BAA 02-08

Information Awareness

Proposer Information Pamphlet

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COORDINATING POC:

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ADMINISTRATIVE NOTE:
NEW GUIDELINES/PROCEDURES

BAA 02-08 PROPOSER INFORMATION PAMPHLET

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

INFORMATION AWARENESS; SOL: BAA 02-08, FIRST ROUND PROPOSALS DUE: 22 APRIL 2002; BAA CLOSES 20 MARCH 2003. POC: LCOL DOUG DYER, DARPA/IAO; QUERIES: BAA02-08@DARPA.MIL

INTRODUCTION

DARPA is soliciting innovative research proposals in the area of information technologies that will aid in the detection, classification, identification, and tracking of potential foreign terrorists, wherever they may be, to understand their intentions, and to develop options to prevent their terrorist acts. Proposed research should investigate innovative approaches that enable revolutionary advances in science, technology or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

SECTION I: BACKGROUND INFORMATION

This section provides supplemental information on DARPA's Information Awareness Office (DARPA/IAO), specific technology focus areas and program structure.

Goal

Elements of an effective counter-terrorism solution include gathering a much broader array of data than we are currently capable of doing, discovering information from elements of the data, creating models of hypotheses, and analyzing these models in a collaborative environment to determine the most probable current or future scenario. DARPA has sponsored research in some of these technology areas. The Information Awareness Office intends to conduct additional research and development to accelerate, integrate, broaden, and automate current approaches to be able to predict and hence preempt future terrorist actions against us.

Technical Areas of Interest

Refer to the BAA originally published at the FedBizOpps web site (copy included in Section III of this PIP for reference).

Objectives

Refer to the BAA originally published at the FedBizOpps web site (copy included in Section III of this PIP for reference).

Information Awareness Motivation

Currently, terrorists are able to move freely throughout the world, to hide when necessary, to find unpunished sponsorship and support, to operate in small, independent cells, and to strike infrequently, exploiting weapons of mass effects and media response to influence governments. This low-intensity/low-density form of warfare has an information signature, albeit not one that our intelligence infrastructure and other government agencies are optimized to detect. In all cases, terrorists have left detectable clues that are generally found after an attack.

To fight terrorism, we need to create a new infrastructure and new information technology aimed at exposing foreign terrorists and their activities and support systems. This is a tremendously difficult problem, because terrorists understand how vulnerable they are and seek to hide their specific plans and capabilities[1]. Terrorist's use of camouflage and deception reduces their signature and introduces great uncertainty in the

[1] Even though terrorist may publish their views and threats generally to gain popular support, information about specific attacks, capabilities, supporters, and those responsible for attacks is kept secret to prevent preemption. Terrorists also lie in an attempt to prevent reprisals. Terrorists must walk a fine line to keep themselves unaccountable to their enemies while popular with their constituencies.

interpretation of any data collected. Once an information leak is discovered, terrorists can adapt quickly to stop it, either by changing tactics or re-organizing in some way.

The key to fighting terrorism is information. Elements of the solution include gathering a much broader array of data than we do currently, discovering information from elements of the data, creating models of hypotheses, and analyzing these models in a collaborative environment to determine the most probable current or future scenario. DARPA has sponsored research in some of these technology areas, but following the September attacks, it became clear that additional research and development is warranted to accelerate, integrate, broaden, and automate current approaches. In response, DARPA has reorganized to form the Information Awareness Office.

Research Process and Evaluation

DARPA anticipates working in close collaboration with one or more U.S. intelligence agencies that will provide operational environments, assist in evaluation, and act as a technology maturation and transition partner(s). Thus the support infrastructure for technology evaluation and feedback, now considered crucial for rapid development of usable tools, will be available. The main focus is on usable tools, rather than demonstrations -- DARPA is steadfastly committed to creating leave-behind prototypes that are reliable, easy to install, and packaged with documentation and source code, though not necessarily complete in terms of desired features. The idea is to enable our partners in the intelligence community to evaluate new technology and pick it up for experimental use and transition, as appropriate. As a result, DARPA will be able to validate experiments and transition technology more easily.

We will often have strong notions of overall goals we'd like to achieve, but we will depend on iterative refinement to work out the details---and researchers, user representatives, and program managers all play an active role in determining how to proceed. It will be critical to be able to share ideas within the funded research team such that the protection of potentially proprietary ideas is at best a secondary concern, at least for the system architecture.[2] We will also expect incremental software releases and periodic technical reports. These artifacts of your research are our primary measure of progress. On a more formal basis DARPA intends to conduct periodic reviews and experiments to ascertain progress toward the accomplishment of specific Information Awareness objectives. Proposals under this BAA should therefore include a milestone assessment plan and appropriate performance metrics. The definition of these milestones and metrics may be negotiated with selected proposers prior to awards under this BAA, or may be proposed as a deliverable within 30 days of an award. In the latter case

[2] The Government wishes to retain, at a minimum, Government Purpose Rights to all output from this effort. Actual rights will be negotiated depending on the type of award instrument, the type of awardee, and the nature of the technology. The Government may choose to disseminate some of the results publicly and may discuss them at conferences and at other public and private meetings under appropriate security constraints. They may form the basis for a subsequent BAA, Research Announcement (RAs), or other solicitations from DARPA or other Government organizations.

awardees will work with DARPA to devise and execute a meaningful milestone plan and performance metrics.

Expected Technical Deliverables

I. Regular Software Releases. Software releases will be packaged with detailed technical documentation, user documentation, libraries, sources and executable code, and delivered as self-extracting installation executables for the expected computing environment of our customers.

