

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

**BROAD AGENCY ANNOUNCEMENT (BAA)
04-Q-4159**

Due Date for Receipt of Phase I Quad Charts:

No Later Than December 1, 2003

CB – Chemical, Biological, Radiological and Nuclear Countermeasures

ED - Explosives Detection

EL – Explosive Ordnance Disposal / Low Intensity Conflict

IDD - Improvised Device Defeat

IP – Infrastructure Protection

PP – Personnel Protection

TOS – Tactical Operations Support

**All submittals are due by 1600 – 4:00 p.m.
Eastern Standard Time (EST) on the above date**

October 29, 2003

TABLE OF CONTENTS

1. INTRODUCTION..... 4

1.1. APPROACH..... 4

1.2. HBCU/MI AND SMALL BUSINESS SET ASIDE..... 4

1.3. PERIOD OF PERFORMANCE..... 4

1.4. TECHNICAL SUPPORT 4

1.5. INSTRUCTIONS AND POINTS OF CONTACT 5

2. GENERAL INFORMATION..... 6

2.1. ELIGIBILITY..... 6

2.2. PROCUREMENT INTEGRITY, STANDARDS OF CONDUCT , ETHICAL CONSIDERATIONS..... 6

2.3. DEFINITIONS..... 6

2.3.1. Small Business Concern..... 6

2.3.2. Small Disadvantaged Business Concern..... 6

2.3.3. North American Industry Classification System..... 6

2.4. RESTRICTIVE MARKING ON PROPOSALS..... 6

2.5. SUBMISSION HANDLING/RIGHTS IN TECHNICAL DATA AND COMPUTER SOFTWARE/PATENT RIGHTS - GENERAL..... 7

2.5.1. Procurement Integrity..... 7

2.5.2. Rights in Technical Data and Computer Software..... 7

2.5.3. Submission Information and FOIA..... 7

2.6. REPORT REQUIREMENTS 7

2.7. SUBCONTRACTING..... 7

3. PROPOSAL PREPARATION..... 8

3.1. GENERAL GUIDANCE..... 8

3.1.1. BAA Information Delivery System (BIDS)..... 8

3.1.1.1. Format and Submittal Upload..... 8

3.1.1.2. Cover Page/Submittal Markings..... 8

3.1.1.3. Document Identifier..... 8

3.1.2. BIDS Security and Submittal Changes..... 9

3.1.3. Special Handling/Procedures for Classified Information..... 9

3.2. PHASE I SUBMITTALS..... 9

3.2.1. General..... 9

3.2.2. File Format and Content..... 9

3.2.3. Notification to Offeror..... 10

3.2.4. Status and Inquiries..... 10

3.3. PHASE II SUBMITTALS..... 10

3.3.1. General..... 10

3.3.2. File Format and Content..... 10

3.3.3. Technical Content..... 10

3.3.4. Notification to Offeror..... 11

3.3.5. Status and Inquiries..... 11

3.4. PHASE III SUBMITTALS..... 11

3.4.1. General..... 11

3.4.2. File Format and Content..... 12

3.4.3. Technical..... 12

3.4.4. Cost..... 13

3.4.5. Contractual..... 14

3.4.6. Notification to Offerors..... 15

4. PROPOSAL EVALUATION..... 16

4.1. OBJECTIVE 16

4.2. EVALUATION CRITERIA 16

 4.2.1. Basic Requirement..... 16

 4.2.2. Technical Performance..... 16

 4.2.3. Contractor Past Performance. 16

 4.2.4. Schedule..... 16

 4.2.5. Cost..... 16

5. TECHNOLOGY DEVELOPMENT REQUIREMENT TARGETS AND OBJECTIVES. 17

5.1. CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR COUNTERMEASURES (CB) MISSION AREA/SUBGROUP..... 17

 R1167 Fuel Cell Power for Tactical Systems 17

5.2. EXPLOSIVES DETECTION (ED) MISSION AREA/SUBGROUP..... 17

 R939A Remote Detection of IEDS..... 18

5.3. EXPLOSIVE ORDNANCE DISPOSAL/LOW INTENSITY CONFLICT (EL) MISSION AREA/SUBGROUP 18

 EL609 Active Thermal Protection..... 18

 EL610 Bladderless Lift Balloon 18

5.4. IMPROVISED DEVICE DEFEAT (IDD) MISSION AREA/SUBGROUP 19

 R000-ID IDD-Unspecified Requirement 19

 R1158 Smokeless Diversionary Device 19

 R1161 Fragmentation Free Micro-Detonator..... 20

 R1162 Dynamic Entry Warning Device..... 20

5.5. INFRASTRUCTURE PROTECTION (IP) MISSION AREA/SUBGROUP 20

 R1163 National Critical Infrastructure Database (NCID) 20

5.6. PERSONNEL PROTECTION (PP) MISSION AREA/SUBGROUP..... 21

 R896 Personal Duress Alarm System..... 21

 R932 RAIDS III..... 21

5.7. TACTICAL OPERATIONS SUPPORT (TOS) MISSION AREA/SUBGROUP..... 21

 R1150 Care Under Fire - Virtual Medical Trainer..... 21

ATTACHMENT A – ACRONYMS AND ABBREVIATIONS..... 23

1. INTRODUCTION.

This is the Combating Terrorism Technology Support Office (CTTSO) Technical Support Working Group (TSWG) Broad Agency Announcement (BAA) 04-Q-4159, 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." Awards for submittals under this BAA are planned late in the second quarter FY 2004. Funds may not be available for all requirements under this BAA. No contract awards will be made until appropriated funds are available from which payment for contract purposes can be made.

