# UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY AND LOGISTICS (USD (AT&L))

#### AND

# COMBATING TERRORISM TECHNOLOGY SUPPORT OFFICE TECHNICAL SUPPORT WORKING GROUP (TSWG)

## BROAD AGENCY ANNOUNCEMENT 02-Q-4655

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**Due Date for Receipt of Phase I Submittals:** 

No Later Than 23 December 2001

23 October 2001

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#### 1. INTRODUCTION.

This is the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) and Combating Terrorism Technology Support Office (CTTSO) Technical Support Working Group (TSWG) Broad Agency Announcement (BAA), 02-Q-4655, issued under the provisions of paragraph 6.102(d)(2)(i) of the Federal Acquisition Regulation (FAR), to provide for the competitive selection of research proposals. Contracts based on responses to this BAA are considered to be the result of full and open competition and in full compliance with the provisions of Public Law (PL) 98-369, "The Competition in Contracting Act of 1984." The earliest contract awards for submittals under this BAA are planned to occur late in the third quarter of Fiscal Year (FY) 2002.

#### 1.1. Approach.

A three-phased proposal selection process will be employed. Phase I will consist of the solicitation, receipt and evaluation of a one-page Summary Quad Chart (viewgraph). Phase II will consist of a solicitation of a White Paper (not to exceed 12 pages) from responders with qualifying Quad Chart evaluations. The White Paper shall include supporting information for data submitted in the summary Quad Chart and shall summarize the problem/threat addressed, provide a more detailed proposed solution/approach, identify deliverables, describe work to be performed, describe the offeror's expertise to effect the proposed solution, and present estimated costs and schedule. Phase III will consist of a solicitation of a full proposal (not to exceed 50 pages) resulting from favorable White Paper evaluations. A final evaluation phase will be conducted upon receipt of full proposals.

#### 1.2. HBCU/MI Set Aside.

In an attempt to maximize participation of Small Businesses and Historically Black Colleges, Universities (HBCU) and other Minority Institutions (MI), a goal of 2.5% of total dollars awarded under the listed mission areas will be set-aside for HBCU/MI and a goal of 2.5% of total dollars awarded under the listed mission areas will be set-aside for small businesses for a total goal of 5%. If set-asides are not determined possible after examination of all proposals submitted under this BAA, goals for total dollars expended will no longer be subject to any set-aside restriction. The Government encourages nonprofit organizations, educational institutions, small businesses, small disadvantaged business concerns, and HBCU/MIs, as well as large businesses and Government laboratories to submit research proposals for consideration.

#### 1.3. Period of Performance.

Proposals that encompass a 12-month period of performance or less are anticipated for many of the requirements in this BAA. The Government may incrementally fund contracts that exceed 12 months. Such long-term proposals shall contain a brief summary of the work contemplated for each period of performance (with associated cost data) so that the contract(s) may be negotiated for the entire program. Long-term proposals must include either separate statements of work (SOW) or describe a phased approach in a single SOW. Also, the proposals must include a full cost proposal for the basic contract and each option or phase proposed. Any desired period for contract option exercise shall be negotiated at the time of contract award in accordance with the option clause set forth in the contract.

#### 1.4. Technical Support.

It is the intent of this office to use contractor support personnel in the review, evaluation, and administration of all submittals for this BAA. Individuals in this category that will have access to any proprietary data shall sign non-disclosure statements that shall be maintained on file in the contracting office. Submission of information in response to this BAA constitutes permission to disclose information to support contractors under these conditions.

#### 1.5. Instructions and Points of Contact.

This BAA Package may be downloaded electronically in its entirety from <a href="www.bids.tswg.gov">www.bids.tswg.gov</a> on the Home Page under Download BAAs.

All contractual and technical questions regarding this BAA must be directed to the Contracting Officer at baaquestions@tswg.gov.

For help with the BAA Information Delivery System (BIDS) submit questions to BIDS administration at <a href="mailto:bidshelp@tswg.gov">bidshelp@tswg.gov</a> or by accessing the HELP REQUEST on the BIDS web site. Please be sure to include the reason for your request in the text block provided. For example, password resets can be requested through HELP REQUEST and should include the message "Request password reset" or "I forgot my password" along with other identifying information.

Offerors are encouraged to periodically review the BAA question and answer section on the web site, <a href="https://www.bids.tswg.gov">www.bids.tswg.gov</a>, located in the HELP section under FAQs.

NOTE: Persons submitting proposals are advised that <u>only the contracting officer</u> may obligate the Government to any agreement involving expenditure of Government funds.

#### 2. GENERAL INFORMATION.

#### 2.1. Eligibility.

To be eligible for contract award, an offeror must meet certain minimum standards pertaining to financial solvency/resources, ability to comply with the performance schedule, prior record of performance, integrity, organization, experience, operational controls, technical skills, facilities, and equipment. See FAR 9.104. Additionally, all offerors MUST be registered in the Central Contractor Registration database. See DFARS 204.7304. Website address for CCR database is http://www.ccr2000.com.

## 2.2. Procurement Integrity, Standards of Conduct, Ethical Considerations.

Certain post-employment restrictions on former federal officers and employees may exist, including special Government employees (Section 207 of Title 18, United States Code). If a prospective offeror believes that a conflict of interest does exist, the situation should be raised to the issuing office's contracts representative before time and effort is expended in preparing a proposal.

#### 2.3. Definitions.

#### 2.3.1. Small Business Concern.

A concern that is independently owned and operated, is not dominant in the field of operation in which it is bidding on Government contracts, and meets the size standards in FAR 19.102.

## 2.3.2. Small Disadvantaged Business Concern.

"Small disadvantaged business concern" as used in this part (except for 52.212-3(c)(4) and 52.219-1(b)(2) for general statistical purposes and 52.212-3(c)(9)(ii), 52.219-22(b)(2), and 52.219-23(a) for joint ventures under the price evaluation adjustment for small disadvantaged business concerns), means an offeror that represents, as part of its offer, that it is a small business under the size standard applicable to the acquisition; and either:

- (1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B; and
  - (i) No material change in disadvantaged ownership and control has occurred since its certification;
  - (ii) Where the concern is owned by one or more disadvantaged individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
  - (iii) It is identified, on the date of its representation, as a certified small disadvantaged business (SDB) concern in the database maintained by the Small Business Administration (PRO-Net); or
- (2) For a prime contractor, it has submitted a completed application to the Small Business Administration or a private certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR part 124, subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since it submitted its application. In this case, a contractor must receive certification as an SDB by the SBA prior to contract award.

#### 2.4. Restrictive Marking on Proposals.

All proposals should clearly indicate content disclosure limitations. Submittals may be marked as "Proprietary" or words to that effect; however, markings such as "Company Confidential" or other phrases that may be confused with national security classifications shall be avoided.