II. Technical Briefings and Reports. Briefings and reports will be developed as a product of individual effort, a tiger team, or as part of a larger working group. Quarterly Status Reports and Annual Project Summary Reports must be submitted as a minimum.

III. Internet Products. Software products that integrate (I) and (II), will be directly uploaded / posted to Web pages specified by DARPA Program Managers. Proposers are encouraged to identify data and software components (including source code) they would be willing to make available to others to help achieve the overall objectives of this BAA.

SECTION II: PROPOSER INFORMATION

This section provides detailed information on proposal format, submission requirements, proposal evaluation, award and funding processes, and related information. *Proposals not conforming to the format and submission requirements specified below will be rejected without review, and not be evaluated.*

BAA 02-08 proposers must be a U.S. organization (i.e., for-profit or not-for-profit organization, or academic institution), and most performing personnel must be U.S. citizens (see "U.S. Organization Certifications," in instructions for Volume I, Section II, E.1, below; and, "U.S. Citizenship Certifications," in instructions for Volume I, Section II, E.2, below).

DARPA anticipates selecting proposers for award who would perform unclassified work only. DARPA also intends to team with one or more U.S. intelligence agencies, and may desire that proposers selected for award would perform in collaboration with those agencies. Key Performers of prospective awardees whose activities would involve collaboration with the Intelligence Community must hold a current Top Secret Department of Defense (DoD) clearance and be approved for access to Sensitive Compartmented Information (SCI), or be eligible for the timely granting of such clearance and access. A sufficient number of non-key performers to enable the effective accomplishment of the proposed research effort must also hold a Top Secret DoD clearance with SCI access, or be eligible for the timely granting of such clearance and access. In addition, prospective awardees whose activities would be associated with the Intelligence Community must also possess a current DoD Top Secret Facility clearance and an approved SCI Facility (SCIF).

Proposers desiring consideration for awards involving collaboration with the Intelligence Community shall identify Key Performers and enabling support staff satisfying the above Top Secret DoD clearance and SCI access requirement (see "Personal Security Clearance (PCL) Certification," in instructions for Volume I, Section II, E.3, below); shall certify their DoD Top Secret Facility clearance (see "Facility Clearance (FCL) Certification," in instructions for Volume I, Section II, E.4, below); and, shall detail their organization's approach to maintaining separation of unclassified and classified activities and materials, and controlling access to classified information based on the need-to-know of its personnel (see "Security Management and Administration Specification," in instructions for Volume I, Section II, E.5, below).

Period of Performance

Proposers may submit proposals for up to a 36-month base period, plus two (2) one-year options.

Contractor Sensitive Information

1. Organizational Conflict Of Interest. Each cost proposal shall contain a section satisfying the following requirements: awards made under this BAA are subject to the FAR at 9.5, Organizational Conflict of Interest. All proposers 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 proposer supports and identify the prime contract number. Affirmations shall be furnished at the time of proposal submission, and the existence or potential existence of organizational conflicts of interest, as that term is defined in FAR 9.501, must be disclosed. This disclosure shall include a description of the action the proposer has taken, or proposes to take, to avoid, neutralize or mitigate such conflict. If the proposer believes that no such conflict exists, it shall so state in this section. It is the policy of DARPA to treat all proposals as competitive information, and to disclose the contents only for the purposes of evaluation.

2. Special Resource Personnel. The Government intends to use personnel from SRS Technologies, Syntek Technologies, CACI, Schafer Corporation and Adroit Systems as special resources to assist with the logistics of administering proposal evaluation and to provide advice on specific technical areas. These contractor personnel are restricted by their contracts from disclosing proposal information for any purpose other than these administrative or advisory tasks. Contractor personnel are required to sign the Organizational Conflict of Interest Non-Disclosure Agreements (OCI/NDA). By submission of its proposal, each proposer agrees that proposal information may be disclosed to these selected contractors for the limited purpose stated above. Any information not intended for limited release to these contractors and other non-Government employees must be clearly marked as "GOVERNMENT REVIEW ONLY" and segregated from other submitted proposal material. Restrictive notices

notwithstanding, proposals may be handled for administrative purposes only, by one or more of the above support contractors.

Proposal Format

Proposals shall consist of two, separately bound volumes: Volume I (Technical and Management Proposal); and, Volume II (Cost Proposal). Ring binders are not acceptable. Volumes I and II shall be submitted together. Volume I shall not exceed 15 single-sided pages. Page length for Volume II is not limited. Page limitation includes all figures, tables, and charts. The cover (if any), title page, official letter of transmittal, and table of contents page do not count against the 15-page limitation for Volume I, provided they contain no substantive text. A bibliography, copies of not more than three (3) relevant papers (both specified in instructions for Volume I, Section IV), and an attachment, if appropriate, detailing proproser proprietary claims (specified in instructions for Volume I, Section III.I.) also do not count against the Volume I 15-page limitation.

All pages in Volumes I and II shall be printed single sided, on 8.5 x 11 inch paper, using one-and-one-half line spacing or more, three-quarter-inch margins or greater, and at least 12-point type. Foldout pages will be counted as multiple pages equal to the number of included 8-1/2 by 11 inch foldout sheets, or fractional foldout sheets. The content of tables shall be printed using one-line spacing or more, and at least 10-point type.

Annotation of illustrations or graphics shall be printed using at least 8-point type. Submitted supporting materials, other than a bibliography and copies of not more than three (3) relevant papers, will not be reviewed, and their submission is therefore strongly discouraged. Proposers are encouraged to submit clearly worded, concise, but descriptive technical proposals.