1.1. Approach.

A three-phased proposal selection process will be employed for this solicitation. Phase I will consist of the solicitation, receipt and evaluation of a one-page Summary Quad Chart (viewgraph) described later in this document. Phase II will consist of a solicitation of a White Paper (not to exceed 12 pages) from submitters with qualifying Quad Chart evaluations. The White Paper shall include supporting information for data submitted in the summary Quad Chart and shall describe 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 and Small Business Set Aside.

Historically Black Colleges and Universities (HBCU), Minority Institutions (MI), small and disadvantaged businesses (SDB), women-owned businesses, and Historically Underutilized Business (HUB) zone enterprises are highly encouraged to submit proposals, and to join others in submitting proposals; however, no portion of the BAA will be set-aside for these special entities because of the impracticality of reserving discrete or severable areas of research and development in any specific requirement area. A goal of 5 % of the total dollars awarded under this BAA will be considered for HBCU and MI, and for small businesses. The final determination will be made based on the individual technical merits of the proposal and the budget constraints within the mission priorities. 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. To ensure full consideration in these programs, registration in the BAA Information Delivery System (BIDS), described later in this document, must include the appropriate business type category as well as accurate and relevant information requested in the registration.

1.3. Period of Performance.

Proposals awarded under this BAA are anticipated to be 12 to 18 months in duration or less. The Government intends to incrementally fund contracts awarded from this BAA as provided by FAR 52.232-22, "Limitation of Funds." As described in section 3, proposals shall contain all work contemplated by tasks with all associated costs for each task separately identified including any proposed options. The proposal shall be structured to facilitate incremental funding and to enable all program requirements to be negotiated with the initial contract award.

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. All individuals in this category that will have access to any proprietary data shall certify that they will not disclose any information pertaining to this solicitation including any submittal, the identity of any submitters or any other information relative to this BAA. Submission of information in response to this BAA constitutes permission to disclose information to certified evaluators under these conditions.

1.5. Instructions and Points of Contact.

This BAA Package may be downloaded electronically in its entirety from www.bids.tswg.gov under Downloads, BAAs. **Registration is not required** to download the BAA package; however, all unclassified proposals must be uploaded to BIDS and a registration is required to upload those submissions. BIDS registration requirements are discussed in section 3 of this document.

All contractual and technical questions regarding this BAA must be directed to the Contracting Officer, 04-Q-4159Questions@tswg.gov.

For help with BIDS, submit questions to BIDS administration at bidshelp@tswg.gov or by accessing the **HELP REQUEST** link located at the bottom of the BIDS Home Page. Please be sure to include the reason for your request in the text block provided.

Offerors are encouraged to periodically review the BAA question and answer section on the web site, www.bids.tswg.gov, located in the Frequently Asked Questions (FAQs) section of the main menu bar.

NOTE: Persons submitting proposals are advised that only the Contracting Officer 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 (CCR) database as indicated in DFARS 204.7300. The website address for CCR database is <http://www.ccr.gov>.

