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BAA 05-51 PROPOSER INFORMATION PAMPHLET

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The Defense Advanced Research Projects Agency (DARPA) often selects its research efforts through the Broad Agency Announcement (BAA) process. The BAA will be posted directly to FedBizOpps.gov, the single government point-of-entry (GPE) for Federal government procurement opportunities over $25,000. The following information is for those wishing to respond to the Broad Agency Announcement.

Application Communities (AC), SOL BAA 05-51, Proposals Due: Initial Closing: October 26, 2005, Final Closing: 02 September 2006, POC: Lee Badger, DARPA/IPTO; FAX: (703) 741-7804

PROGRAM OBJECTIVES AND DESCRIPTION. The Defense Advanced Research Projects Agency (DARPA) is soliciting proposals for DARPA's Information Processing Technology Office (IPTO), to perform research, development, modeling, design, and testing to support the Application Communities (AC) program. DoD computing systems are highly reliant on Commercial Off The Shelf (COTS) software applications. Unfortunately, COTS applications are frequently vulnerable to security compromise and service disruption due to bugs, configuration errors, and operator errors. Such security and reliability failures pose a serious threat to the operational capabilities of military forces. This threat is exacerbated by the fact that DoD systems are frequently comprised of numerous copies of a small chosen set of COTS applications. These application copies are vulnerable to the same problems and are therefore vulnerable to failing simultaneously or sequentially at the command of a skilled attacker. Such software homogeneity has strong manageability advantages, but the risk of catastrophic failure or software blight dramatically reduces the trust that should be placed in such systems wherever there is a channel through which malicious code or commands can be introduced. Significant research has focused on introducing software diversity to limit the impact of single flaws. Diversity appears to be a promising avenue for addressing common mode vulnerabilities, but it will likely increase management costs, and will probably have performance implications as well. An alternative is to augment applications to cooperate so different copies of an application collaboratively reason about their shared attributes to diagnose, protect, and monitor one another.

The AC program seeks to develop a software execution infrastructure for existing COTS programs. This infrastructure will monitor and augment COTS application behavior so multiple active copies of application X running under the infrastructure behave as a self-aware Application-X-Community that: 1) collaboratively diagnoses problems (attacks/bugs/errors), 2) collaboratively responds to problems by generating appropriate configuration changes, patches, filters, etc., and 3) collaboratively generates a community-specific situation awareness gauge that predicts likelihood and timing of imminent problems. Potential formulations for success metrics are: 1) for collaborative diagnosis: xx% accurate problem identification, localization, and diagnosis in xx minutes;

2) for collaborative response: generate effective patches/filters in xx minutes and prevent xx% of harmful patch/filter side effects; and 3) for situational awareness: predict likelihood and timing of problems with xx% accuracy and provide both a local and community-wide measure of risk. In lieu of providing complete program success metrics up front, the AC program requests that AC researchers propose success metrics and the resources and time needed to achieve them. AC researchers are encouraged to provide several alternatives making rational tradeoffs between research ambition and project length. AC researchers should also identify where commercial investment in products and services is justified, in the event the proposed metrics are achieved. The AC program seeks a small number of teams where each team covers all the technical areas and must include an integrator that can bring the resulting technology to market if the research is successful. The program will test the hypothesis that a collaborative reliability and defense system for black-box COTS applications can be made mostly automatic and that application communities encompassing a greater diversity of users and environments are more resilient in the face of unanticipated errors and attacks.

The overarching goal of the AC program is to develop practical technology for on-line, mostly automatic, flaw and attack remediation for heavily-deployed black-box COTS applications. The AC program focuses on the scenario in which an application is used simultaneously by a variety of users and in a variety of settings. This program seeks to determine the extent to which diverse field data from these different users and settings can be combined with techniques such as static binary analysis, model checking, formal specifications, binary instrumentation, correlation, and historical information to characterize an application's intended behavior, diagnose problems, block problems or attack recurrence, restart failed copies into safe states, and monitor health.