DARPA's desire is to receive great ideas quickly, in a succinct package, and avoid onerous proposal preparation requirements that undoubtedly add cost for proposers. To reduce required content, we are attempting to avoid requirements for duplicative content, and not require a statement of work (SOW) or cost details that are prematurely detailed prior to selection of a proposal for funding. Successful proposers can anticipate a request for a draft SOW and additional cost detail consistent with the submitted proposal and any negotiated changes.

Regardless of the security level of the effort proposed, only UNCLASSIFIED proposals will be accepted.

Volume I: Technical and Management Proposal (15-page limit)

The sections below shall appear in clearly marked form in the order indicated.

Part I - Administrative:

A. Title Page, to include:

(1) BAA 02-08, Information Awareness;

(2) Proposal title;

(3) Technical area addressed by proposal;

(4) Date proposal was prepared;

(5) Lead organization submitting proposal;

(6) If interested in consideration for awards involving collaboration with the Intelligence Community in addition to awards for unclassified work, inclusion of the following statement, "Request consideration for awards involving collaboration with the Intelligence Community;"

(7) Type of business of lead organization, selected from among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," or "OTHER NONPROFIT;"

(8) Contractor's reference number (if any);

(9) Other team members (if applicable), and type of business for each;

(10) 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);

(11) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);

(12) Certification as to the equal authenticity of both the hard and electronic copies of the proposal (see Proposal Submission instructions); and,

(13) Total funds requested from DARPA, and the amount of cost-share (if any).

B. Official Transmittal Letter.

Part II - Detailed Proposal:

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 shall be given to addressing both risk and payoff of the proposed work that make it desirable to DARPA. The detailed Technical and Management proposal shall include the following elements, in the order indicated:

A. Brief statement of main goals (expected results) of the proposed research effort shall be provided, stated in terms of the tangible benefits of the project if the proposed research is successful (i.e., new capabilities and research products to be produced). The specific basis for confidence that the proposed approach is feasible from both a technical and cost perspective shall be addressed.

B. Cost of the proposed effort: Specified by contract year.

C. Technical Plan: Clearly shows how the stated technical goals and deliverable products are to be achieved / produced within the proposed cost and schedule shall be provided. As a minimum, the technical plan shall consist of the following elements, presented in the order indicated:

(1) Innovative claims for the proposed research effort:

This is the centerpiece of the proposal and should succinctly describe the uniqueness and benefits of the proposed approach relative to the current state-of-art and alternative approaches. Claims of innovativeness shall be clearly stated, described in detail, supporting justification provided for each, and each correlated with associated technical goals or deliverable products.

(2) Technical goals and deliverable products:

The technical area(s) to be addressed in the proposed research program shall be identified, and a general discussion shall be provided of the state-of-the-art for each area to be researched. Technical goals and deliverable products associated with the proposed research program shall be identified, correlated with specific technical areas, and described in detail, with specific focus on their associated rationale and how they fit within the Information Awareness vision.

(3) Technical approach:

The technical approach for accomplishment of technical goals and deliverable production shall be described in detail. The use of mature and off-the-shelf technology to supplement new and innovative higher order solutions and as part of the overall technical approach shall also be discussed. If interested in consideration for awards involving collaboration with the Intelligence Community in addition to awards for unclassified work, proposed plans and capabilities to accomplish technology transition to the U.S. Intelligence Community shall be described in detail. If the proposed effort consists of

multiple segments or phases that could reasonably be partitioned for purposes of funding, these segments or phases should be clearly identified, with separate cost estimates provided for each in the Volume II Cost Proposal.

(4) Program Schedule:

A schedule for the proposed research program, reflecting a milestone assessment plan and top-level cost estimates, shall be provided. The milestone assessment plan shall include appropriate performance metrics. Schedules and cost estimates shall be top-level down to any partitioned segment or phase consistent with the technical approach. Costs should be detailed only at a summary level for direct labor, other direct costs and direct material. The schedule should convey a clear picture of how the proposed research program is planned to progress over the course of the proposed effort, and allow ready correlation of proposed activities with the proposer's cost estimates. The milestone assessment plan will be used to monitor progress toward achievement of stated technical goals and deliverable products and thereby enable a "Go / No Go" decision concerning continued support of the research effort. The definition of milestones and metrics may be negotiated with selected proposers prior to contract award, or may be proposed as a deliverable within 30 days of an award. In the latter case awardees will work with DARPA to devise and execute a meaningful milestone plan and performance metrics.

(5) Related research and alternative approaches:

Other relevant research being undertaken by the proposer and others, as well as potential alternative approaches, shall be identified. The advantages and disadvantages of other identified relevant research efforts or alternative approaches shall be identified and discussed with respect to the proposed research effort.

D. Demonstration and Integration Plans.

(1) Proposers shall include a multiphase development narrative that demonstrates a clear understanding of the proposed research and a plan for periodic and increasingly robust demonstrations over the project life that will show applicability to the overall Information Awareness project concept.

(2) Proposers shall identify and describe demonstrations they will perform to show the capabilities and validity of their methods.

Note: Proposers should expect to undergo reviews by a panel of DARPA-selected subject matter experts concurrently with, or subsequent to, major demonstrations and milestones. The purpose of these reviews is to assess the technical feasibility and accuracy of the proposers' models, agents, algorithms, and architectures to support program goals. These reviews are in addition to

the periodic progress review meetings conducted by DARPA program managers as part of normal program management function.