## 2.5. Submission Handling/Rights in Technical Data and Computer Software/Patent Rights - General.

#### 2.5.1. Procurement Integrity.

The Government intends to comply with FAR 3.104 in its treatment of information submitted in response to this BAA solicitation and marked with the individual or company's legend.

#### 2.5.2. Rights in Technical Data and Computer Software.

Rights in technical data, computer software and software documentation provided in the proposal shall be treated in accordance with the DFARS 252.227-7016, entitled "Rights in Bid and Proposal Information." As discussed below, offeror's will be required in Phase II to assert restrictions on specific technical data, computer software, and computer software documentation that are proposed to be delivered under a resultant contract with less than unlimited rights. See DFARS 252.227-7017(d) and paragraph 3.3.3.4 below. Rights in technical data, computer software and computer software documentation in the resultant contract shall be as set forth in DFARS 252.227-7013 (regarding technical data) and DFARS 252.227-7014 (regarding computer software and software documentation). Both clauses (DFARS 252.227-7013 and – 7014) shall be included in any non-commercial contract exceeding the simplified acquisition threshold. Other clauses to be included in the contract are: DFARS 252.227-7019, Validation of Asserted Restrictions - Computer Software; DFARS 252.227-7025, Limitations on the Use or Disclosure of Government-Furnished Information marked with Restrictive Legends; DFARS 252.227-7027, Deferred Ordering of Technical Data or Computer Software; DFARS 252.227-7030, Technical Data-Withholding of Payment; DFARS 252.227-7036, Declaration of Technical Data Conformity; and DFARS 252.227-7037, Validation of Restrictive Markings on Technical Data.

#### 2.5.3. Patent Rights.

The resulting contract will include appropriate patent rights clauses.

#### 2.5.4. Submission Information and FOIA.

Records or data bearing a restrictive legend may be included in the proposal. The offeror is cautioned, however, that portions of the proposal may be subject to release under terms of the Freedom of Information Act (FOIA), 5 U.S.C. 552, as amended. In accordance with FOIA regulations, the offeror will be afforded the opportunity to comment on, or object to the release of proposal information.

#### 2.6. Report Requirements.

The number and types of deliverable reports shall be specified in the contractual document. The reports shall be prepared and submitted in accordance with the procedures contained in the contract, based on the minimum reporting requirements, the contractor's proposal, and as mutually agreed upon before award. A Final Report that summarizes the project and associated tasks is required at the conclusion of each contract, notwithstanding the fact that the research may be continued under a follow-on contract. Monthly Reports documenting program and financial status are required. In addition, test plans, test and technical reports, technical data, specifications, computer programs or other data, as appropriate, should be specified based on the proposed efforts.

#### 2.7. Subcontracting.

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy.

#### 3. PROPOSAL PREPARATION.

This section provides information needed by the individual preparing the proposal for submission under this BAA.

#### 3.1. General Guidance.

All submittals must strictly follow the instructions in this announcement and include only the information specified to avoid delays in evaluation or disqualification.

#### 3.1.1. Continuing Research Requirements.

A proposal for continuation of a given research project will be considered on the same basis as proposals for new research agreements. The proposal must be submitted sufficiently in advance of the termination of the existing agreement so that if it is accepted, support may be continued without interruption.

#### 3.1.2. BAA Information Delivery System (BIDS).

The Broad Agency Announcement Information Delivery System (BIDS) in operation at <a href="www.bids.tswg.gov">www.bids.tswg.gov</a>, will be used to provide public access to the BAA package and will be used to collect all <a href="unclassified">unclassified</a> submittals under this BAA. A BIDS registration is not necessary to download the BAA package. Registration is required to respond to this BAA and must be completed <a href="no later than 5 working days">no later than 5 working days</a> prior to the requirement closing date in order to gain access to the system and to upload response data. The offeror must complete all mandatory fields on the contractor registration submittal form in BIDS. Registration acceptance will be transmitted by email and indicate the registrant's "Company ID" to be used for login (User name) and as part of the document identifier described later in this BAA package. Questions regarding BIDS may be addressed via email to TSWG BAA Administration at <a href="mailto:bidshelp@tswg.gov">bidshelp@tswg.gov</a> or by accessing the HELP REQUEST at the bottom of the BIDS site screen.

#### 3.1.2.1. Format and Submittal Upload.

All unclassified responses shall be uploaded to BIDS in the electronic format specified and each must include all information requested for each submittal type as described in this document. Each follow-on submittal shall not be uploaded until the previous submittal has been evaluated and an email request for the next submittal is received by the offeror from the contracting officer.

#### 3.1.2.2. Cover Page/Submittal Markings.

The cover page of all submittals (or margin headers for all Quad Charts) shall be marked with the appropriate *BAA Announcement Number*, *Interest Area Number* and *Title* (as identified in Section 5 of this BAA) as well as a *Document Identifier* as described below. Additionally, for any classified material, the document must be clearly marked in accordance with appropriate security regulations.

#### 3.1.2.3. Document Identifier.

The offeror shall insert a "Document Identifier" into the header (top margin area) of each submittal. The identifier shall be unique to any other submittal from the offeror and MUST be formatted with the targeted Interest Area/BAA short title (i.e. ATL), the Requirement Number, the company registration identification (assigned at BIDS registration) and the contractor internal tracking number. The constructed document identifier is used by the evaluation team to identify each submittal and to connect downloaded/printed documents with evaluation records posted into on-line collaboration software.

For example, Document Identifiers should be formatted as follows:

ATL-Requirement Number-Company ID- Contractor Internal Tracking Number.

Note: When actually uploading the document to a specific requirement in BIDS (on-line), the appropriate prefix (underlined in the example) is automatically generated *by the system* and attached to the contractor internal tracking number which is unique and created by the offeror. The document identifier inserted into the header of the uploaded document MUST match the document identifier in the on-line BIDS system.

The system enforces unique tracking numbers for each offeror and will not allow an upload of a submittal document if the contractor internal tracking number entered by the offeror has already been used. For best tracking purposes, it is recommended that offeror use tracking numbers that will indicate the Phase to which the document was submitted. For example, {your contractor internal tracking number}-01 would indicate that the document was submitted to Phase 1, and a suffix of -02 would indicate that the document was submitted to Phase 2, thereby making each number unique by virtue of the suffix. An alternative is to use -QC as the Quad Chart submittal, -WP as the White Paper and -FP as the final proposal, all unique because of the dash characters.

#### 3.1.3. BIDS Security and Submittal Changes.

All data uploaded to BIDS is secure from public view or download. All submissions will be considered proprietary/source selection sensitive and protected accordingly. Changes to uploaded responses will be permitted up to the closing date and time. If the offeror wishes to submit a modified requirement response, the offeror must first delete the previous response and then upload a modified document. Changes after the requirement due date will not be permitted. The documents may only be reviewed by the registrant, authorized Government representatives, and assigned evaluators.

