues

NOTE: If proposals are classified, the proposals must indicate the classification level of not only the proposal itself, but also the anticipated award document classification level.

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.

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

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

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 addressed to:

Defense Advanced Research Projects Agency
ATTN: TCTO
Reference: DARPA-BAA-10-41
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 DARPA's policy 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 five days after unsuccessful notification.

2. Abstract and Proposal Information

Proposers are strongly encouraged to submit an abstract (white paper) in advance of a full proposal (see also sections B.3 and B.4 below). This procedure is intended to minimize unnecessary effort in proposal preparation and review. The time and date for submission of proposal abstracts is specified in Section C on page 23. DARPA will acknowledge receipt of the submission and assign a control number that shall be used in all further correspondence regarding the abstract.

DARPA will respond to abstracts with a statement as to whether DARPA is interested in the idea. DARPA will attempt to reply to abstract submissions via email within thirty (30) calendar days of receipt. Should a proposer be discouraged from submitting a full proposal, the email shall contain feedback for the proposer regarding the rationale for the decision not to recommend that a full proposal be submitted. Abstracts will be reviewed in the order they are received. Early submissions of abstracts and full proposals are strongly encouraged because selections may be made at any time during the period of the solicitation. Regardless of DARPA's response to an abstract, proposers may submit a full proposal. DARPA will review all full proposals submitted using the published evaluation criteria and without regard to any comments resulting from the review of an abstract.

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 180 days from the date of posting on FedBizOpps and Grants.gov. Ability to review late submissions remains contingent on availability of funds.

Restrictive notices notwithstanding, abstracts/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 non-disclosure requirements. Abstracts and proposals may not be submitted by fax or e-mail; any so sent will be disregarded.

Submissions not meeting the format described in the BAA may not be reviewed. All administrative correspondence and questions on this solicitation, including requests for information on how to submit an abstract or full proposal to this BAA, should be directed to the administrative addresses below; e-mail or fax is preferred.

- EMAIL: DARPA-BAA-10-41@darpa.mil
- FAX: (703) 248-1880
- ATTN: DARPA-BAA-10-41
3701 North Fairfax Drive
Arlington, VA 22203-1714

DARPA will employ an electronic upload submission system (T-FIMS) for all unclassified responses to this BAA. Unclassified abstracts and proposals sent in response to DARPA-BAA-10-41 must be submitted through T-FIMS. See <https://www.tfims.darpa.mil/baa/> for more information on how to request an account, upload abstracts and proposals, and use the T-FIMS tool. 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 abstract/proposal is due to create an account in T-FIMS and submit the proposal. All proposers using T-FIMS must also encrypt the abstract/proposal, as per the instructions below.

All abstracts and proposals submitted electronically through T-FIMS 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 DARPA-BAA-10-41@darpa.mil at the time of 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 abstract/proposal not being evaluated. For further information and instructions on how to zip and encrypt proposal files, see <https://www.tfims.darpa.mil/baa/>.

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

the Grants.gov APPLY electronic submission. As a reminder, DO NOT submit abstracts through Grants.gov.

Proposers must complete the following steps before submitting proposals on Grants.gov (these steps are also detailed at www.grants.gov/applicants/get_registered.jsp):

- Proposers must obtain a DUNS number
- Proposers must register their organization in the Central Contractor Registration (CCR) (<https://www.bpn.gov/CCRSearch/Search.aspx>)
- Proposers must obtain a user name and password with an E-Authentication provider
- Proposers must register the Authorized Organization Representative (AOR) in Grants.gov
- Proposers must have the organization's E-BIZ point of contact authorize the AOR to submit applications.

Grant or cooperative agreement proposals may be submitted to DARPA through Grants.gov, or through T-FIMS. If proposers intend to use Grants.gov as their means of submission, then they must submit their entire proposal through Grants.gov; applications cannot be submitted in part to Grants.gov and in part through T-FIMS or hard copy.