E. Corporate Capabilities Section - Describes proposer relevant capabilities. As a minimum, this description shall include proposer organizational past accomplishments and work in this or closely related research areas to show how past/current performance justifies an award; qualifications of Key Performers and proposed consultants and subcontractors; a description of the facilities that are to be used in the proposed effort; and, the following certifications:

(1) U.S. Organization Certification:

Proposers shall certify that their organization(s) is/are a U.S. organization. Exceptions will be considered for non-U.S. organizations performing under proposals involving only unclassified work. For the purposes of BAA 02-08, a "U.S. organization" is defined as corporation, business association, partnership, society, trust, or any other entity, organization or group that is incorporated to do business in the United States. Certification shall consist of the specification of each proposer's articles of incorporation.

(2) U.S. Citizenship Certifications:

Each proposer shall certify that all performers planned to participate on the proposed work program are U.S. citizens. Exceptions will be considered for non-U.S. citizens performing under proposals involving only unclassified work. Certification shall consist of the specification of each proposed performer's name, social security number, and date and place of birth, or for naturalized citizens, U.S. naturalization certificate number, and city, state and date of certificate issue.

(3) Personal Security Clearance (PCL) Certifications:

Personal Security Clearance (PCL) Certifications are required only of proposers desiring consideration for awards involving collaboration with the Intelligence Community. Proposers shall certify to DARPA Security and Intelligence Directorate (DARPA/SID), through appropriate security channels, the PCL and SCI access of proposed Key Performers and designated research-enabling non-key performers. Proposer certification shall consist of the proposed performer's name, Social Security number, the level of SCI clearance held, the granting U.S. Government agency, and the date of the performer's most recent Single-Scope Background Investigation (SSBI) or SSBI Periodic Review (SSBI-PR). For proposed performers not possessing an active SCI clearance, proposers shall certify the date of the proposed performer's most recent SSBI or SSBI-PR, or alternatively, the date a SSBI or SSBI-PR investigation request was submitted, and the U.S. Government agency to whom the investigation request was submitted.

(4) Facility Clearance (FCL) Certification:

Facility Clearance (FCL) Certification is required only of proposers desiring consideration for awards involving collaboration with the Intelligence Community. Proposers shall certify to DARPA Security and Intelligence Directorate (DARPA/SID), through appropriate security channels, that their organization holds an active FCL, the level of FCL granted, and the Defense Security Service (DSS) issued facility cage code. If existing facilities were accredited by agencies not serviced by DSS proposers shall identify the U.S. Government agency that provided classified storage and processing approval.

(5) Security Management and Administration Specification:

Security Management and Administration Specification is required only of proposers desiring consideration for awards involving collaboration with the Intelligence Community. Proposers shall describe their organization's approach to maintaining separation of unclassified and classified activities and materials, and controlling access to classified information based on the need-to-know of its personnel.

(6) Key Performer Availability Certifications:

Certifications shall consist of the specification of each Key Performer's name, and the percentage of their effort to be dedicated to the proposed work program. Percentage of effort shall be expressed in terms of the proposer's Full-Time Equivalent (FTE) for employees. The FTE value shall be specified in terms hours.

F. Management Plan - Describes the proposer's overall approach for managing the proposed research effort. In addition, the management plan shall include:

(1) An organization chart for the proposed research team.

(2) A brief discussion of the proposer's organization (to include a discussion of the relationship among team members, and any formal teaming agreements that are required to execute the proposed program).

(3) A discussion of the unique capabilities of team members, and the task responsibilities of team members.

(4) A description of the planned use / functional responsibilities of personnel in the research effort.

G. Government-owned Resources - If any portion of the proposed research effort is based on 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, this subsection shall consist of a statement to that effect.

H. Proprietary Claims (if any) to results, deliverable products, prototypes, intellectual property, or systems supporting and/or necessary for the use of the research, results, deliverables and/or prototypes shall be explicitly stated. If there are no proprietary claims, this section shall consist of a statement to that effect. In addition, if appropriate, the proposer shall include an attachment to Volume I containing information required by DFARS 252.227-7017, Identification and Assertion of Use, Release or Disclosure Restrictions (June 1995) and/or DFARS 252.227-7028 (June 1995) Technical Data or Computer Software Previously Delivered to the Government.

I. IT Resources - 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 Director, DARPA/IAO, stating that the proposer either cannot 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 purchase analysis clearly showing the reason for the lease decision.

4. The cost for each IT resource item.

Part III - Additional Information

A brief bibliography of relevant technical papers and research notes by the proposer (published and unpublished), which document the technical ideas upon which the proposal is based. In addition, copies of not more than three (3) relevant papers can be included in the submission. **The bibliography and copies of the three (3) relevant papers do not count against the 15-page limit of Volume I (Technical Proposal).** Submitted supporting materials, other than a bibliography and copies of not more than three (3) relevant papers, will not be reviewed, and their submission is therefore strongly discouraged.

<u>Volume II</u>: Cost Proposal (no page limit)

Note: These requirements pertain to those proposers who are proposing to undertake R&D via traditional FAR/DFARS-based contracts, cooperative agreements, and grants. Proposers offering to undertake R&D via "Other Transactions" may desire to obtain additional information from DARPA's contractual point-of-contact for this BAA, or from DARPA's web site at URL http://www.darpa.mil/cmo/pages/845.htm.

The sections below must appear in clearly marked form in the order indicated. Cost estimates shall be provided by Government fiscal year (01 Oct to 30 Sep).