This program is not focused on swiftly-spreading worms. Instead, this program focuses on slower and stealthier phenomena in which watching for signatures of propagation mechanisms is more difficult. Proposals should consider the following technical areas. However, alternative approaches will be considered.

Collaborative Diagnosis Technical Area: Learning a new attack or discovering a bug or error is time consuming using current technology. If a community of similar application instances can collect and analyze information related to the failures they experience, the AC program hypothesizes that this collective information can be used to speed up the learning process. The goal, therefore, is rapid application-specific attack or error identification, localization and diagnosis. Technical approaches may include but are not limited to 1) reasoning using differences among nearly identical participants, 2) reconfiguring to highlight differences and 3) combining multiple static and dynamic analyses. In addition to intrusion detection, prior work includes manual specification of behavior models, code scanner/checkers, collaborative bug isolation via instrumentation inserted into the code, and software tomography. Possible metrics include the accuracy of the problem identification and localization, and timeliness of the problem impact assessment.

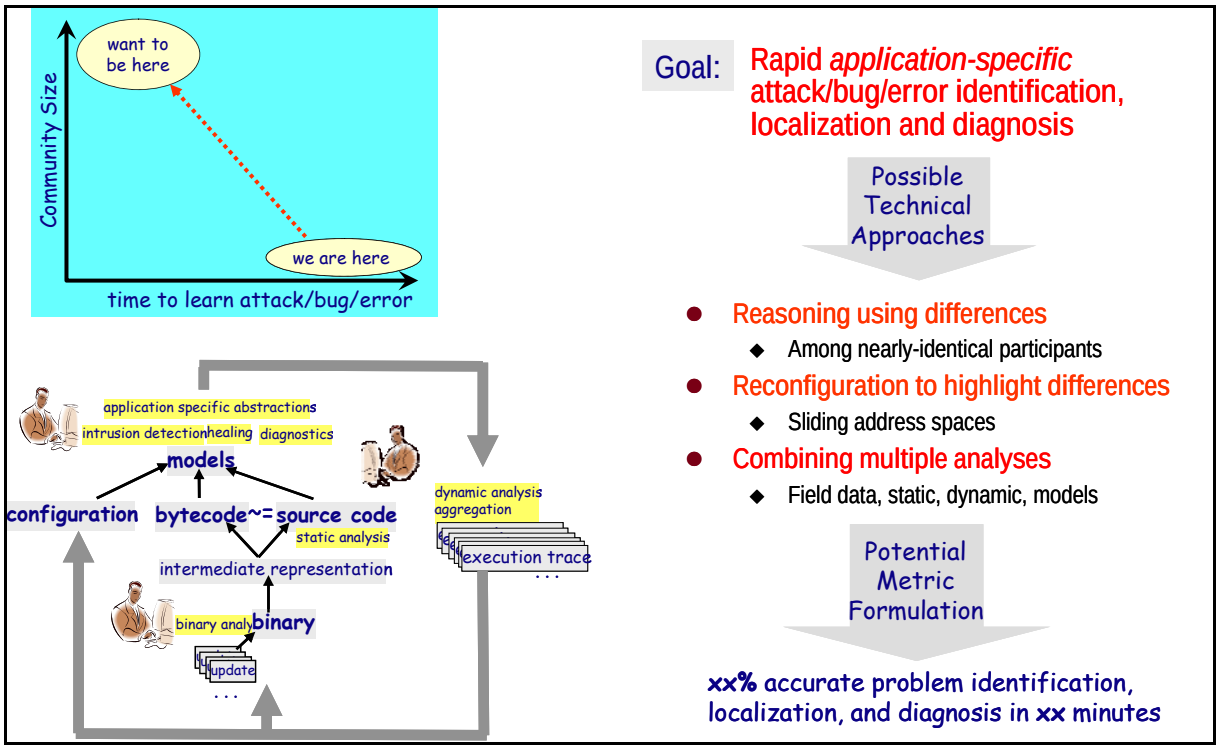

Figure 1. Collaborative Diagnosis

Collaborative Response Technical Area: Fixing complex systems is both slow and error-prone. Through collaboration, this part of the program seeks to enable safe-to-use patches and filters that don't impede intended behavior. One possible strategy is to generate a best-guess patch or filter and then use the information in available traces to validate it against historical