#### 3.1.4. Special Handling/Procedures for Classified Information.

If a submittal contains classified information, the offeror must first obtain a submittal number through BIDS for tracking purposes and identify in the comments section why the submittal cannot be uploaded and submitted via the automated system. The BIDS tracking number must be clearly identified on the mailed submittal. Classified responses (up to SECRET) must be appropriately marked, sealed and mailed in accordance with classified material handling procedures. All classified documents must be packaged and shipped in accordance with regulations and instructions pertaining to the level of clearance.

#### For classified submittals, send an e-mail to:

#### Security@tswg.gov

They will provide you with the appropriate mailing address.

Classified documents MUST be mailed and MUST be received by the applicable due date and time. Classification does not in any way eliminate the offeror's requirement to comply with all instructions in this BAA.

#### 3.2. Phase I Submittals.

#### 3.2.1. **General**.

Offerors shall respond to Phase I of this BAA using a one-page Quad Chart in the format depicted in the Quad Chart template downloadable from the BIDS web site "Template" menu option. The Quad Chart must be received electronically through BIDS (unclassified) or received by mail (classified only) no later than **1600 (4:00 p.m.)** EST on the due date advertised for the specific requirement. Upon request, the offeror may be required to provide access to pending patent applications.

#### 3.2.2. File Format and Content.

The Quad Chart shall be prepared in color or black and white in Microsoft (Office-98) Word, Microsoft PowerPoint, or Adobe PDF (Version 4 or higher) electronic file format. The document must be print-capable, without password, using text font and graphic file formats that will cause the document to be NO LARGER THAN 500KB IN FILE SIZE. Graphic images inserted into the document should be in a file format (GIF/JPEG) that will minimize file size and support clear SVGA display and document printing (96 DPI recommended). The offeror shall upload the submittal via the BIDS response form for each requirement before the due date and time, and in accordance with instructions in sections 3.1 and 3.2. Prior to submittal, the offeror must ensure that the prepared chart includes the document identification header

content as described in this document. The offeror should also ensure that the candidate proposal meets the needs of the requirement including cost, technical feasibility and other evaluation criteria as identified in this BAA.

#### 3.2.3. Notification to Offeror.

Following review of the Quad Chart, the Government will notify the offeror when a submittal has been accepted or rejected. Notification of acceptance accompanied with a request to submit the Phase II requirement (White Paper) will be emailed to the offeror's principal contact as entered during the BIDS registration and shall indicate the new submittal period. Notifications of rejection will likewise be e-mailed to the address provided by the offeror during BIDS registration. Debriefings for Quad Charts are not anticipated due to the nature of a BAA. It should generally be assumed that the reason a proposed solution was not considered for further review was that it did not fit the needs of the TSWG, that it was too costly, or that it failed to meet requirements as specified for technical evaluation.

#### 3.2.4. Status and Inquiries.

Phase I is complete when all submissions have been accepted or rejected in accordance with paragraph 3.2.3 above. Telephonic inquiries concerning the status of Quad Charts will not be accepted.

#### 3.3. Phase II Submittals.

#### 3.3.1. General.

The second phase consists of a White Paper submitted with no more than <u>12 pages</u> (including cover page, figures, charts, and tables) on single-sided, double-spaced pages, using no smaller than 10-point font, and 1-inch margins left/right/top/bottom. If the White Paper is longer than 12 pages, only the first 12 pages will be evaluated.

#### 3.3.2. File Format and Content.

The White Paper shall be prepared in color or black and white in Microsoft (Office-98) Word or Adobe PDF (Version 4 or higher) electronic file format. The document must be print-capable and without password. All text and graphic content MUST NOT EXCEED 500KB IN TOTAL FILE SIZE. Graphic images inserted into the document should be in a file format (GIF/JPEG) that will minimize file size and support clear SVGA display and document printing (96 DPI recommended). The offeror shall upload the submittal via the BIDS response form for each requirement before the due date and time (i.e. 30 days from the date of the email), and in accordance with instructions in section 3.1 above. Prior to submittal, the offeror must ensure that the submittal includes the document identification header content as described in section 3.1 of this document. The offeror should also ensure that the submittal meets the needs of the requirement including cost, technical feasibility and other evaluation criteria as identified in this BAA.

#### 3.3.3. Technical Content.

The White Paper shall describe the problem/threat addressed in the BAA Requirement and include:

- **3.3.3.1.** Description of the proposed solution including underlying theory, a suggested concept of operations and potential users. Include a description of similar work performed, including what agency funded the effort.
- **3.3.3.2.** Description of the proposed tasks and associated deliverables. Include definition of anticipated risks, planned mitigation efforts, work to be performed by the offeror, by other organizations, and any required Government furnished material (GFM) or information (GFI). Include clear descriptions of proposed phases, decision points and/or options. The offeror's proposed position on ownership of intellectual property shall also be described. Upon request, the offeror may be required to provide access to pending patent applications.
- 3.3.3.3. Description of the planned methodology to transition to production and the suggested field support

methodology, including:

- **3.3.3.3.1.** A description of the offeror's capability and/or experience in doing this type of work. Include description of co-participants' capabilities and/or experience as well. State whether agreement has been reached with proposed co-participants.
- **3.3.3.3.2.** A Master Project Schedule preferably in Gantt chart format. Schedule should show planned start and stop point of each phase and subordinate tasks, estimated delivery dates, and decision points. Period of performance will be assumed to be the last completion date shown unless otherwise stated.
- **3.3.3.3.3.** A proposed, task-phased budgetary estimate. At a minimum, this estimate shall detail estimated labor hours and costs and anticipated material and other costs. Costs allocated to other organizations, e.g., Government testing, shall also be clearly shown. Estimated production unit costs should also be included.
- **3.3.3.4.** Identification of Rights in Technical Data and Computer Software/Patent Rights. Offerors must include in their submission a chart as outlined in DFARS 252.227-7017(d) identifying technical data and computer software to be delivered with less than unlimited rights, and a statement in accordance with DFARS 252.227-7028 identifying technical data or computer software that it intends to deliver that is identical or substantially similar to documents or other media that the offeror has produced for, or is obligated to deliver under any other Government contract or subcontract. Offerors are encouraged to read DFARS 252.227-7013, DFARS 252.227-7014 and DFARS 252.227.7103-5.
- **3.3.3.5.** <u>Technology Transition</u>. The White Paper shall contain a brief discussion on the proposed concept for commercializing or transitioning the technology to production if the project is successful. If the offeror's proposal is based on technology that has a patent applied for, or issued, the offeror must provide the patent number or application serial number.