A. Title Page, to include:

(1) BAA 02-08, Information Awareness;

(2) Proposal title;

(3) Technical area addressed by proposal;

(4) Date proposal was prepared;

(5) Lead organization submitting proposal;

(6) If interested in consideration for awards involving collaboration with the Intelligence Community in addition to awards for unclassified work, inclusion of the following statement, "Request consideration for awards involving collaboration with the Intelligence Community;"

(7) Type of business of lead organization, selected from among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," or "OTHER NONPROFIT;"

(8) Contractor's reference number (if any);

(9) Other team members (if applicable), and type of business for each;

(10) 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);

(11) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);

(12) Certification as to the equal authenticity of both the hard and electronic copies of the proposal (see Proposal Submission instructions);

(13) Award instrument requested: cost-plus-fixed-fee (CPFF); cost-contract--no fee; cost sharing contract--no fee; or, other type of procurement contract (specify): grant, cooperative agreement, or other transaction;

(14) Place(s) and period(s) of performance;

(15) Total proposed cost separated by basic award and option(s) (if any);

(16) Name, address, and telephone number of the proposer's cognizant Defense Contract Management Agency (DCMA) administration office (if known); and,

(17) Name, address, and telephone number of the proposer's cognizant Defense Contract Audit Agency (DCAA) audit office *(if known)*.

B. One-page cost and fee summary - Correlates with the technical approach provided in the technical proposal (Volume I).

C. Estimated cost breakdown, to include:

(1) Total program cost and total costs for any partitionable segments or phases therein, broken down by major cost items (i.e., direct labor, subcontracts / consultants, travel, materials, other direct costs, overhead charges, G&A, and fee), and further broken down by year;

(2) Enumeration of anticipated major subcontracts and consultancy agreements, and significant hardware/software purchases; and

(3) Source, nature, and amount of proposer cost sharing.

D. Supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates in B and C, above. Include a description of the method used to estimate costs and supporting documentation. Note: "cost or pricing data" as defined in FAR Subpart 15.401 shall be required if the proposer is seeking a procurement contract award of $550,000 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., a grant, cooperative agreement, or other transaction).

E. Organizational Conflict of Interest Certification - All proposers 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 proposer supports and identify the prime contract number.

Affirmations shall be furnished at the time of proposal submission, and the existence or potential existence of organizational conflicts of interest, as that term is defined in FAR 9.501, must be disclosed. This disclosure shall include a description of the action the proposer has taken, or proposes to take, to avoid, neutralize or mitigate such conflict. If the proposer believes that no such conflict exists, it shall so state in this section.

F. Proposer's taxpayers identification number (TIN), DFARS 204.7202-3; corporate and Government entity (CAGE) code, DFARS 204.7202-1; and contractor Data Universal Numbering System (DUNS) number, FAR 4.602(d) and FAR 4.603. The codes provided shall be those of the proposer and not of the principal place of performance, if the two are different.

Proposal Submission

Proposal hard copies: Proposers shall submit one original and six (6) copies of Volume I (Technical and Management Proposal), and one original and three (3) copies of the Volume II (Cost Proposal).

Proposal soft / electronic copies: Proposers shall also submit one copy each of both Volume I and II, using the following filename convention: "<OrganizationName>-<PrincipalInvestigatorName>-<ShortNameForProposal>-<Volume>-<AppropriateFileTypeExtension>." Electronic copies of proposals shall accompany submission of proposal hard copies. Submission of an electronic copy alone of either or both proposal volumes is not responsive. It is the proposer's responsibility to ensure that proposal hard copies and electronic copies are equally authentic, and that either or both are a valid basis for Government proposal evaluation. Proposers shall certify the equal authenticity of both the hard and electronic copies of their proposals by including the following notation on the proposal's title page, "*Both hard copies and electronic copies of this proposal are certified as being equally authentic. Either is a valid basis for Government proposal evaluation*."

Electronic copies of Volume I shall be submitted in Microsoft Word for Windows, RTF, or PDF format. Electronic copies of Volume II shall be submitted in Microsoft Word for Windows, Microsoft Excel for Windows, RTF, or PDF format. Electronic copies in LaTeX, unformatted ASCII (with JPG or GIF attachments) or Postscript file formats are not acceptable. Any version of Microsoft Word able to be opened and read by Microsoft Word 2000 are acceptable. Graphics shall be embedded so that each document is stand-alone. Documents with graphics as separate files are not acceptable. Electronic copies of proposal Volumes I and Volume II shall be submitted together on the same compact disk(s) or 3-1/2-inch, 1.4MB floppy diskette(s). Disks or diskettes shall be clearly labeled as "BAA 02-08 Proposal", and be marked with the proposer's organization, principal investigator's name, proposal title (short title), and notation certifying that the electronic media was verified to be virus-free (using an up-to-date, reputable virus detection utility, such as Norton or McAfee anti-virus software).

Proposals shall be submitted to: DARPA/IAO, ATTN: BAA 02-08, 3701 North Fairfax Drive, Arlington, VA 22203. Proposals submitted by e-mail or facsimile will NOT be accepted.

Proposal submission date: BAA 02-08 will be open for a period of one year after its publication on the FedBizOpps website. An initial round of evaluations will be conducted. To be considered in this initial round of evaluations, proposals must be received before 4:00 PM local time, 22 April 2002. The Government may request additional proposals subsequent to this first round consistent with funding availability and program requirements. Proposals received after the close of the initial evaluation period, but before the close of the BAA, will be reviewed but the likelihood that funding will be available or that program requirements remain outstanding will be less than for proposals submitted prior to the initial round due date. Proposals received after the close of this BAA will be returned unopened.

Evaluation, Award and Funding

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 at any time during the open period of the BAA for administrative reasons.

For evaluation purposes, a proposal is the two-volume document described in "Proposal Format" (see above). Other additional materials or supporting information will not be reviewed.