behavior. The goal is rapid attack or error suppression that preserves critical functionality. Technical approaches may include but are not limited to 1) collaborative response feedback for patch or filter refinement, 2) predictive checkpointing, 3) speculative execution, 4) targeted static analysis and 5) automatic data structure repair. Possible metrics include the timeliness of generating effective patches or filters, degree of prevention of harmful side effects, recovery time, and time to validate a patch or filter.

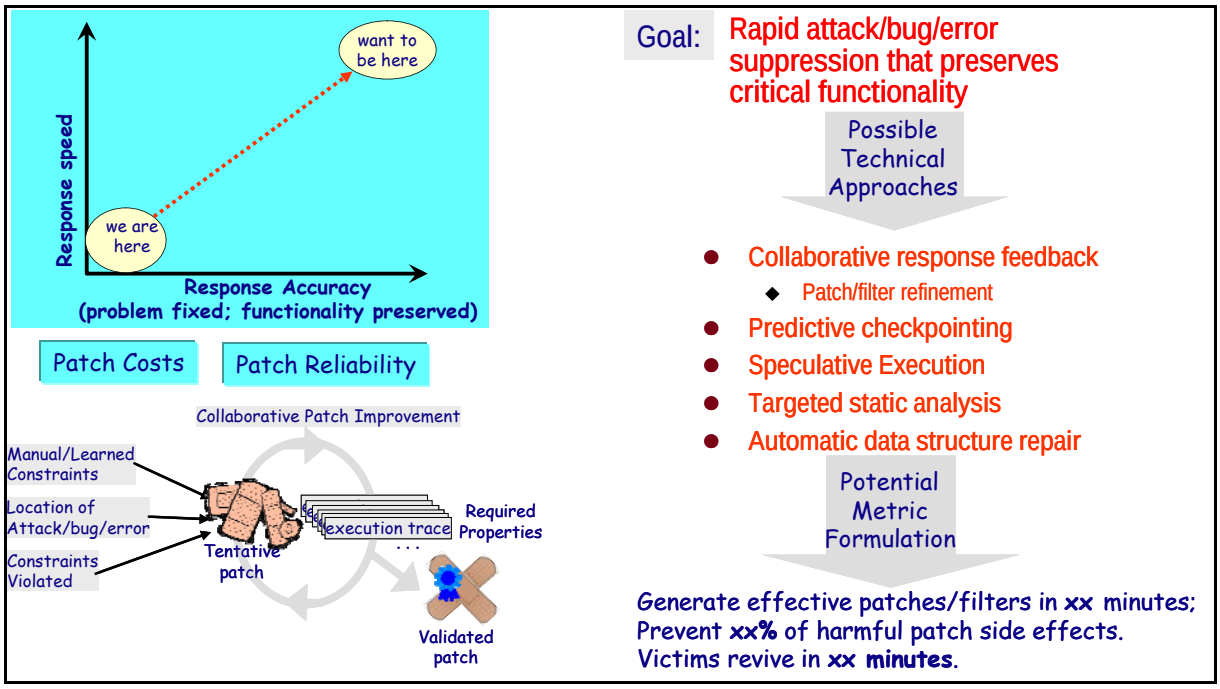

Figure 2. Collaborative Response

Situational Awareness Technical Area: The AC program seeks to provide an early warning system for application community-supported software. Today latent flaws or vulnerabilities are revealed only when failures or attacks become blatant. Some failures or attacks may be stealthy or never revealed. The goal for this technical area is to reason with the information available among the instances of a community and to present the diagnosis information appropriately to different kinds of users in a timely manner so that users can take rational steps to avoid dependencies on at-risk functions. This technical area seeks to notice aspects of a system that are precursors (e.g., including the fact that a system is unusually vulnerable to a current problem experienced in other instances) to estimate the likelihood of the problem and set a likely timeframe to it. Technical approaches may include but are not limited to 1) state sampling and comparison, 2) high dimensional attribute space reduction, 3) vulnerability estimation based on state similarity to victims, 4) multiple anomaly profiles and 5) mission/attacker models. Possible metrics include the accuracy of attack prediction and attack timing.