3. Abstracts

Initial proposer submissions to the Government should be a 9-page abstract. The submission of the abstract is intended to avoid unnecessary effort and expense in proposal generation for ideas that will not be selected within this BAA. The purpose of the abstract is to give the proposer the opportunity to solicit early feedback from the Government as to whether or not the research proposed is of interest to DARPA/TCTO. It is thus in the proposer's best interest to clearly articulate the innovative concept and technology development needed with respect to demonstrable metrics. Proposers should avoid using proprietary information or data not critical to the idea being presented.

Abstracts must describe the problem that will be solved, evidence that the proposed solution will be successful, and quantitative assessment of the impact of such a solution, should it prove successful.

4. Abstract Preparation and Format

Abstracts should contain the following parts: Cover Sheet of the offeror's planned proposal (see Proposal Section 1.1 below for details), a Technical Summary of the proposer's planned proposal (in PowerPoint slides and Text); and a Cost Summary as summarized below.

SECTION	PAGE LIMIT	TOPICS
Cover Sheet	1	Proposer Identification
Technical Summary	3 slides	Summary of key aspects of the proposal.
Technical Summary	4	Summary of Technical Proposal
Cost Summary	1	Summary of Cost and Schedule

Table 1 - Summary of Required Abstract Contents

The abstract shall include the following sections, each starting on a new page (where a "page" is 8-1/2 by 11 inches with type not smaller than 12 point, margins not smaller than 1 inch, and line spacing not smaller than single-spaced). The overall page limit of the abstract must not exceed 9 pages. All submissions must be in English.

5. Proposal Preparation and Format

The proposal shall be delivered in two volumes, Volume 1 (technical proposal) and Volume 2 (cost proposal). Proposals not meeting the format described in this BAA may be rejected without review.

The technical proposal shall include the following sections, each starting on a new page (where a "page" is 8-1/2 by 11 inches with type not smaller than 12 point, charts may use 10 pt font, margins not smaller than 1 inch, and line spacing not smaller than single-spaced). All submissions must be in English. Individual elements of the proposal shall not exceed the total of the maximum page lengths for each section as shown in braces { } below.

Volume 1 – Technical and Management Proposal

Proposal Section 1 - Administrative

1.1 Cover Sheet

The cover sheet should contain the following information:

- BAA number;
- Proposal title;
- Area of Interest;
- Lead organization submitting the proposal;
- Technical point of contact, including: name, telephone number, electronic mail address, fax (if available), and mailing address;
- Administrative point of contact, including: name, telephone number, electronic mail address, fax (if available), and mailing address;
- Total funds requested from DARPA. Summary of the costs of the proposed research, including total base cost, estimates of base cost in each year of the

effort, estimates of itemized options in each year of the effort, and cost sharing if relevant;

- Contractor's reference number (if any); and
- Contractor's type of business, selected from among the following categories:
 - WOMEN-OWNED LARGE BUSINESS,
 - OTHER LARGE BUSINESS,
 - SMALL DISADVANTAGED BUSINESS [Identify ethnic group from among the following: Asian-Indian American, Asian-Pacific American, Black American, Hispanic American, Native American, or Other],
 - WOMEN-OWNED SMALL BUSINESS,
 - OTHER SMALL BUSINESS,
 - HBCU,
 - MI,
 - OTHER EDUCATIONAL,
 - OTHER NONPROFIT, or
 - FOREIGN CONCERN/ENTITY.
- Other team members (if applicable) and type of business for each.

1.2 Official Transmittal Letter

1.3 Table of Contents {No page limit}

Proposal Section 2 - Technical Details

2.1 Multimedia Summary: Video and PowerPoint Summary Chart {7 charts}

Provide a one Quadchart slide plus up to 6 PowerPoint charts together with a video presentation (length not to exceed 10 minutes and in .wmv format), summarizing key aspects of the proposal.