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 (USC)). 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 FAR Part 19 (except for FAR Sections 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 (SDB) 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 SDB concern in the database maintained by the Small Business Administration (SBA) (PRO-Net); or
- (2) For a prime contractor, it has submitted a completed application to the SBA 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.

2.3.3. North American Industry Classification System.

Establishments that specialize in performing Professional, Scientific and Technical Activities for others are coded 541710 under the North American Industry Classification System (NAICS). The small business size standard for Classification 541710 is 500 employees.

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." Rights in technical data, computer software and computer software documentation in the resultant contract shall be in accordance with 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 252.227-7017, 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. 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. 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 should be specified based on the proposed efforts as appropriate.

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 the information specified to avoid delays in evaluation or disqualification of a submittal.

3.1.1. BAA Information Delivery System (BIDS).

The BIDS, in operation at www.bids.tswg.gov, will be used to provide public access to the BAA package and will be used to collect all **unclassified** submittals under this BAA. A BIDS registration is not necessary to download the BAA package. A Submitter Registration is required to respond to this BAA to upload submittal response data. The offeror must complete all mandatory fields on the submitter registration form in BIDS including a User Name that will be used for login and as part of document identifiers for submissions described later in this BAA package. Registration acceptance for submitters is automatic and will be transmitted by email indicating the User Name for login, but may take a few minutes to be recognized by BIDS. Questions regarding BIDS may be addressed via email to TSWG BAA Administrators at bidshelp@tswg.gov or by accessing the HELP REQUEST at the bottom of the BIDS Home Page. For password resets, if you know your User Name and have a valid email address, the password can be reset automatically by selecting "Forgot My Password." A new password will be sent to the email address. Use the HELP REQUEST if you are having problems with your BIDS account. Registration account information can be updated by the user after login. The email address for a specific User Name in the BIDS registration serves as the notification point for all email correspondence to that "user" and should be the point of contact for the Government Contracting Officer.

3.1.1.1. 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.

3.1.1.2. 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*, *Requirement Number* and *Title* as well as a *Document Identifier* described below. Additionally, for any classified material, the document must be clearly marked in accordance with appropriate security regulations.

3.1.1.3. 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 Mission Area or subgroup (i.e. CB, ED, EL, IDD, IP, PP, or TOS), the Requirement Number, the User Name, and the submitter internal tracking number (SIT). For example, Document Identifiers are formatted as follows:

MissionArea-Requirement Number-UserName-Submitter Internal Tracking Number.

The constructed document identifier is frequently used by the evaluation team to identify each submittal and to connect downloaded/printed documents with evaluation records posted into on-line collaboration software.

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 submitter internal tracking number which is unique and created by the offeror. The document identifier

should be inserted into the header of the uploaded document and **MUST** match the document identifier in BIDS.

The system enforces unique tracking numbers for each offeror and will not allow an upload of a submittal document if the submitter internal tracking number 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, {submitter 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 for a Quad Chart submittal, -WP for a White Paper and -FP as the final proposal, all unique because of the dash characters.

3.1.2. 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. The documents may only be reviewed by the registrant, authorized Government representatives, and assigned evaluators. 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.

3.1.3. 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 classification.**

For classified submittals, send an email to security@tswg.gov. Mailing instructions will be provided at that time.

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 samples downloadable from the BIDS web site "Reference Materials" option in the right hand panel. 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 December 1, 2003**. 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 Word 97, Microsoft PowerPoint 95, or Adobe Acrobat (PDF – portable document format) 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 (such as 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 contracting authority as entered in the BIDS registration and will indicate the new submittal due date and time. Notifications of rejection will likewise be emailed 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. Submitters are able to check the status of any submission by accessing the BIDS website under "My Submissions."

3.3. Phase II Submittals.

3.3.1. General.

The second phase consists of a White Paper submitted with no more than 12 pages (including figures, charts, and tables, but excluding the cover page). All submittal pages must be formatted using single-side, double-spaced pages, font no smaller than 10 point, with 1-inch page margins (left/right/top/bottom). If the White Paper is longer than 12 pages, only the first 12 pages will be evaluated. A cover page shall include the data specified in the sample document entitled: Submittal Cover Sheet provided under Reference Materials in the Downloads section of the BIDS home page.