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

(1) Technical approach, including design innovation and effectiveness, approach for research, implementation and testing;

(2) Overall scientific and technical merit;

(3) Potential contribution and relevance to this DARPA mission.

(4) Proposer's demonstrated capabilities and related experience; and,

(5) Cost realism and reasonableness.

The Government anticipates completing an initial round of evaluations during the third quarter of fiscal year 2002. As soon as the proposal evaluation is completed, the proposer will be notified of selectability or non-selectability. Selected proposals will be funded; non-selected proposals will be destroyed. (One copy of non-selected proposals may be retained for file purposes.) Resulting awards (if any) may take the form of

procurement contracts, cooperative agreements, grants, or agreements entered into under the authority of 10 USC 2371, or Section 845, Public Law 103-160, as amended (commonly referred to as "technology investment agreements" or "other transaction agreements for prototypes"). Prospective proposers who may require additional information relative to the use of these "other transaction" authorities should contact the contracts point-of-contact for this BAA, Barbara Meyrowitz, DARPA Contracts Management Office (CMO), at bmeyrowitz@darpa.mil.

DARPA will construct a balanced program in order to meet its needs. A total of several millions of dollars will be available for these efforts. The size of each award and duration of efforts will vary according to the type of effort undertaken. In the case of proposals containing partitioned segments or phases, proposers should define partitions so that the annual budget for each is in the $200,000 to $1,000,000 range. If warranted, portions or partitions of resulting awards may be segregated into pre-priced options. The Government reserves the right to select for award all, some or none of the proposals received. The Government also reserves the right to fund all, or any part of, a proposal evaluated to be eligible for award. Awards are subject to the availability of Government funds, and may be incrementally funded.

Communicating with DARPA

All correspondence and questions relative to this BAA and its accompanying PIP are to be submitted to DARPA by e-mail or facsimile and be directed to one of the addresses specified below (e-mail is preferred).

Addresses

The administrative addresses for this BAA are:

Electronic Mail: BAA02-08@darpa.mil
Electronic File Retrieval: http://www.darpa.mil/baa
Fax: 703-527-3783 addressed to: DARPA/IAO, BAA 02-08

Mail to: DARPA/IAO
ATTN: BAA 02-08
3701 N. Fairfax Drive
Arlington, VA 22203-1714

Submitted correspondence must include the name, organization, address, e-mail address, telephone number and facsimile number of a designated point of contact.

SECTION III: DARPA BAA 02-08, INFORMATION AWARENESS

INFORMATION AWARENESS
SOLICITATION BAA 02-08

Contracting Office Address:

Other Defense Agencies, Defense Advanced Research Projects Agency, Contracts Management Office, 3701 North Fairfax Drive, Arlington, VA 22203-1714.

Description:

The Defense Advanced Research Projects Agency (DARPA) seeks strong, responsive proposals from well-qualified sources to develop information technologies to help prevent continued terrorist attacks on the citizens, institutions, and property of the United States and its allies. Program efforts are intended mainly to provide a series of increasingly powerful leave-behind prototypes with a limited number of proof-of-concept demonstrations in extremely high risk, high payoff areas.

TECHNICAL TOPIC AREAS:

I. Repository technologies

II. Collaboration, Automation and Cognitive Aids technologies

III. Prototype System technologies

Offerors wishing to perform work in more than one topic area must submit separate proposals for each area of interest.

OBJECTIVES:

(1) Development of revolutionary technology for ultra-large all-source information repositories and associated privacy protection technologies.

(2) Development of collaboration, automation, and cognitive aids technologies that allow humans and machines to think together about complicated and complex problems more efficiently and effectively.

(3) Development and implementation of an end-to-end, closed-loop prototype system to aid in countering terrorism through prevention by integrating technology and components from existing DARPA programs such as: Genoa, EELD (Evidence Extraction and Link Discovery), WAE

(Wargaming the Asymmetric Environment), TIDES (Translingual Information Detection, Extraction and Summarization), HID (Human Identification at Distance), Bio-Surveillance; as well as programs resulting from the first two areas of this BAA and other programs.

Repository Issues: The National Security Community has a need for very large scale databases covering comprehensive information about all potential terrorist threats; those who are planning, supporting or preparing to carry out such events; potential plans; and potential targets. In the context of this BAA, the term "database" is intended to convey a new kind of extremely large, omni-media, virtually-centralized, and semantically-rich information repository that is not constrained by today's limited commercial database products -- we use "database" for lack of a more descriptive term. DARPA seeks innovative technologies needed to architect, populate, and exploit such a database for combating terrorism. Key metrics include the amount of total information that is potentially covered, the utility of its data structures for data entry and use by humans and machines in searching and browsing, data integration, and capability to automatically populate, and the completeness, correctness, and timeliness of the information when used for predictive analysis and modeling in exploiting the information in these repositories. It is anticipated this will require revolutionary new technology.

The database envisioned is of an unprecedented scale, will most likely be distributed, must be capable of being continuously updated, and must support both autonomous and semi-automated analysis. The latter requirement implies that the representation used must, to the greatest extent possible, be interpretable by both algorithms and human analysts. The database must support change detection and be able to execute automated procedures implied by new information. Because of expected growth and adaptation needs, the effective schema must be adaptable by the user so that as new sources of information, analytical methods, or representations arise, the representation of data may be re-structured without great cost. If distributed, the database may require new search methods to answer complex, less than specific queries across physical implementations and new automated methods for maintaining consistency. The reduced signature and misinformation introduced by terrorists who are attempting to hide and deceive imply that uncertainty must be represented in some way. To protect the privacy of individuals not affiliated with terrorism, DARPA seeks technologies for controlling automated search and exploitation algorithms and for purging data structures appropriately. Business rules are required to enforce security policy and views appropriate for the viewer's role.