2.2 Innovative Claims for the Proposed Research {2 pages}

This page is the centerpiece of the proposal and should succinctly describe the unique proposed approach and contributions. This section may also *briefly* address the following topics:

- a. Problem Description - Provide a concise description of the problem areas addressed. Make this specific to your approach.
- b. Research Goals - Identify specific research goals. Goals should address the technical challenges of the effort.
- c. Expected Impact - Describe the expected impact of your research.

2.3 Proposal Roadmap {1 page}

The roadmap provides a top-level view of the content and structure of the proposal. It contains a synopsis for each of the roadmap areas defined below, which should be elaborated elsewhere. It is important to make the synopses as explicit and informative as possible. The roadmap must also cross-reference the proposal page number(s) where each area is elaborated. The required roadmap areas are:

- a. Main goals of the proposed research.
- b. Tangible benefits to end users (i.e., benefits of the capabilities afforded if the proposed technology is successful).
- c. Critical technical barriers (i.e., technical limitations that have, in the past, prevented achieving the proposed results).
- d. Main elements of the proposed technical approach.
- e. Basis of confidence (i.e. rationale that builds confidence that the proposed approach will overcome the technical barriers).
- f. Nature and description of end results to be delivered to DARPA. In what form will results be developed and delivered to DARPA and the scientific community? Note that DARPA encourages experiments, simulations, specifications, proofs, etc. to be documented and published to promote progress in the field. Proposers should specify both final and intermediate products.
- g. Cost and schedule of the proposed effort.

2.4 Technical Approach {16 pages}

Provide a detailed description of the technical approach. Teams may choose to allocate the pages among the program phases unequally; however, separate sections are required for each phase. This section will elaborate on many of the topics identified in the proposal roadmap and will serve as the primary expression of the proposers' scientific and technical ideas.

2.5 Prior Work {3 pages}

Describe any ongoing work or past projects in the related space that have been successfully completed by the team members. Describe if the deliverable or products are fielded (and to what extent), and whether the technology is being marketed.

2.6 Statement of Work (SOW) {4 pages}

In plain English, clearly define the technical tasks/subtasks to be performed, their durations, and dependencies among them. For each task/subtask, provide:

- A general description of the objective (for each defined task/activity);
- A detailed description of the approach to be taken to accomplish each defined task/activity);
- Identification of the primary organization responsible for task execution (prime, sub, team member, by name, etc.);
- The completion criteria for each task/activity - a product, event or milestone that defines its completion.
- Define all deliverables (reports, data, software, hardware, prototypes, etc.) to be provided to the Government in support of the proposed research tasks/activities. Include expected delivery date for each deliverable.
- Cost, schedule and measurable milestones for the proposed research, including estimates of cost for each major task in each year of the effort delineated by the prime and major subcontractors, total cost and company cost share, if applicable. (Note: Measurable milestones should capture key development points in tasks and should be clearly articulated and defined in time relative to start of effort.)

Note: The SOW should be developed so that each phase of the program is separately defined. Do not include any proprietary information in the SOW.

2.7 Intellectual Property {No page limit}

Per section VIII - Other Information, proposers responding to this BAA must submit a separate list of all technical data or computer software that will be furnished to the Government with other than unlimited rights. The Government will assume unlimited rights if proposers fail to identify any intellectual property restrictions in their proposals. Include in this section all proprietary claims to results, prototypes, deliverables or systems supporting and/or necessary for the use of the research, results, prototypes and/or deliverables. If no restrictions are intended, then the proposer should state “NONE”. If the expected deliverables are to be furnished with other than unlimited rights or Government Purpose Rights, the proposal should include costing for widespread use (e.g. DOD-wide enterprise or per-seat licensing, that the government may choose to exercise). Because the goal of the program is large-scale adoption of military-relevant apps and services, affordability is a key concern and future licensing cost, if any, will be a factor in the proposal evaluation.

2.8 Management Plan {2 pages}

Describe any formal teaming agreements that are required to execute this program, a brief synopsis of all key personnel, and a clearly defined organization chart for the program team (prime contractor and subcontractors, if any).