3.3.2. File Format and Content.

The White Paper shall be prepared in color or black and white in Microsoft Word 97 or Adobe Acrobat PDF 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 (such as 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 (select "create next submission" from the accepted submittal) before the due date and time (i.e., 30 days from the date of the notification 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 any 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 inclusive of any proposed options. At a minimum, this estimate shall detail estimated labor hours and costs and anticipated material and other costs for each task area. 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. Technical data and computer software to be delivered with less than unlimited rights should be identified as prescribed by DFARS 252.227-7017 and DFARS 252.227-7028.

3.3.3.5. Technology Transition. 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 emailed to the offeror's contracting authority as **entered in the BIDS registration** and will indicate the new submittal due date and time. 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. It is requested that proposals be divided into two "uploadable" documents/files. The first document should include all technical and contractual information. The second document shall include all cost information preferably in spreadsheet format. Each single file shall not exceed 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 using single-sided, double-spaced pages, font no smaller than 10 point, with 1-inch page margins

(left/right/top/bottom). A cover page shall include the data specified in the sample document entitled: **Submittal Cover Sheet** provided under Reference Materials in the Downloads section of the BIDS home page. Each proposal submittal shall reference the BAA Number, the BAA Mission Area Title, the specific Requirement 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 Word 97, Microsoft Excel 97 or Adobe Acrobat PDF 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 (such as 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 (select "create next submission" from the accepted submittal) before the due date and time specified in the email notice (i.e. 30 days from the date of the notification email) and in accordance with section 3.1 above.

3.4.3. Technical.

The technical portion of the proposal shall 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 with task phasing and proposed options, 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 (such as environmental, safety, health, and 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 request 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 scope of work to be performed for this effort inclusive of any proposed options.

3.4.4. Cost.

The cost information of the proposal shall contain the following:

3.4.4.1. A cost estimate that is sufficiently detailed by element of cost for meaningful evaluation. Cost estimates shall be identifiable by task phasing proposed in the technical section and shall be inclusive of any proposed options. 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. Materials: 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. Competitive Methods: 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. Noncompetitive Methods: For those acquisitions (e.g., subcontract, purchase orders, material orders) over \$550,000 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 inter-organizational transfers priced at cost, provide a separate breakdown of cost by elements.

3.4.4.2.5. Direct Labor: 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. Indirect Costs: 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: Include the fee, if any, proposed for this effort.

3.4.5. Contractual.

The contractual portion of the proposal should contain the following:

3.4.5.1. Identify the offeror's contracting point of contact including name, telephone number, email address, facsimile number, mailing address, and contact information including DUNS number, CCR, business type, and other relevant information.

3.4.5.2. The type of contract preferred. Generally, the contract type most used is Cost Plus Fixed Fee (CPFF).

3.4.5.3. Proposed duration of all tasks in the basic contract and any options.

3.4.5.4. 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.

3.4.5.5. 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. The contractor shall include facility clearance information. Also, the contractor shall indicate the Government agency that issued the clearances.

3.4.5.6. 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.

3.4.5.7. 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 of all submittals and awards any contracts considered under this BAA. Notification of acceptance or rejection of a Phase III Proposal will be sent via email to the offeror's principal contact as entered in the 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.

The TSWG conducts rapid prototype development focused on critical multi-agency and future threat counter/anti-terrorism requirements. 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. This agency's program objectives are to provide an interagency forum to coordinate R&D requirements for combating terrorism, to sponsor R&D not otherwise being addressed by individual agencies, and to promote information transfer among the participating agencies.

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 its merit and relevance to the TSWG program rather than against other proposals in the same general research area.

4.2.1. Basic Requirement.

The proposed solution must meet the letter and intent of the stated requirement; all elements within the proposal must exhibit a comprehensive understanding of the problem and the requirements of intended end users. The proposed solution must meet multiple TSWG user (U.S. Government or commercial) needs and be fully compliant with each required element of the solicitation.

4.2.2. Technical Performance.

The proposed technical approach must be 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 are to be complete and in a logical sequence. All proposed deliverables must clearly define a final product that meets the requirement and can be expected as a result in the award. The proposal must identify and clearly define technical risks and planned mitigation efforts. Those risks and the associated mitigation must be feasible and reasonable. The roles of the prime and other participants required must be clearly distinguished and pre-coordination with all participants (including Government facilities) fully documented. The requirement for and the anticipated use or integration of GFM including all equipment, facilities, and information, must be fully described including dates when such GFM will be required. Intellectual property ownership and the planned transition to production must be adequately addressed, including a support concept for the product described. Similar efforts completed by the offeror in this area must be fully described including identification of other Government sponsors.