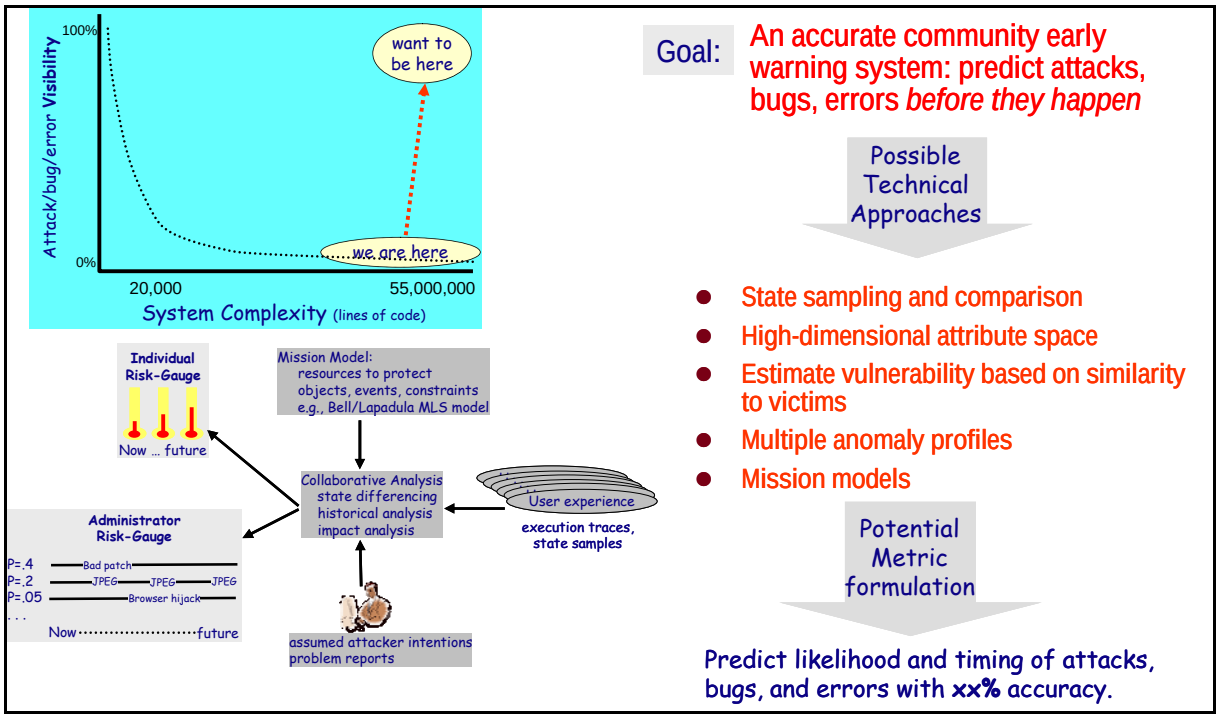

Figure 3. Situational Awareness

The vulnerabilities of computing and information systems addressed by this program include mobile/malicious code, denial-of-service attacks, accidental faults introduced by human error, and problems associated with software aging. The program will build on the advances made in earlier programs addressing the DoD's operational needs for information systems, such as the ability to operate through attacks, maintain critical functionality, gracefully degrade non-critical functions in the face of intrusions and attacks when full functionality cannot be maintained, and dynamically trade off security, performance and functionality as a function of threat.

Assessment and validation of technical approaches will be carried out to determine their efficacy. Proposers should assume that their solutions will be subjected to red team evaluation and budget for several weeks of interaction with a DARPA-provided red team. These interactions will consist of discussions that culminate in a red team exercise of the new technology. This solicitation does not request contracts for red teams, however organizations having red team capabilities that are interested in participating in that capacity should notify DARPA using the BAA's email address (BAA05-51@darpa.mil).