2.9 Schedule and Milestones {2 pages}

Provide graphic representation of key project milestones and schedule from the date of contract award.

2.10 Personnel, Qualifications, and Commitments {10 pages}

List key personnel, in particular, key developers, showing a concise summary of their qualifications. Provide a description of any previous accomplishments or similar efforts completed/ongoing in this or closely related research area, including identification of other Government sponsors, if any.

Indicate the level of effort in terms of hours to be expended by each person during each contract year and other (current and proposed) major sources of support for them and/or commitments of their efforts. DARPA expects all key personnel associated with a proposal to make substantial time commitment to the proposed activity and the proposal will be evaluated accordingly. It is DARPA’s intention to put key personnel clauses into the contracts, so proposers should not bid personnel whom they do not intend to execute the contract.

Include a table of key individual time commitments as follows:

Key Individual	Project	Pending/Current	2010	2011	2012
Jane Doe	Program Name	Proposed	ZZZ hours	UUU hours	WWW hours
	Project 1	Current	n/a	n/a	n/a
	Project 2	Pending	100 hours	n/a	n/a
John Deer	Program Name	Proposed			

2.11 Organizational Conflict of Interest Affirmations and Disclosure
{No page limit}

Per the instructions in section III.A.1 above, if the proposer or any proposed sub IS providing SETA support, as described, to any DARPA technical office(s) through an active contract or subcontract (regardless of which DARPA technical office is being supported), they must provide documentation: 1) stating which office(s) the proposer, sub and/or individual supports, 2) identify the prime contract numbers, AND 3) include a description of the action the proposer has taken or proposes to take to avoid, neutralize, or mitigate the conflict.

If the proposer or any proposed sub IS NOT currently providing SETA support as described, then the proposer should simply state “NONE.”

Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be rejected without technical evaluation and withdrawn from further consideration for award.

2.12 Human Use {No page limit}

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. For further information on this subject, see section VI.B.4 below. If human use is not a factor in a proposal, then the proposer should state “NONE.”

2.13 Animal Use {No page limit}

For submissions containing animal use, proposals must briefly describe plans for Institutional Animal Care and Use Committee (IACUC) review and approval. For further information on this subject, see Section VI.B.5 below. If animal use is not a factor in a proposal, then the proposer should state “NONE.”

2.14 Statement of Unique Capability Provided by Government or Government-funded Team Member {No page limit}

Per section III.A. - Eligible Applicants, proposals which include Government or Government-funded entities (i.e., FFRDC’s, National laboratories, etc.) as prime, sub or

team member, shall provide a statement which clearly demonstrates the work being provided by the Government or Government-funded entity team member is not otherwise available from the private sector. If none of the team members belongs to a Government or Government-funded entity, then the proposer should state “Not Applicable.”

2.15 Government or Government-funded Team Member Eligibility {No page limit}

Per section III.A. - Eligible Applicants, proposals which include Government or Government-funded entities (i.e., FFRDC’s, National laboratories, etc.) as prime, sub or team member shall provide documentation citing the specific authority which establishes they are eligible to propose to Government solicitations: 1) statutory authority; 2) contractual authority; 3) supporting regulatory guidance; AND 4) evidence of agency approval. If no such entities are involved, then the proposer should state “None.”

2.16 Facilities {2 pages}

Provide a description of the facilities that would be used for the proposed effort. If any portion of the research is predicated upon the use of Government Owned Resources of any type, the proposer shall specifically identify the property or other resource required, the date the property or resource is required, the duration of the requirement, the source from which the resource is required, if known, and the impact on the research if the resource cannot be provided. If no Government Furnished Property is required for conduct of the proposed research, the proposal shall so state.