4.2.3. Contractor Past Performance.

The offeror's past performance in similar efforts must clearly demonstrate an ability to deliver products that meet the proposed technical performance requirements within the proposed budget and schedule. The proposed project team must have demonstrated expertise to manage the cost, schedule and technical aspects of the project.

4.2.4. Schedule.

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

5. TECHNOLOGY DEVELOPMENT REQUIREMENT TARGETS AND OBJECTIVES.

TSWG is interested in soliciting proposals in the following areas of combating terrorism and explosive ordnance disposal/low intensity conflict. The intent of this BAA is to identify technologies and approaches that provide near-, mid-, and long-term solutions that enhance the capabilities of the US Government to combat or mitigate terrorism. 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, every submittal must have a document identifier that includes the mission area designator (CB, ED, EL, IDD, IP, PP, or TOS), the requirement number, user name, and a submitter internal tracking number as described in section 3 of this document.

5.1. Chemical, Biological, Radiological and Nuclear Countermeasures (CB) Mission Area/Subgroup

The Chemical, Biological, Radiological and Nuclear Countermeasures (CBRNC) Subgroup is responsible for identifying and developing user requirements and associated technologies and equipment to support Chemical, Biological, Radiological and Nuclear Countermeasures. This includes development of personal protective equipment and systems to detect, assess, mitigate, and decontaminate improvised chemical, biological, radiological and nuclear countermeasures devices in non-battlefield scenarios. The types of systems are categorized into four areas: Detection/Identification, Mitigation/Decontamination, Protection, and Information Products and Training.

R1167 Fuel Cell Power for Tactical Systems

Develop and demonstrate in the field within 18 months after contract award, a prototype scalable rugged portable fuel cell system that can continuously produce up to 2kW electrical output (up to 3.5kW surge load), with selectable voltage, amperage, frequency and phase output. The fuel cell will be used to replace existing battery systems used in remote locations or under circumstances in which the electrical infrastructure has been compromised. Specific applications include, but are not limited to, robots for detecting, assessing, and rendering safe explosive and incendiary devices; remotely placed sensors of various types; beacons, and communications devices; search and rescue equipment; drop-and-go surveillance devices, and small package water treatment systems. The robotics version of the fuel cell system shall deliver at least 315 watts for 6 hours (1.9kW-hour) and should be small and light-weight (maximum dimensions 15 cm X 15 cm X 14 cm, and no heavier than 20 lbs). Weight and cube limitations for other applications will vary depending on energy requirements and operational considerations. The startup transient time from a cold condition shall be minimized. Its performance reliability must be very high with a projected life cycle of 2 - 5 years. The design number of cold and warm start-ups before predicted failure will be a selection factor. It must operate with low infrared and acoustic signatures. It should require minimal maintenance and servicing with a goal of sustained unattended operations for at least 90 days. The fuel must be regenerated via a photovoltaic capability, which may be detachable from or independent of the fuel cell. The system must be sufficiently rugged to survive severe mechanical insults, such as vibration and impacts during transportation by helicopter or tactical vehicle on rough terrain and on unimproved roads. It must not explode or rupture when subjected to impact, fire, or explosion. It must be designed to operate under all weather conditions and adverse environmental circumstances, at temperatures ranging from -30 to +70 degrees Celsius. It must be water-resistant to rain, high-pressure spray and brief standing water to depths of up to 20 centimeters.

5.2. Explosives Detection (ED) Mission Area/Subgroup

The Explosives Detection (ED) Subgroup is responsible to identify, prioritize and execute research and development projects that satisfy interagency requirements for existing and emerging technology in the area of explosives detection and diagnostics. Emphasis is on long term sustained approach to develop technologies for detection and subsequent characterization of concealed explosives.

R939A Remote Detection of IEDS

Develop system that can remotely detect the presence of improvised explosive devices (IEDs) concealed by people engaged in attacks against government installations both domestic and abroad. System will provide a stand-off capability for an operator to identify in real-time whether or not there is concealment that poses a potential threat. System shall be capable of alerting the operator at a distance of 100 meters and providing recognizable images at 50 meters and closer. Systems shall pose no apparent health and safety risks to operators and surrounding individuals. Systems shall be able to identify concealments on any or all of the following: people, vehicles, or road side locations. Systems should be man-portable. Fixed installations of stand-off equipment must have a form factor that allows for transport by military aircraft. Proposed solutions to this problem based on trace technology will not be considered.