The potential sources of information about possible terrorist activities will include extensive existing databases. Innovative technologies are sought for treating these databases as a virtual, centralized, grand database. This will require technologies for automatically determining schemas, access methods and

controls, and translation of complex English language queries into the appropriate language for the relevant databases.

DARPA currently has on-going research programs aimed at language translation, information extraction from text, and multi-modal biometric technologies. These component technologies will be used to feed the Information Awareness database but must be augmented by other technologies and new sources of information to dramatically increase the coverage of counter-terrorism information. These other technologies include but are not limited to innovative new methods of database integration, structured information authoring, and exploitation of integrated data streams. Non-traditional methods of identifying and monitoring terrorist activity are anticipated. Populating a database with information derived from masked or deceptive behavior by an adversary is a challenging technical problem. DARPA invites new ideas for novel information sources and methods that amplify terrorist signatures and enable appropriate response.

Collaboration, Automation And Cognitive Aids Issues: DARPA will be developing technology to support collaborative work by cross-organizational teams of intelligence and policy analysts and operators as they develop models and simulations to aid in understanding the terrorist threat, generate a complete set of plausible alternative futures, and produce options to deal proactively with these threats and scenarios. The challenges such teams face include the need to work faster, overcome human cognitive limitations and biases when attempting to understand complicated, complex, and uncertain situations, deal with deliberate deception, create explanations and options that are persuasive for the decision maker, break down the information and procedural stovepipes that existing organizations have built, harness diversity as a tool to deal with complexity and uncertainty, and automate that which can effectively be accomplished by machines so that people have more time for analysis and thinking. Emphasis needs to be placed on ease of use, adaptation to the user who is often not a scientist or engineer, and implicit encouragement to use the tools to make the users' tasks easier.

DARPA is seeking innovative technology for automating some of the team processes; augmenting the human intellect via tools that assist teams thinking together, tools that do some of the thinking for people, and tools that support human/machine collaboration in the cognitive domain; and for providing a rich environment for collaboration across existing hierarchical organizations while maintaining the necessary accountability and control. DARPA envisions that the human teams using its system will be drawn from multiple organizations spanning state, local, and federal government. Thus, there will be the need to permit collaboration across organizational-boundaries while providing control and accountability and connection back to the central systems of each participating organization. Technology will be required to support the entire life cycle of such teams. Key challenges include knowledge management/corporate memory,

declarative policy generation and context-based enforcement, business rules and self-governance, and planning and monitoring team processes.

The goals for automation technology include speeding the front-end processes of gathering, filtering, and organizing information and assimilating its content without having to read all of it. On the back-end of the process, technology is needed to automate or semi-automate the generation of efficient and persuasive explanations, and to maintain consistency within a large, distributed multi-media knowledge base. Technology is also required to make the tools and the collaborative environment itself more efficiently used by humans by making it aware of user context and preferences and smart and adaptive to optimize the user experience. DARPA seeks technology to aid the human intellect as teams collaborate to build models of existing threats, generate a rich set of threat scenarios, perform formal risk analysis, and develop options to counter them. These tools should provide structure to the collaborative cognitive work, and externalize it so that it can be examined, critiqued, used to generate narrative and multi-media explanations, and archived for re-use.

Prototype System Issues: One of the main objectives of the Information Awareness effort by DARPA is to create a prototype, closed-loop, end-to-end system. It is anticipated that technology and components from existing programs such as Genoa, EELD, WAE, TIDES, HID, Bio-Surveillance; as well as programs resulting from the first two technical areas of this BAA and other programs will be integrated to provide this system. It is envisioned that this system will be developed in an operational environment, but in a research and development mode. Technology concepts, system architecture concepts, management, experimentation and transition concepts to implement this prototype system and assure its transition to operational use are solicited. A modular architecture that permits easy insertion and extraction of functional components is anticipated. This will allow early achievement of end-to-end functional capabilities from collection to decision with available components and increasing capabilities as new components become available for testing and experimentation.

This is not the role of the traditional system integrator in that innovative management and integration techniques must be found to take the innovative results from independent R&D programs and put them together into an evolving, more capable prototype system to accomplish the objective of countering terrorism. The U.S. is facing a new evolving complex threat that requires an agile and urgent approach to system integration.

PROGRAM IMPLEMENTATION: The Government anticipates multiple awards in each of three technical areas. A multi-phase approach will be needed to achieve program goals. Proposers should note that approaches with eclectic ideas from multiple technical specialties or communities are actively sought. The degree of advances will vary among the three technical areas of interest, but the goal is to create a series of prototype systems that add value quickly and improves rapidly over the program schedule -- the primary goal is a series of leave-behind

prototypes with limited set of proof-of-concept demonstrations in very high risk areas.

CAPABILITIES: Significant portions of the effort to be performed under this BAA do not lend themselves to organizations specializing in a particular niche. Given the breadth and depth of capabilities required to accomplish BAA objectives, it is anticipated that successful proposers will possess unparalleled multidisciplinary qualifications in order to maximize the outcomes of leading research and development efforts. In many cases this will require a collaborative approach; therefore, proposals reflecting the effective teaming of parties possessing superior specialized knowledge and expertise are highly encouraged. On a practical level teaming is intended to support critical mass efforts, to enhance the integration of successful algorithms, and to lessen the average burden per researcher associated with conducting evaluations or incorporating (if a team wishes) superior ideas developed by others.