Volume 2 – Cost Proposal

Cover Sheet

The cover sheet should contain the following information:

- BAA number;
- Area of interest;
- Proposal title;
- Lead organization submitting proposal;
- Type of business, selected among the following categories: “LARGE BUSINESS”, “SMALL DISADVANTAGED BUSINESS”, “OTHER SMALL BUSINESS”, “HBCU”, “MI”, “OTHER EDUCATIONAL”, OR “OTHER NONPROFIT”;
- Contractor’s reference number (if any);
- Other team members (if applicable) and type of business for each;
- 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);
- 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);
- Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract—no fee, cost sharing contract – no fee, or other type of procurement contract (*specify*), or other transaction;
- Place(s) and period(s) of performance;

- Total proposed cost separated by basic award and option(s) (if any);
- Name, address, and telephone number of the proposer’s cognizant Defense Contract Management Agency (DCMA) administration office (*if known*);
- Name, address, and telephone number of the proposer’s cognizant Defense Contract Audit Agency (DCAA) audit office (*if known*);
- Date proposal was prepared;
- DUNS number;
- TIN number;
- Cage code;
- Subcontractor information; and
- Proposal validity period (minimum 180 days).

Cost Summaries {5 pages}

Provide a top-level total cost summary for the entire program broken down by phases. Show each major task and subtask by month and delineate prime and major subcontractor efforts.

Detailed Cost Breakdown

For purposes of building your cost proposal, assume an estimated start date of 1 July 2010. Provide: (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 by task and phase; (2) major program tasks by fiscal year; (3) an itemization of major subcontracts and equipment purchases; (4) an itemization of any information technology (IT) purchase²; (5) a summary of projected funding requirements by month; and (6) the source, nature, and amount of any industry cost-sharing; (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.) and (8) provide appropriate cost or price analyses of subcontractor proposals, IAW FAR 15.404-3, to establish the reasonableness of proposed subcontract prices.

The prime contractor is responsible for compiling and providing all subcontractor proposals for the Procuring Contracting Officer (PCO) with the submission of this proposal. Subcontractor proposals should include Interdivisional Work Transfer

² 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 (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.”

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 proposer cannot provide the requested resources from its own funding.

The Defense Appropriations Act caps indirect cost rates for any procurement contract, grant or agreement using 6.1 Basic Research Funding at 35% of the total cost of the award. Total costs include all bottom line costs. For grants/agreement awardees subject to cost principles in 2 CFR part 220 (Educational Institutions), indirect costs are all costs of a prime award that are Facilities and Administration costs. For grant/agreement awardees subject to the cost principles in 2 CFR part 225 (State, Local, and Indian Tribal Governments), 2 CFR part 230 (Non-profit Organizations) or 48 CFR part 23 (Federal Acquisition Regulation), indirect costs refer to any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective. The cost limitations do not flow down to subcontractors.

Provide supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates 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 proposer requests an exception from the requirement to submit cost or 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.

For information on 845 Other Transaction Authority for Prototypes (OTA) agreements, refer to http://www.darpa.mil/cmo/other_trans.html. All proposers requesting an 845 Other Transaction Authority for Prototypes (OTA) agreement must include a detailed list of milestones. Each such milestone must include the following: milestone description, completion criteria, due date, payment/funding schedule (to include, if cost share is proposed, contractor and Government share amounts). It is noted that, at a minimum, such milestones should relate directly to accomplishment of program technical metrics 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 milestones with a payment/funding schedule to the maximum extent possible. Do not include proprietary data. If the proposer requests award of an 845 OTA agreement 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.acq.osd.mil/dpap/Docs/otguide.doc>), information must be included in the cost proposal to support the claim. Additionally, if the proposer plans requests award of

an 845 OTA agreement, 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.

C. Submission Dates and Times

Abstracts

Abstracts must be submitted to DARPA via T-FIMS on or before 1200 noon (ET), 17 March 2010. Abstracts received after this time and date may not be reviewed.

Proposals

The full proposal must be submitted per the instructions in section IV.B. - Content and Form of Application Submission above by 1200 noon (ET), on 19 April 2010 (initial closing), in order to be considered during the initial evaluation phase. While DARPA-BAA-10-41 will remain open until 1200 noon (ET), 30 August 2010 (final closing date/BAA expiration), proposers are warned that the likelihood of funding is greatly reduced for proposals submitted after the initial closing date.