#### 3.3.4. Notification to Offeror.

Following review of the White Paper, the Government will notify the offeror (normally within 90 days of the submittal close date) when a submittal has been accepted or rejected. Notification of acceptance accompanied with a request to submit the Phase III requirement (Proposal) will be e-mailed to the offeror's principal contact as entered during the BIDS registration and shall indicate the new submittal period. Notifications of rejection will likewise be emailed to the address provided by the offeror during BIDS registration. Debriefings for White Papers are not anticipated due to the nature of the BAA. It should generally be assumed that the reason a White Paper was not considered for further review was that it did not fit the needs of the TSWG, that it was too costly, or that it failed to meet requirements as specified for technical evaluation.

## 3.3.5. Status and Inquiries.

Phase II is complete when all submissions have been accepted or rejected in accordance with paragraph 3.3.4 above. Telephonic inquiries concerning the status of White Paper submittals will not be accepted.

#### 3.4. Phase III Submittals.

## 3.4.1. General.

The primary objective of the phased solicitation approach used in this BAA is to minimize cost and effort of prospective offerors. Accordingly, full proposals will only be requested for qualifying solutions that have a high probability of award. However, the Government reserves the right to cancel any Phase III solicitation prior to award. A complete, clear and concise proposal in a single electronic file upload is considered optimum. In the unusual circumstance where a single file submittal will exceed 500KB in total file size, the response may be divided into two upload files with one file containing all technical descriptions and the second file containing all cost data; both files not exceeding 500KB in total file size. In any case, technical descriptions shall not exceed 50 pages including cover page, figures, charts and tables (excluding

any forms requested within this BAA package). All submittal pages must be formatted on single-sided, double-spaced pages, font no smaller than 10 point, with 1-inch page margins (left/right/top/bottom). Each proposal submittal shall reference the BAA Number, the BAA Interest Area Title, the specific Interest Area Number and Title as identified in Section 5 and include a Document Identifier as described in section 3.1 of this document. Classified proposals (up to SECRET) must be appropriately marked, sealed, and mailed in accordance with classified material handling procedures. Proposals received after the closing date will not be considered by the Government.

#### 3.4.2. File Format and Content.

The proposal shall be prepared in color or black and white in Microsoft (Office-98) Word or Adobe PDF (Version 4 or higher) electronic file format. The document must be print-capable and without password. Total text and graphic content in any upload section of the proposal MUST NOT EXCEED 500KB IN TOTAL FILE SIZE. Graphic images inserted into submittal documents should be in a file format (GIF/JPEG) that will minimize file size and support clear SVGA display and document printing (96 DPI recommended). All (unclassified) submittals shall be uploaded via the BIDS response upload form before the due date and time specified in the email notice (i.e. 30 days from the date of the email) and in accordance with section 3.1 above.

#### 3.4.3. Technical.

The technical portion of the proposal should contain the following:

- **3.4.3.1.** A title and an abstract that includes a concise statement of work and basic approaches to be used. This should be on a separate page and in a form suitable for release under the Freedom of Information Act, 5 U.S.C. 552, as amended. The statement of work should indicate the effort intended for the period of performance.
- **3.4.3.2.** The technical portion shall include an Executive Summary, a technical approach, description of relevant prior work, a program plan including a statement of work, facilities and equipment descriptions, list of documentation and reports, and a management plan. All paragraphs containing proprietary information must be clearly marked.
- **3.4.3.3.** The proposal shall include a section on technology transition planning that discusses the proposed approach for commercializing or transitioning the prototype technology to production. This section shall identify any existing intellectual property claims or intentions. The offeror shall specifically indicate if there is a patent pending (and the patent application number, if received) or a patent issued with the patent number(s). The offeror shall include a statement on licensing or venturing plans, as applicable, if the project is successful. The offeror shall discuss barriers to commercialization, such as anticipated regulatory issues (environmental, safety, health, transportation), liability issues, interoperability, financing, etc. and planned steps to address these barriers. Also, if not covered in other sections, this section shall address interaction with potential users.
- **3.4.3.4.** The names, brief biography, and a list of recent publications of the offeror's key personnel (including alternates, if desired) who will be involved in the research. Documentation of previous work or experience in the field of the offeror is especially important.
- **3.4.3.5.** The type of support, if any, the offeror might equest from the Government, such as facilities, equipment, or materials.
- **3.4.3.6.** The names of other federal, state, or local agencies or other parties receiving the proposal and/or funding the proposed effort. If none, so state.
- **3.4.3.7.** A statement regarding possible impact, if any, of the proposal's effect on the environment. If none, so state.

- **3.4.3.8.** A brief description of the offeror's organization.
- **3.4.3.9.** The offeror shall indicate the total contract proposed for the effort inclusive of all options.

#### 3.4.4. Cost Volume.

The cost volume of the proposal should contain the following:

- **3.4.4.1.** A cost estimate that is sufficiently detailed by element of cost for meaningful evaluation. Cost breakdown shall include materials, direct labor, indirect costs, and other direct costs such as special test equipment or travel. Offerors shall provide exhibits as necessary to substantiate the cost elements.
- **3.4.4.2.** A cost-element breakdown shall be attached for each proposed line item and must reflect all specific requirements. Supporting breakdowns must be furnished for each cost element, consistent with the offeror's cost accounting system. When more than one contract line item is proposed, summary total amounts covering all line items must be furnished for each cost element. If agreement has been reached with Government representatives on the use of forward pricing rates/factors, identify the agreement. Depending on the offeror's system, breakdowns shall be provided for the following basic elements of cost, as applicable:
- **3.4.4.2.1.** <u>Materials</u>: Provide a consolidated price summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing (vendor quotes, invoice prices, etc.). Include new materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed, identify the item and show the source, quantity, and price.
- **3.4.4.2.2.** <u>Competitive Methods</u>: For those acquisitions (e.g., subcontract, purchase orders, material orders) over \$100,000 priced on a competitive basis, also provide data showing degree of competition and the basis for establishing the source and reasonableness of price. For inter-organizational transfers priced at other than cost of the comparable competitive commercial work of the division, subsidiary, or affiliate of the contractor; explain the pricing method (See FAR 31.205-26(e)).
- **3.4.4.2.3.** Established Catalog or Market Prices/Prices Set By Law or Regulation: When an exemption from the requirement to submit cost or pricing data is claimed, whether the item was produced by others or by the offeror, provide justification for the exemption.
- **3.4.4.2.4.** <u>Noncompetitive Methods</u>: For those acquisitions (e.g., subcontract, purchase orders, material orders) over \$500,000 priced on a noncompetitive basis, also provide data showing the basis for establishing source and reasonableness of price. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown if price is based on cost. For interorganizational transfers priced at cost, provide a separate breakdown of cost by elements.
- **3.4.4.2.5.** <u>Direct Labor</u>: Provide a list of participants, not necessarily by name, showing a time phased (e.g., monthly, quarterly) breakdown of labor hours, rates, and cost by appropriate category, and furnish basis for estimates.
- **3.4.4.2.6.** <u>Indirect Costs</u>: Indicate how offeror has computed and applied offeror's indirect costs. Indicate the rates used and provide an appropriate explanation.
- **3.4.4.2.7.** Other Costs: List all other costs not otherwise included in the categories described above (e.g., special tooling, travel, computer and consultant services, preservation, packaging and packing, spoilage and rework) and provide basis for pricing.
- **3.4.4.2.8.** Royalties: If more than \$250, provide the following information on a separate page for each separate royalty or license fee:

- Name And Address of Licensor
- Date of the License Agreement
- Patent numbers, Patent Application Serial Numbers, or other basis on which the royalty is payable
- Brief description (including any part or model numbers of each contract item or component on which the royalty is payable)
- Percentage or dollar rate of royalty per unit
- Unit price of contract item
- Number of units
- Total dollar amount of royalties

Note: A copy of the current license agreement and identification of applicable claims of specific patents may be specifically requested by the contracting officer. (See FAR 27.204 and 31.205.37.)

- **3.4.4.2.9.** Facilities Capital Cost of Money: When the offeror elects to claim facilities capital cost of money as an allowable cost, the offeror must submit Form CASB-CMF and show the calculation of the proposed amount. See FAR 31.205-10.
- 3.4.4.2.10. FEE: The fee, if any, which the organization proposes to assess the research project.

#### 3.4.5. Contractual.

The contractual portion of the proposal should contain the following:

- **3.4.5.1.** The type of contract preferred.
- **3.4.5.2.** Proposed duration of effort, basic contract, and any options.
- **3.4.5.3.** The identity of any members of the organization with potential conflicts of interest. Possible conflicts of interest include any people with prior federal employment including employment of the principal investigator as a special Government employee (duties, agency with whom employed, dates of employment) within two years from the date of proposal submission. If none, so state.
- **3.4.5.4.** If the offeror is proposing to perform research in a classified area, indicate the level of classification of the research and the level of clearance of the potential principal investigator and all other proposed personnel. Also indicate the Government agency that issued the clearances.
- **3.4.5.5.** A list of property required to perform the proposed research, separating items to be acquired with contract funds and those to be furnished by the Government. When possible, the description or title and estimated or known unit and total costs of each item should be shown (i.e., manufacturer, catalog price, or previous purchase price). When such information on individual items is not available, the items should be grouped by class and estimated values indicated. In addition, the offeror must include a statement as to why it is necessary to acquire the property with contract funds, and if applicable, express in writing his unwillingness or financial inability to acquire the items with his own resources. Please note that the FAR generally prohibits providing an industrial contractor with facilities (including plant equipment and real property) with a unit acquisition cost of less than \$10,000.
- **3.4.5.6.** If the total amount of the proposal exceeds \$500,000 and the offeror is not a small business, the offeror shall submit a subcontracting plan for small business and small socially and economically disadvantaged business concerns. A mutually agreeable plan will be included in and made a part of the resultant contract. The contract cannot be executed unless the contracting officer determines that the plan provides the maximum practicable opportunity for small business and small disadvantaged business concerns to participate in the performance of the contract.

#### 3.4.6. Notification to Offerors.

Phase III is complete when the Government concludes technical evaluations and transitions to formal negotiations. Notification of acceptance or rejection of a Phase III Proposal will be sent via email to the offeror's principal contact during BIDS registration. A formal debriefing may be requested by the offeror if the Government does not accept the Phase III proposal. Telephonic inquiries concerning the status of Phase III prior to official notification will not be accepted.

#### 4. PROPOSAL EVALUATION.

#### 4.1. Objective.

USD (AT&L) and CTTSO are issuing this joint BAA to identify capabilities that can be developed in approximately 12-18 months. USD (AT&L) is responsible for research and development in the Department of Defense. CTTSO executes the TSWG program that conducts rapid prototype development focused on critical multi-agency and future threat counter/anti-terrorism requirements in support of the USD (AT&L). The primary TSWG mission is to conduct the National Interagency Research and Development (R&D) Program for combating terrorism through rapid research, development, and prototyping.

#### 4.2. Evaluation Criteria.

The criteria to be used to evaluate and select proposals for TSWG projects are described in the following paragraphs. Each proposal will be evaluated on the merit and relevance of the specific proposal as it relates to the TSWG program <u>rather than against other proposals</u> for research in the same general area.

#### 4.2.1. Basic Requirement.

The proposed solution meets the letter and intent of the stated requirement and all elements within the proposal exhibit a comprehensive understanding of the problem and the requirements of intended end users. The proposed solution meets multiple TSWG user (either U.S. Government or commercial) needs and is conclusive with full compliance and justification of each required element in the solicitation.

#### 4.2.2. Technical Performance.

The proposed technical approach is feasible, achievable, complete and supported by a proposed technical team that has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements provided are complete and in a logical sequence with all proposed deliverables clearly defined such that a final product that achieves the requirement can be expected as a result in the award. The proposal identifies all technical risks and planned mitigation efforts are clearly defined and feasible. The roles of the prime and other participants required are clearly distinguished and precoordination with all participants (including Government facilities) fully documented. The requirement for and the anticipated use or integration of GFM including all equipment, facilities, information, etc. is fully described including dates when such GFM will be required. Intellectual property ownership and the planned transition to production are adequately addressed, including a support concept for product described. Similar efforts completed by the offeror the in this area are fully described including identification of other Government sponsors.

#### 4.2.3. Contractor Past Performance.

The offeror's past performance in similar efforts clearly demonstrates an ability to deliver products that meet the proposed technical performance requirements within the proposed budget and schedule. The proposed project team has the expertise to manage the cost and schedule.

#### 4.2.4. Schedule.

The proposed schedule is complete and achievable. The proposal indicates that the offeror has fully analyzed the project's critical path and has addressed the resulting schedule risks.

#### 4.2.5. Cost.

The proposed costs are both reasonable for the work proposed and affordable. The proposal documents all anticipated costs including those of associate, participating organizations. The proposal demonstrates that the offeror has fully analyzed budget requirements and addressed resulting cost risks. All cost-sharing and leveraging opportunities have been explored and identified. Other sponsors who have funded or are funding this offeror for the same or similar efforts are identified.

## 5. TECHNOLOGY DEVELOPMENT REQUIREMENT TARGETS AND OBJECTIVES.

USD (AT&L) and CTTSO are interested in soliciting proposals in the following areas combating terrorism, location and defeat of hard or difficult targets, protracted operations in remote areas, and countermeasures to weapons of mass destruction. The intent of this BAA is to identify technologies and approaches that provide near-term solutions (12-18 months). The level of detail provided for each specific mission area requirement or the order in which requirements appear is not intended to convey any information regarding relative priority. As a reminder, the subgroup designator, requirement number and document identifier must be included on every submittal (i.e., Quad Chart, White Paper, Proposal).