This is a solicitation for an initial phase only. If results are promising, a follow-on program is a possibility. The length of this phase is not set. Proposers should scope the length of the program to the work proposed. While this BAA is for the initial phase only, please provide a description of your implementation strategy for technology breakthroughs achieved in this phase.

PROGRAM SCOPE. Proposed research should investigate innovative approaches and techniques that lead to or enable revolutionary advances in the state-of-the-art. Proposals

are not limited to the specific strategies listed above, and alternative visions will be considered. However, proposals should be for research that substantially contributes towards the goals stated. Specifically excluded is research that primarily results in minor evolutionary improvement to the existing state of practice or focuses on special-purpose systems or narrow applications.

GENERAL INFORMATION

Proposals not meeting the requirements and format described in this pamphlet may not be reviewed. Proposals **MUST NOT** be submitted by fax or e-mail; any so sent will be disregarded. This notice, in conjunction with the BAA 05-51 FBO Announcement and all references, constitutes the total BAA. A Frequently Asked Questions (FAQ) list will be provided. The URL for the FAQ will be specified on the DARPA/IPTO BAA Solicitation page. A Proposers' Day Workshop was held on August 16, 2005. A list of attendees can be found at

http://www.schafertmd.com/acp2005/sortlist1.cfml?sort=2.

Presentations that were given at the Proposers' Day workshop can be seen at

http://www.tolerantsystems.org/ProposersDay/proposers_day.html.

The teaming information site is located at

https://csc-ballston.dmeid.org/baa/BAA_05-51_Teaming.htm

Note that it is critical that teams include an integrator who can bring the technology to market.

No additional information is available, nor will a formal Request for Proposal (RFP) or other solicitation regarding this announcement be issued. Requests for same will be disregarded. 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 Disadvantaged Businesses and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this BAA will be set aside for Small Disadvantaged Business, HBCU and MI participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

Proposals selected for funding 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 proposer 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/).

Security classification guidance on a DD Form 254 (DoD Contract Security Classification Specification) will not be provided at this time since DARPA is soliciting ideas only. After reviewing incoming proposals, if a determination is made that contract award may result in access to classified information, a DD Form 254 will be issued upon contract award. **If you choose to submit a classified proposal you must first receive the permission of the Original Classification Authority to use their information in replying to this BAA.**

DARPA has determined that work for this program is to be funded by budget category 6.2 (Applied Research). This means that research performed under this program on-campus at a university is considered contracted fundamental research; therefore, public releases of information about such research are not subject to prior Government review. The definition of CONTRACTED FUNDAMENTAL RESEARCH is contained in DOD Instruction 5230.27 and can be found at http://www.dtic.mil/whs/directives/corres/pdf2/i523027p.pdf. Public release of information about research performed under circumstances other than those described above is subject to prior government review, according to the procedures available at http://www.darpa.mil/tio.

SUBMISSION PROCESS

This BAA requires completion of an online Cover Sheet for each Proposal prior to submission. To do so, the offeror must go to **http://CSC-Ballston.dmeid.org/BAA/index.asp?BAAid=05-xx** and follow the instructions there. Each offeror is responsible for printing the BAA Confirmation Sheet and attaching it to every copy. The Confirmation Sheet should be the first page of the Proposal. If an offeror intends to submit more than one Proposal, a unique UserId and password must be used in creating each Cover Sheet. Failure to comply with these submission procedures may result in the submission not being evaluated.