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

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

D. Intergovernmental Review - N/A

E. Funding Restrictions

The Defense Appropriations Act caps indirect cost rates at 35% of the total cost of the award for any procurement contract, grant or agreement using 6.1 Basic Research Funding. The cost limitations do not flow down to subcontractors. Total costs include all bottom line costs. Indirect costs are defined as follows:

- For Educational Institutions subject to the cost principles in 2 CFR part 220, indirect costs are all costs of a prime award that are Facilities and Administration costs.
- For State, Local, and Indian Tribal Governments subject to 2 CFR part 225, Non-Profit Organizations subject to 2 CFR part 230 and all other organizations subject to 48 CFR part 32 Federal Acquisition Regulation, indirect cost are any cost not directly identified with a single final cost objective (i.e. costs identified with two or more final cost objectives or with at least one intermediate cost objective).

DARPA currently anticipates using 6.2 funding for this program.

F. Other Submission Requirements

Abstracts and proposals **MUST NOT** be submitted to DARPA via email or fax (see Submission instructions above in section IV.B.). Abstract submissions **MUST** be made through T-FIMS.

V. APPLICATION REVIEW INFORMATION

A. Evaluation Criteria

Evaluation of proposals will be accomplished through a scientific review of each proposal using the following criteria. Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. While these criteria are listed in descending order of relative importance, it should be noted that the combination of all non-cost evaluation factors is significantly more important than cost.

1. 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 outcome that achieves the goal can be expected as a result of award. The proposal identifies major technical risks and planned mitigation efforts are clearly defined and feasible.

2. Potential Contribution and Relevance to the DARPA Mission

The potential contributions of the proposed effort with relevance to the national technology base will be evaluated. Specifically, DARPA's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security by sponsoring revolutionary, high-payoff research that bridges the gap between fundamental discoveries and their application.

3. 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.

4. 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. The proposal will be reviewed to determine if the costs proposed are based on realistic assumptions, reflect a sufficient understanding of

the technical goals and objectives of the BAA, and are consistent with the proposer's technical approach (to include the proposed Statement of Work). At a minimum, this will involve review, at the prime and subcontract level, of the type and number of labor hours proposed per task as well as the types and kinds of materials, equipment and fabrication costs proposed. It is expected that the effort will leverage all available relevant prior research in order to obtain the maximum benefit from the available funding. For efforts with a likelihood of commercial application, appropriate direct cost sharing may be a positive factor in the evaluation. The evaluation criterion recognizes that undue emphasis on cost may motivate proposers to offer low-risk ideas with minimum uncertainty and to staff the effort with junior personnel in order to be in a more competitive posture. DARPA discourages such cost strategies.

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

B. Review and 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.

Each proposal will be evaluated on the merit and relevance of the specific proposal as it relates to the office rather than against other proposals for research in the same general area, since no common work statement exists. 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 above in section IV.B. - Content and Form of Application Submission. 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.

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 whose proposal is determined selectable regardless of its overall rating.

Restrictive notices notwithstanding, proposers are advised that employees of commercial firms under contract to the Government may be used by DARPA to administratively process proposals, monitor contract performance, or perform other administrative duties requiring access to other contractors' proprietary information. These support contracts include nondisclosure agreements prohibiting their contractor employees from disclosing

any information submitted by other contractors or using such information for any purpose other than that for which it was furnished. By submission of its proposal, each proposer agrees that proposal information may be disclosed to those non-Government personnel for the limited purposes stated above. In addition, these support contractors are prohibited from competition in DARPA technical research. 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 scientific review process, the original electronic uploaded file of each proposal received will be retained at DARPA for an indefinite period of time.