There are four *general* requirements (R-100, 200, 300, and 400) in this BAA and each proceeds to related and more defined requirements. Please note the requirement number that best describes your submission in the submission title. Do not include more than one requirement number per submission. If none of the specific requirements describe your submittal then select the most appropriate *general* requirement.

It should not be assumed that the specific requirements are higher priority than a general requirement nor should the number of specific requirements be interpreted to indicate the relative priority between *general* requirement areas.

#### R-100 Combating Terrorism

This topic area includes but is not limited to finding suspected terrorists, predicting the future behavior of terrorists, finding weapons and support equipment that could be used by terrorists, detection and warning of terrorist activities, rapidly configuring protection and defensive measures against terrorist action and recovery from terrorist actions.

#### R-101 Automated Speaker Recognition System

Incorporate Pashtu, Urdu, Farsi, Arabic dialects, and other minor Middle Eastern and central/south Asian languages into an existing Automated Speaker Recognition System. Integrate advanced language recognition and change detection algorithms to detect changes and identify language within speech data containing multiple languages, short segments (10 - 30 seconds) and over degraded channels. Develop corpus collection/database to support this project. Incorporate open system architecture to permit client-server use by selected intelligence and counterintelligence agencies.

#### R-102 Computer and Information Operations

Develop a family of tools for the detection, extraction, storage, transmission, scanning, and forensic analysis of computer media, PDAs, and digital audiovisual imagery. Emphasis will be on tools for high performance analysis (forensic intrusion, data, media, network and hierarchical visual information), decryption, steganography, and forensic knowledge based application.

#### R-103 Tagging, Tracking, Locating and Remote Sensors

Develop tags/sensors that allow remote monitoring of real/near real-time movement of forces and resources. Both line-of-sight and non-line-of-sight methods are acceptable. Methods may be either passive or active. This includes monitoring of civilian as well as military targets. Networked autonomous systems that provide a fused picture of the environment and movements are desireable.

#### R-104 Locating Faces in Video Images

Develop improved algorithms for identifying that a 2-D video image or sequence of images contains one or more human faces, locating those faces precisely in the image(s) and counting the number of different faces. We are primarily interested in "natural environments" with unconstrained lighting and pose angle, where image resolution exceeds 50-pixel interocular distance. Integration with emerging U.S. government test datasets will be required.

#### R-105 Identifying Faces in Video Images

Develop improved algorithms for identifying faces from video sequences under unconstrained lighting and

pose conditions. Of particular interest is the refinement of basis sets for image-based approaches, creation of model-based methods using 2-D input with potential for "real time" applications, and study of decision optimization with multiple, highly correlated images. Demonstration of algorithms using emerging U.S. government test datasets will be required.

## R-106 Video Human Tracking

Develop a system for tracking a single person through multiple sequential 2-D video images or through multiple cameras in uncontrolled lighting environments.

#### R-107 Voice Print Identification

Develop a system to use voice prints to locate, track, and correlate suspected terrorists and their associates. Develop the technology to identify specific foreign language speakers based on a short sample of voice data collected from intelligence, law enforcement or media sources. Technology must interface with collection databases of voice samples and provide a mechanism for the distribution and use of resultant "speaker id" products. The identification technology should incorporate current state of the art and provide linkage to emerging developing technologies from academia, industry and government labs. System should have the ability to automatically establish and track correlations and build the identification objects, while also providing a robust suite of voice analyst assistant tools for parsing and analyzing the speech data. Develop the ability to handle multiple channel effects and noise degradation from degraded or low quality channels.

#### R-108 Terrorist Behavior and Actions Predictions Technology

Develop an integrated information base and a family of data mining tools and analysis aids to assist the analyst and the identification of patterns, trends and models of behavior of terrorist groups and individuals. This would include information fusion of diverse intelligence, law enforcement and cultural data into a common form assessable to state of the art data mining and analytic tools. Included would be visualization and display tools for understanding the relationships between persons, events and patterns of behaviors. The system would allow "what if" type modeling of events and behavioral patterns and result in predictive analysis products with specific elements of information to confirm or deny the hypothesis of the various models. The resulting predictions and hypothesis models should form the basis of a planning and "course of action" tool for US/Allied actions in confirming predictions or disrupting behaviors.

#### R-109 Information Integration Center

Develop the ability to readily store, catalogue and correlate data that will be identified in the course of an investigation and analysis of suspected terrorist activity.

#### R-110 Physical Security

This topic area covers research and development projects that satisfy requirements for physical security support to protect personnel, equipment and facilities against terrorist activity. This includes development of equipment and systems to safeguard personnel, prevent or delay unauthorized access to facilities and installations, and to protect against terrorist threats and sabotage. It further includes methods of mitigating the effects of blast on structures.

#### R-111 Ports of Entry Passenger Screening Aid

Develop a deception detection device for use with counterterrorism based structured interviews for passengers of the various modes of transportation. The system should apply known relationships between electrodermal activity and the detection of deception in a polygraph to a portable device. Consideration will be given to alternate approaches and sensors. Emphasis should be placed on processing time.

#### R-120 Advanced Distributed Learning (ADL)

This topic area focuses on the research and development of ADL technologies to enhance the operational readiness of all elements involved in combating terrorism and consequence management. This includes development of ADL delivery systems, architectures, and infrastructures; models, tools, and procedures to

enable the cross platform shared use and reuse of training materials; and tools, techniques, and guidelines for creating high quality, standardized training materials.

#### R-200 Location and Defeat of Hard or Difficult Targets

This topic area includes but is not limited to technologies for locating, characterizing, planning and practicing mission options, destroying, and damage assessment of underground facilities, highly camouflaged (natural or artificial), or otherwise hidden targets that may house terrorists or terrorist activities.

#### R-201 Detection and Mapping of Underground Facilities

Develop a system to detect, locate, and map underground/concealed cavities that may serve as secure havens for terrorists. Applicable methods may include ground penetrating radar, acoustics, and unconventional surveillance and reconnaissance.

#### R-210 Tactical Operations Support

This topic area covers research and development projects that satisfy requirements for equipment and systems to support specialized force offensive operations directed against terrorist activities and groups. This includes reducing the support and infrastructure of terrorist organizations through Psychological Operations and Civil Affairs (reducing popular support and credibility of the terrorist organizations), and through Foreign Internal Defense augmentation, training and equipping indigenous professional military units to fight terrorists.