Proposers must submit the original and **2** copies of the full proposal *and* **2** electronic copies (i.e., **2** separate disks) of the full proposal (in PDF or Microsoft Word 2000 for IBM-compatible format on a 3.5-inch floppy disk or cd). **Mac-formatted disks will not be accepted**. Each disk must be clearly labeled with BAA 05-51, proposer organization, proposal title (short title recommended) and "Copy <n>___ of **2**". The full proposal (original and designated number of hard and electronic copies) must be submitted in time

to reach DARPA by 12:00 PM (ET) 26 October 2005**,** in order to be considered during the initial evaluation phase. However, BAA 05-51, Application Communities, will remain open until 12:00 NOON (ET) 02 September 2006. Thus, proposals may be submitted at any time from issuance of this BAA through 02 September 2006. While the proposals submitted after the 26 October 2005, deadline will be evaluated by the Government, proposers should keep in mind that the likelihood of funding such proposals is less than for those proposals submitted in connection with the initial evaluation and award schedule. DARPA will acknowledge receipt of submissions and assign control numbers that should be used in all further correspondence regarding proposals.

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. Input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants /experts who are also bound by appropriate non-disclosure requirements. However, non-Government technical consultants/experts will not have access to proposals that are labeled by their offerors as "Government Only". Use of non-government personnel is covered in FAR 37.203(d).

REPORTING REQUIREMENTS/PROCEDURES:

The Award Document for each proposal selected and funded will contain a mandatory requirement for submission of DARPA/IPTO Quarterly Status Reports and an Annual Project Summary Report. These reports, described below, will be electronically submitted by each awardee under this BAA via the DARPA/IPTO Technical – Financial Information Management System (T-FIMS). The T-FIMS URL will be furnished by the government upon award. Detailed data requirements can be found in the Data Item Description (DID) DI-MISC-81612A available on the Government's ASSIST database (http://assist.daps.dla.mil/quicksearch/).

PROPOSAL FORMAT

Proposals 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) and with text on one side only. The submission of other supporting materials along with the proposal is strongly discouraged. Sections I, II and III (excluding the submission cover/confirmation sheet and section M) of the proposal shall not exceed the total of the maximum page lengths for each section as shown in braces { } below.

Section I. Administrative

The BAA Confirmation Sheet {1 page} described under "Submission Process" will include the following:

A. BAA number;
B. Technical topic area;
C. Proposal title;

D. Technical point of contact including: name, telephone number, electronic mail address, fax (if available) and mailing address;
E. Administrative point of contact including: name, telephone number, electronic mail address, fax (if available) and mailing address;
F. 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;
G. 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."

Section II. Technical Volume

This section provides the detailed discussion of the proposed work necessary to enable an in-depth review of the specific technical and managerial issues. Specific attention must be given to addressing both risk and payoff of the proposed work that make it desirable to DARPA. The technical volume shall not exceed 45 pages and must include the following sections and information:

Page-counts are maximums.

{2 Pages} Table of Contents. The Table of Contents should be keyed to the page numbers of the proposal sections.

{5 Pages} A slide summary (five slides maximum) of the proposal in PowerPoint chart format that succinctly indicates the main objective, research challenges addressed, approach for overcoming challenges, key innovations, expected impact, cost, and other unique aspects of the proposal.

The detailed proposal information is required to include the following items:

A. {1 Page} Innovative claims for the proposed research.
This page is the centerpiece of the proposal and should succinctly describe the unique proposed contribution.

B. {1 Page} Proposal Roadmap
The roadmap provides a top-level view of the content and structure of the proposal. It contains a synopsis (or "sound bite") for each of the nine areas defined below. 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 nine roadmap areas are:

1. Main goals of the proposed research (stated in terms of new, operational capabilities for assuring that critical information is available to key users).

2. Tangible benefits to end users (i.e., benefits of the capabilities afforded if the proposed technology is successful).

3. Critical technical barriers (i.e., technical limitations that have, in the past, prevented achieving the proposed results).

4. Main elements of the proposed approach.

5. Rationale that builds confidence that the proposed approach will overcome the technical barriers. ("We have a good team and good technology" is not a useful statement.)

6. Nature of expected results (unique/innovative/critical capabilities to result from this effort, and form in which they will be defined).