VI. AWARD ADMINISTRATION INFORMATION

A. Abstract Encourage/Discourage

The formal recommendation about whether a full proposal should be submitted will be made via email as soon as possible. However, the exact time for response will depend on a variety of circumstances, including the number of abstracts received. These recommendations will state either 1) DARPA/TCTO does NOT encourage the submission of a full proposal based on the submitted abstract, OR 2) DARPA/TCTO is interested in receiving more information and proposers should then expect to develop a full proposal. Please note that this recommendation and any additional feedback provided is for the benefit of the proposer, and following these recommendations is not a guarantee that a full proposal will be funded.

B. Award Notices

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

C. Administrative and National Policy Requirements

1. Meeting and Travel Requirements

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

2. 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.

3. 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>

4. Publication Approval

It is the policy of the Department of Defense that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. The definition of Contracted Fundamental Research is:

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

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

It is anticipated that the performance of research resulting from the BAA will be a mix of fundamental and restricted research.

Proposers 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 and will be considered Restricted Research.

For certain research projects, it may be possible that although the research being performed by the Prime Contractor is Restricted Research, a subcontractor may be conducting Contracted Fundamental Research. In those cases, it is the Prime Contractor's responsibility to explain in their proposal why its subcontractor's effort is Contracted Fundamental Research.

The following same or similar provision will be incorporated into any resultant Restricted Research or Non-Fundamental Research procurement contract or other transaction:

There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval of the DARPA Public Release Center (PRC). All technical reports will be given proper review by appropriate authority to determine which Distribution Statement is to be applied prior to the initial distribution of these reports by the Contractor. With regard to subcontractor proposals for Contracted Fundamental Research, papers resulting from unclassified contracted fundamental research are exempt from prepublication controls and this review requirement, pursuant to DoD Instruction 5230.27 dated October 6, 1987.

When submitting material for written approval for open publication, the Contractor/Awardee must submit a request for public release to the DARPA PRC and include the following information: 1) Document Information: 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 public_release_center@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.

5. 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.

6. 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.

7. Central Contractor Registration (CCR)

Proposers selected, but 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>.

8. On-line Representations and Certifications (ORCA)

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

9. 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.

10. 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.

11. Employment Eligibility Verification

As per FAR 22.1802, recipients of FAR-based procurement contracts must enroll as Federal Contractors in E-verify and use E-Verify to verify employment eligibility of all employees assigned to the award. All resultant contracts from this solicitation will include FAR 52.222-54, "Employment Eligibility Verification." This clause will not be included in grants, cooperative agreements, or Other Transactions.

D. Reporting

The number and types of reports will be specified in the award document, but will include as a minimum monthly financial status reports and an annual project summary. In addition, each performing contractor (including subs) on each team will be expected to provide monthly status reports to the Program Manager. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. These shall be prepared and submitted in accordance with the procedures contained in the award document. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be continued under a follow-on vehicle. There may also be additional reporting requirements for Other Transactions.

1. T-FIMS

The above reports may be electronically submitted by each awardee under this BAA via the DARPA Technical – Financial Information Management System (T-FIMS). If applicable, the T-FIMS URL and instructions will be furnished by the contracting agent prior to award.

2. I-Edison

All required reporting shall be accomplished, as applicable, using the i-Edison.gov reporting website at <http://s-edison.info.nih.gov/iEdison>.

VII. AGENCY CONTACTS

DARPA will use email for all technical and administrative correspondence regarding this BAA, with the exception of select/not-selected notifications.

Administrative, technical or contractual questions should be sent via e-mail to DARPA-BAA-10-41@darpa.mil. All requests must include the name, email address, and phone number of a point of contact.

The technical POC for this effort is Dr. Mari Maeda, electronic mail: DARPA-BAA-10-41@darpa.mil.

VIII. OTHER INFORMATION

1. 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 may use the list during the scientific review 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 (including open source software) that may be embedded in, or that may create linkages affecting distribution rights to, 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 scientific review 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 Procurement Contract or Other Transaction 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 above. The Government may use the list during the scientific review 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, 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.

2. Solicitation Web Site

The solicitation web page at http://www.darpa.mil/tcto_solicitations.html will have a Frequently Asked Questions (FAQ) list.