#### R-300 Protracted Operations in Remote Locations

This topic area includes but is not limited to technologies that contribute to mission performance including the sustainment and protection of small military units that are deployed in remote areas for extended periods of time. This area also includes technologies that: support the efficient infiltration and exfiltration of military forces and equipment; placement and data access of remote sensors (either stationary or mobile); communication and coordination of operations between and among command centers and remotely located forces; enhanced situational awareness including data fusion; and other technologies that contribute to reconnaissance, direct action, or psychological operations and civil affairs. Remote locations are geographical areas characterized by rugged terrain, presence of hostile forces, and politically denied access. Systems that can fuse multiple sensors into a common picture are desired. Unconventional surveillance and reconnaissance systems are desired.

#### R-301 Early Warning Devices

Develop early warning capability to alert tactical forces of near presence of non-friendly personnel or vehicles. Included in this requirement are detection systems that identify electromagnetic emissions or acoustic systems. Systems must be rugged and if remote sensors are used, the sensors must be easily hidden in the terrain.

#### R-310 Direct Action

This topic area includes but is not limited to enhancing direct action capabilities including improved situational awareness for assault units, improved accuracy and lethality of weapons, weapons for special situations, and light-weight personal armor that stops both weapons and knife penetration with full body protection.

#### R-311 Specialty Munitions

Develop special purpose long-range munitions that will enhance special operations mission requirements and are compatible with standard, fielded weapon systems. Included but not limited in this requirement is ability to provide standoff guidance to specified targets without exposing friendly force.

#### R-312 Advanced Tactical Imaging Systems

Develop small, weapons-mounted or hand-held systems that provide full exploitation of the imaging spectrum (optical and thermal) to provide quality images that support targeting and offensive operation in

environments obscured by smoke, haze, fog, or darkness. System capability must be agile and adjustable to the specific environment in order to take best advantage of the available spectrum.

## R-313 Advanced Breaching Tools

Develop tools, methods, or systems that will allow controlled breaching of objectives in a manner that limits collateral effects to the structure or to personnel in the vicinity of the breach point. Breaching of masonry, structural metallic, or other systems may be addressed. Systems must be man portable and be designed to be consistent with operation by small tactical teams.

#### R-314 Through-Wall Imaging

Develop high fidelity through-wall imaging capability. System must provide accurate location and number of personnel as well as map out the area being imaged. The system must include a user-friendly display that is easily interpreted by tactical force personnel. The display must be night vision compatible, and be rugged enough to support typical tactical operations scenarios. The system should be man portable and operate on its own power supply, but, able to use external power if available.

#### R-400 Countermeasures to Weapons of Mass Destruction

This topic area includes but is not limited to technologies to monitor, detect and characterize purposely concealed chemical, biological, radiological, nuclear (CBRN) and high-explosive substances; safely destroy or render harmless CBRN, and high-explosive substances or manufacturing facilities; screen personnel and their belongings in potential risk areas (airports, embassies, border crossings, or other portal locations); positively identify known terrorists that may be associated with weapons of mass destruction; quickly and positively identify the nature and source as well as predict the impact of weapons of mass destruction after their release; and forensic methods to quickly identify terrorists who have released weapons of mass destruction. Also desired are systems that include database and data mining tools to identify common times, places, contacts, and other commonalities between suspects.

#### R-401 Identifying Terrorists Involved with Weapons of Mass Destruction

Develop methods to determine if terrorists have worked with weapons of mass destruction. Identify and characterize the chemical and/or physical changes resulting from intermittent less than lethal exposure to chemical warfare nerve, blister, blood and choking agents; radiation from nuclear weapons or potential radiological dispersion devices; and biological warfare agents. These phenomena shall be used to develop expedient field assays (desired) and devise definitive laboratory protocols (required) to positively associate alleged terrorists in custody with exposure to one or more types of weapons of mass destruction. The matrices of interest include clothing, hair, skin, blood, bodily wastes, teeth and bone. The chemical and/or physical changes must be sufficiently stable to be detectable days to weeks after the individual's exposure. The ability to identify instances of repeated exposure and to estimate the time elapsed since the last exposure is desired.

## R-402 Entry Point Screening for Improvised Explosive Devices, Chemical and Radiological Weapons

Develop an entry point screening system with integrated sensor technology to detect improvised explosive devices (IED), and chemical and radiological weapons. Novel detection technology needs to be integrated with existing sensor systems for detecting explosives, chemical and radiological material. Fixed and mobile entry point screening systems need to be developed in order to support permanent base and expeditionary force protection operations.

## R-410 Chemical, Biological, Radiological, and Nuclear Countermeasures

This topic area covers research and development projects that satisfy user requirements to counter the terrorist employment of chemical, biological, radiological or nuclear (CBRN) materials.

#### R-411 Pre-release Detection of Chemical and Biological Agents

Develop a system to detect chemical warfare agents (CWAs), biological warfare agents (BWAs) and selected toxic industrial chemicals (TICs) prior to release in a terrorist attack. Rapid warning of a potential

CWA, BWA or TIC release would permit security force personnel to prevent or contain the release and warn personnel to take life saving countermeasures. Pre-release detection capability will provide point detection and alarm within two minutes against the following prioritized CWAs: Nerve agents (GA, GB, GD, GF, VX) (required); Blood Agents (AC and CK) (required); Blister Agents (all H series, L, HL and CX) (desired); TICS with IDLH less than 10ppm (desired); and BWAs: Bacteria, e.g., anthrax; plague; tularemia; toxins; and viruses. Detection may be based on decomposition products, byproducts or other residues from the synthesis or culture process. Contact with the container and surface swipes may be performed in the sampling process.

#### R-412 Air Sampler and Aerosol Collector

Develop a miniaturized device to continuously monitor and record data on airborne particulate levels for a period of up to 7 days required (30 days desired). The device shall be small, able to operate autonomously to count, categorize and collect airborne particulate matter. The device shall be able to distinguish biological from non-biological particles. It shall exclude particles larger than 25 microns and detect particles down to 0.01 micron in size. The device shall be capable of computing a binary trigger signal based on current and past environmental parameter values, providing the signal to flag a collection event for subsequent analysis after recovery. The device shall have a maximum weight of 2KG and a maximum volume of 1L. The device shall remain operational at temperatures from –20 to 50 degrees C.

#### R-413 WMD Release Source Prediction

Develop a system to quickly ascertain the location and characteristics of the source a WMD release from remote sensing or from air and/or surface sampling for input into military or other government models to predict the impact of the release and plan response measures. Quick identification of the source can support efforts to mitigate the release and collect critical transient evidence to help identify the perpetrator. The source of a covert CBR release may not be readily apparent requiring the timely deployment of remote sensing capability, a grid of expendable air samplers or a surface sampling plan if the plume has dissipated. The sensor/sampling grid shall be of sufficient density and accuracy to for the application to have a 95% probability of converging on a source location within 100 meters.