7. The risk if the work is not done.

8. Criteria for scientifically evaluating progress and capabilities on an annual basis.

9. Cost of the proposed effort for each performance year.

C. {2 Pages} Research Objectives:

1. Problem Description. Provide concise description of problem area addressed by this research project.

2. Research Goals. Identify specific research goals of this project. Identify and quantify expected performance improvements from this research. Identify new capabilities enabled by this research. Identify and discuss salient features and capabilities of developmental hardware and software prototypes**.**

3. Expected Impact. Describe expected impact of the research project, if successful, to problem area.

D. Technical Approach:

1. {12 Pages} Detailed Description of Technical Approach. Provide detailed description of technical approach that will be used in this project to achieve research goals
2. {2 Pages} Comparison with Current Technology. Describe state-of-the-art approaches and the limitations within the context of the problem area addressed by this research.

E. {3 Pages} Statement of Work (SOW) written in plain English, outlining the scope of the effort and citing specific tasks to be performed, references to specific subcontractors if applicable, and specific contractor requirements.

F. Schedule and Milestones:

1. {1 Page} Schedule Graphic. Provide a graphic representation of project schedule including detail down to the individual effort level. This should include but not be limited to, a multi-phase development plan, which demonstrates a clear understanding of the proposed research; and a plan for periodic and increasingly robust experiments over the project life that will show applicability to the overall program concept. Show all project milestones.

2. {3 Pages} Detailed Individual Effort Descriptions. Provide detailed task descriptions for each individual effort and/or subcontractor in schedule graphic.

G. {2 Pages} Deliverables Description. List and provide detailed description for each proposed deliverable. Include in this section all proprietary claims to results, prototypes, or systems supporting and/or necessary for the use of the research, results, and/or prototype. If there are no proprietary claims, this should be stated. The offeror must submit a separate list of all technical data or computer software that will be furnished to the Government with other than unlimited rights (see DFARS 227.) Specify receiving organization and expected delivery date for each deliverable.

H. {2 Pages} Technology Transition and Technology Transfer Targets and Plans. Discuss plans for technology transition and transfer. Provide a clear strategy and plan for transition and transfer to the commercial sector.

I. {3 Pages} Personnel and Qualifications. List of key personnel, concise summary of their qualifications, and discussion of proposer's previous accomplishments and work in this or closely related research areas. Indicate the level of effort (including percentage of time allocations) 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.

J. {1 Page} Facilities. 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 offeror 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.

K. {2 Pages} Experimentation Plans. Offerors should identify experiments to test the hypotheses of their approaches and be willing to work with other contractors in order to develop joint experiments in a common testbed environment. Offerors should expect to participate in teams and workshops to provide specific technical background information to DARPA, attend semi-annual Principal Investigator (PI) meetings, and participate in other coordination meetings via teleconference or Video Teleconference (VTC). Funding to support these various group experimentation efforts should be included in technology project bids.

L. {1 Page} Quad Chart. Offerors are required to submit a one page summary quad chart in accordance with Appendix A.

M. {2 Pages} Organizational Conflict of Interest: Awards made under this BAA may be subject to the provisions of the Federal Acquisition Regulation (FAR) Subpart 9.5, Organizational Conflict of Interest. All offerors and proposed subcontractors must affirmatively state whether they are supporting any DARPA technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports, and identify the prime contract number. Affirmations should be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest, as that term is defined in FAR 2.101, must be disclosed, organized by task and year. This disclosure shall include a description of the action the Contractor has taken, or proposes to take, to avoid, neutralize, or mitigate such conflict.

IMPORTANT NOTE: IF THE OFFEROR DOES NOT COMPLY WITH THE ABOVE STATED REQUIREMENTS, THE PROPOSAL WILL BE REJECTED.

Section III. Cost Volume

Cost proposals are not subject to page limits, and shall provide a detailed cost breakdown of all direct costs, including cost by task, with breakdown into accounting categories (labor, material, travel, computer, each subcontractor's cost, labor and overhead rates, equipment, G&A and fee), for the entire contract and for each calendar year, divided into quarters. Where the effort consists of multiple portions that could reasonably be

partitioned for purposes of funding, these should be identified as contract options with separate cost estimates for each.