DURATION: Research under this BAA is expected to last for five years. During the first 36 months a range of ideas will be developed via limited demonstrations and preliminary prototypes. During the final 24 months the most promising research avenues will be extended to support production of a scalable leave-behind system prototype.

PROGRAM SECURITY REQUIREMENTS: All proposers must be U. S. organizations (i.e., for-profit or not-for-profit organization, or academic institution), and most performing personnel must be U.S. citizens. DARPA anticipates selecting proposers for award who would perform unclassified work only. DARPA also intends to team with one or more U.S. intelligence agencies, and may desire that proposers selected for award would perform in collaboration with those agencies. Key Performers of prospective awardees whose activities would involve collaboration with the Intelligence Community must hold a current Top Secret Department of Defense (DoD) clearance and be approved for access to Sensitive Compartmented Information (SCI), or be eligible for the timely granting of such clearance and access. A sufficient number of non-key performers to enable the effective accomplishment of the proposed research effort must also hold a Top Secret DoD clearance with SCI access, or be eligible for the timely granting of such clearance and access. In addition, prospective awardees whose activities would be associated with the Intelligence Community must also possess a current DoD Top Secret Facility clearance and an approved SCI Facility (SCIF). Proposers desiring consideration for awards involving collaboration with the Intelligence Community shall identify key personnel and enabling support staff satisfying the above Top Secret DoD clearance and SCI access requirement (see "Personal Security Clearance (PCL) Certification," in the PIP); shall certify their DoD Top Secret Facility clearance (see "Facility Clearance (FCL) Certification," in the PIP); and, shall detail their organization's approach to maintaining separation of unclassified and classified activities, and controlling need-to-know, as specified in the PIP.

GENERAL INFORMATION: DARPA Information Awareness Office (IAO) is issuing this single step (full-up proposals, no white papers) Broad Agency Announcement (BAA) to solicit research proposals for Information Awareness. This announcement constitutes a Broad Agency Announcement (BAA 02-08) in accordance with the Federal Acquisition Regulation (FAR) at 6.102(d)(2)(i). In addition to this BAA, and before submitting a proposal, prospective proposers MUST also obtain and refer to the associated Proposer Information Pamphlet (PIP) for BAA 02-08 – it provides further information on the areas of interest, program background, anticipated research processes, expected deliverables, preparation and formats for proposals, and proposal evaluation criteria. The BAA as published in the Government wide point of entry, in conjunction with the PIP and all references, comprises the total BAA. 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. This PIP may be obtained by fax, electronic mail, or mail request to the administrative contact address given below, or by downloading from the FedBizOpps website at http://www.fedbizopps.gov. 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 (HBCU) and Minority Institutions (MI) are encouraged to submit proposals and join others in submitting proposals; however, no portion of this BAA will be set aside for HBCU or MI participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

PROPOSAL SUBMISSION: BAA 02-08 will be open for a period of one year after its publication at FedBizOpps. To be considered for the initial round of funding, full proposals must be submitted to DARPA/IAO, 3701 North Fairfax Drive, Arlington, VA 22203-1714 (Attn: BAA 02-08) on or before 4:00 p.m. local time, 22 April 2002. In addition to hard copies, an electronic copy of each proposal must be submitted on floppy diskette(s) or compact disk(s), according to instructions in the PIP. Proposals submitted by fax or e-mail are NOT acceptable and will NOT be considered. DARPA will neither acknowledge receipt of nor return submissions.

PROPOSAL FORMAT: Detailed instructions for completing the proposals are contained in the PIP. Proposals not conforming to the specified format will not be reviewed or evaluated.

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

(1) Technical approach, including design innovation and effectiveness, approach for research, implementation and testing;

(2) Overall scientific and technical merit;

(3) Potential contribution and relevance to this DARPA mission;

(4) Proposer's demonstrated capabilities and related experience; and

(5) Cost realism and reasonableness.

The Government anticipates completing an initial round of evaluations during the third quarter of fiscal year 2002. Resulting awards (if any) may take the form of procurement contracts, cooperative agreements, grants, or agreements entered into under the authority of 10 USC 2371, or Section 845, Public Law 103-160, as amended (commonly referred to as “technology investment agreements” or “other transaction agreements for prototypes”).

DARPA will construct a balanced program in order to meet its needs. A total of several millions of dollars will be available for these efforts. The size of each award and duration of efforts will vary according to the type of effort undertaken. In the case of proposals containing partitioned segments or phases, proposers should define partitions so that the annual budget for each is in the $200,000 to $1,000,000 range. If warranted, portions or partitions of resulting awards may be segregated into pre-priced options. The Government reserves the right to select for award all, some or none of the proposals received. The Government also reserves the right to fund all, or any part of, a proposal evaluated to be eligible for award. Awards are subject to the availability of Government funds, and may be incrementally funded.

ADDRESSES: The administrative addresses for this BAA are: Electronic Mail: BAA02-08@darpa.mil. Electronic File Retrieval: http://www.darpa.mil/baa. Fax: 703-527-3783 addressed to: DARPA/IAO, BAA 02-08. Mail to: DARPA/IAO, ATTN: BAA 02-08, 3701 N. Fairfax Drive, Arlington, VA 22203-1714. Submitted correspondence must include the name, organization, address, e-mail address, telephone number and facsimile number of a designated point of contact.

Point of Contact:

LCol Doug Dyer, USAF, Program Manager, DARPA Information Awareness Office, (IAO), Phone none, FAX 703-527-3783, E-mail none.

Note: In the event of any conflict between this PIP and the BAA, the instructions in the BAA take precedence.