#### R-414 Expedient Chemical and Biological Agent Battlefield Neutralization

Develop procedures for the rapid and expedient neutralization of suspected chemical or biological agents in containers or improvised production facilities using military explosives or other methods with minimal additional logistical burden. The procedures shall address quantity, placement, and stand-off distances with and without personal protective equipment.

#### R-415 Field Confirmatory Biological Analysis

Develop a portable (<10kg) battery-powered device to process and analyze aqueous samples (<10ml) for the presence of and to identify viable or dead known biological warfare agents (at least eight per sample based on multiple target signatures). With minimal preprocessing of samples, the system must be capable of analyzing ground water, natural surface water, wastewater and aqueous extraction from an intermediate capture medium. In addition to suspended organic and inorganic particulates, the samples may contain a wide range of organic and inorganic solutes including those from spent growth media. Consumables should be shelf stable without refrigeration and self-contained. If required antibodies and nucleic acid probes will be provided as GFE, for simulants (unclassified) during development and actual agents (classified) for deployment. The sample preprocessing and analysis shall take no longer than one hour and there shall be no cross contamination between samples. The system shall be capable of being decontaminated in the field. False positive and false negative rates shall be minimized and probable minimum detectable level of pathogens and toxins shall be specified. Threshold: Bench top system in a simple laboratory to be operated by a trained technician. Objective: Field deployable system to be operated with no specialized molecular biology knowledge after minimal training.

#### R-416 WMD Material Assessment

Develop database that can be used to track, associate, evaluate and assess procurement of WMD associated materials, including equipment, machinery, precursor and sub-precursor materials, and to

highlight abnormal behavior patterns. Database should integrate inputs from purchases of materials or equipment that could be used to manufacture WMD weapons. Transactions to be tracked include use of credit cards, checks, purchase orders, cash, etc. Database should permit records of WMD associated materials procured in unusual quantities to be documented by retailers/wholesalers/manufacturers and reported to appropriate Homeland Defense authorities.

#### R-420 Explosives Detection

This topic area covers research and development projects that satisfy requirements for existing and emerging technology in the area of explosives detection and diagnostics. Emphasis is on long-term sustained approachs to develop technologies for detection and subsequent characterization of concealed explosives.

#### R-421 Standoff Detection

Develop technologies that lead to a standoff explosive detection capability for screening people and vehicles at distances of no less than 20 feet with desired goal of 200 feet.

#### R-422 Handheld Detectors

Develop next generation explosives detectors. Efforts must result in reduced cost and size and have increased duty cycle. Based on existing parameters for handheld detectors the next generation system will have a weight of less than two pounds and cost no more than 10,000 dollars per system.

#### R-423 Walkthrough Portals for Personnel Screening

Develop portals that do not require people undergoing screening to remain stationary. This walkthrough capability should provide as a minimum detection rates for explosives of greater than 95% with a less than 1% false alarm rate. These portals should also be configured to allow for integration of other sensors such as metal detectors and imaging systems such as low dose x-ray or millimeter wave devices.

#### R-430 Improvised Device Defeat

This topic area covers research and development projects that satisfy requirements to more safely and effectively render terrorist devices safe. Particular emphasis is placed on technologies that safely diagnose and defeat terrorist improvised explosive devices (IEDs), improvised chemical and biological devices, and large vehicle bombs (LVBs).

#### R-431 Standoff Large Vehicle Bomb (LVB) Diagnostics

Develop systems to accurately locate and identify components of Large Vehicle Bombs containing explosives and/or chemical, biological, radiological and nuclear (CBRN) agents to increase the capabilities of military explosive ordnance disposal (EOD) units and federal, state and local bomb technicians to apply effective, field transportable, robust diagnostics while interrogating a suspect large vehicle bomb. Real-time feedback to the operator is essential in order to facilitate the use of follow-on neutralization systems. Also, in order to minimize risk to operators, standoff or remote capabilities are highly desirable. Factors that may limit the utility or availability of the equipment, such as size, cost, and deployment and usage times, should be given major consideration.

#### R-432 Large Vehicle Bomb Neutralization

Develop systems to facilitate the rapid neutralization of Vehicle-Borne explosive, chemical, biological, nuclear and radiological devices. Systems must address the ability to disrupt multiple threat type vehicles without causing the device to initiate or detonate. Threat vehicles include, but are not limited to, vans, tractor- trailers, fuel tanks, sewage trucks, water tankers, etc. To minimize operator risk, consideration should be given to using remote employment techniques leveraging existing robotic systems to the greatest extent possible. Further consideration should be given to making the system available to both military and civilian EOD communities, ease of deployment, and system size.

## R-433 Large Vehicle Bomb (LVB) Containment and Mitigation

Develop portable and semi-permanent systems and techniques that will reduce the damage both in overpressure and fragmentation caused by the functioning of a Large Vehicle Bomb. Systems should be capable of rapid deployment and use standard materials that will mitigate the effects of LVB's. Ideally, the techniques or systems should provide a reduction of 50% of the air blast. Remote operation of the tools with robotic vehicles/systems is highly desirable.

#### R-434 Precision Disruption Tools

Develop precision explosive ordnance disposal procedures. Improvised thermobaric devices, improvised biological and chemical weapons of mass destruction mandate the development of precision disruption technology. The current methods are crude and cause collateral damage. Applying these antiquated render safe techniques could cause the inadvertent release of the improvised material. Development of precision disruption tools that will "peel back" and expose the inner contents to allow surgical separation of components without inadvertent release of the improvised material is required. Developments in lasers and precision surgery techniques that use computer controls are needed to allow for precise disassembly of improvised terrorist devices.

## ATTACHMENT A - ACRONYMS AND ABBREVIATIONS

ADL Advanced Distributed Learning
BAA Broad Agency Announcement
BIDS BAA Information Delivery System

BWA Biological Warfare Agent

CASB-CMF Cost Accounting Standards (CAS) Board - Cost of Money Factors

CBRN Chemical, Biological, Radiological and Nuclear

CWA Chemical Warfare Agent

DFARS Defense Federal Acquisition Regulation Supplement

EOD Explosive Ordnance Disposal EST Eastern Standard Time

FAR Federal Acquisition Regulation FCCM Facilities Capital Cost Of Money FOIA Freedom Of Information Act

FY Fiscal Year

GFI Government Furnished Information GFM Government Furnished Material

HBCU/MI Historically Black Colleges, Universities (HBCU) & other Minority Institutions (MI)

IED Improvised Explosive Device

IDLH Immediately Dangerous to Life and Health

LVB Large Vehicle Bomb

PDF Portable Document Format

PL Public Law

R&D Research and Development

SF Standard Form SOW Statement of Work

TIC Toxic Industrial Chemicals
TSWG Technical Support Working Group

USC United States Code

USD (AT&L) Under Secretary of Defense, Acquisition, Technology and Logistics