Offerors should expect to attend semi-annual Principal Investigator (PI) meetings and/or technical interchange meetings, host site visits and participate in other coordination meetings as needed via teleconference or Video Teleconference (VTC). Funding to support these various efforts should be included in technology project bids.

Contractors requiring the purchase of information technology (IT) resources as Government Furnished Property (GFP) **MUST** attach to the submitted proposals the following information:

1. A letter on Corporate letterhead signed by a senior corporate official and addressed to **Mr. Lee Badger,** DARPA/IPTO, stating that you either can not or will not provide the information technology (IT) resources necessary to conduct the said research.

2. An explanation of the method of competitive acquisition or a sole source justification, as appropriate, for each IT resource item.

3. If the resource is leased, a lease versus purchase analysis clearly showing the reason for the lease decision.

4. The cost for each IT resource item. Including a copy of a price quote is preferable.

5. A description for each IT resource item.

Section IV. Additional Information

A bibliography of relevant technical papers and research notes (published and unpublished) that document the technical ideas, upon which the proposal is based, may be included in the proposal submission. Provide one set for the original full proposal and one set for each of the **2** full proposal hard copies. Please note: The materials provided in this section, and submitted with the proposal, will be considered for the reviewer's convenience only and not considered as part of the proposal for evaluation purposes.

EVALUATION AND FUNDING PROCESSES

Proposals will not be evaluated against each other, since they are not submitted in accordance with a common work statement. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons. For evaluation purposes, a proposal is the document described in PROPOSAL FORMAT Section I and Section II (see below). 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.

Evaluation of proposals will be accomplished through a scientific review of each proposal using the following criteria, which are listed in descending order of relative importance:

(1) Overall Scientific and Technical Merit: The overall scientific and technical merit must be clearly identifiable and compelling. The technical concepts should be clearly defined and developed. The technical approach must be sufficiently detailed to support the proposed concepts and technical claims. Evaluation will also consider the effectiveness of the system integration and management plan.

(2) Innovative Technical Solution to the Problem: Offerors should apply new and/or existing technology in an innovative way that supports the objectives of the proposed effort. The proposed concepts and systems should show breadth of innovation across all the dimensions of the proposed solution. Offerors must also specify quantitative experimental methods and metrics for measuring progress of the effort.

(3) Plans and Capability to Accomplish Technology, Integration and Transition: The offeror should provide a clear strategy and plan for integration and transition to military forces (and commercial sector, where applicable). Offerors should consider involving potential military transition partners, as appropriate, in any proposed experiments, tests and demonstrations. Offerors should also provide a plan for integration and transition of appropriate technology components and information to the user community.

(4) Offeror's Capabilities and Related Experience: The qualifications, capabilities, and demonstrated achievements of the proposed principals and other key personnel for the primary and subcontractor organizations must be clearly shown.

(5) Proposed length of project: The offeror must propose a duration required for achieving the proposed results with the idea that the sooner a solution is presented and validated the more favorably the proposal will be viewed.

(6) Cost Realism: The overall estimated costs should be clearly justified and appropriate for the technical complexity of the effort. Evaluation will consider the value of the research to the government and the extent to which the proposed management plan will effectively allocate resources to achieve the capabilities proposed.

The Government reserves the right to select all, some, or none of the proposals received in response to this solicitation and to make awards without discussions with offerors; however, the Government reserves the right to conduct discussions if the Source Selection Authority later determines them to be necessary. Proposals identified for funding may result in a 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. If warranted, portions of resulting awards may be segregated into pre-priced options.

The administrative addresses for this BAA are:

Fax: 703-741-7804 Addressed to: DARPA/IPTO, BAA 05-51
Electronic Mail: baa05-51@darpa.mil
Electronic File Retrieval: http://www.darpa.mil/ipto/Solicitations/solicitations.htm
Mail to: DARPA/IPTO
ATTN: BAA 05-51
3701 N. Fairfax Drive
Arlington, VA 22203-1714

Appendix A – Sample Quad Chart and Instructions