5.3. Explosive Ordnance Disposal/Low Intensity Conflict (EL) Mission Area/Subgroup

The Explosive Ordnance Disposal/Low Intensity Conflict (EOD/LIC) Program provides rapid prototyping and advanced technology development in response to the needs of military Explosive Ordnance Disposal (EOD), Special Operations Forces (SOF) and Homeland Security personnel as they face the challenges of the war on terrorism, force protection and homeland defense. EOD/LIC technology developments are focused primarily on detection, access, identification, and neutralization of conventional explosive ordnance and improvised explosive threats including weapons of mass destruction on land, sea and underwater.

EL609 Active Thermal Protection

Identify or develop a self-contained Active Thermal Protection (ATP) system capable of cooling the user in hot environments and warming the user in cold environments. The system must be compatible with all current and emerging Personal Protective Equipment (PPE) used in the Explosive Ordnance Disposal (EOD) community to include bomb suits, diver's dry suits, and Chemical, Biological, and Radiological (CBR) protective ensembles used by EOD/SOF and emergency response personnel. The system must:

- Be adjustable to allow the user to regulate temperature for operator preference and variations in heating/cooling requirements based on physical activity.
- Utilize readily available commercial-off-the-shelf (COTS) or government-off-the-shelf (GOTS) power supplies/batteries, if applicable.
- Have quick connect/disconnect fittings to allow the user to connect/disconnect from the system as mission requires.
- Be rugged and lightweight. Maximum weight limit for system is set at 8 lbs., with an objective of 3 lbs.
- Include detachable components for extremity protection.
- Have 5 hour minimum operational capability.
- Be capable of operating in 150 feet of seawater (FSW).
- Have illuminated temperature control setting.
- Have easily operated (one hand) temperature controls with settings distinguishable to the operator by feel alone.
- Be able to be produced in various generic sizes (small, medium, large, x-large).
- Allow operator freedom of movement.
- Be easily maintained by the operator.

EL610 Bladderless Lift Balloon

Identify or develop a remotely actuated underwater lift system for raising submerged ordnance items to be used by U.S. Navy Explosive Ordnance Disposal (EOD) teams. The system must:

- Maintain full lift capability for a minimum of 6 hours while in a stationary position and while being towed.
- Be able to be towed by a small boat.
- Be no heavier than 160 lbs., with the objective of weighing 120 lbs. or less.
- Be compatible with current and emerging wireless firing systems.

- Be capable of lifting 2,000 lbs. from a depth of 200 feet of seawater, with the objective of being capable of lifting 2,500 lbs. from a depth of 300 feet.
- Be able to be deployed by a single diver.
- Be rugged, reusable and low maintenance.

We are interested in investigating the feasibility of the following:

- Non-explosive alternative to the explosive valve for providing a high-pressure air gate between the air supply and the lifting bag.
- Alternatives to a SCUBA cylinder air source in order to minimize the size and weight.
- Providing the future capability of deploying the lift system via remotely operated vehicles or unmanned underwater vehicles.
- Providing a system with a low-magnetic signature.

We are not interested in systems which pump air from the surface down to a lifting bag.

5.4. Improvised Device Defeat (IDD) Mission Area/Subgroup

The Improvised Device Defeat (IDD) Subgroup is responsible for prioritizing and addressing the technological requirements of the military, federal, state, and local bomb technician community for increased capabilities in diagnostics and defeat technologies to more safely and effectively render terrorist explosive 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).

R000-ID IDD-Unspecified Requirement

The Improvised Device Defeat (IDD) Subgroup is responsible for prioritizing and addressing technological requirements for military, Federal, State and local bomb technicians. Particular emphasis is placed on technologies that safely diagnose and defeat terrorist improvised explosive devices (IEDs), improvised chemical and radiological devices, and vehicle borne improvised explosive devices (VBIEDs).

- Characterize improvised explosive mixtures used by terrorist organizations and develop effective response procedures, tools and equipment.
- Develop improved tools and equipment to increase the effectiveness of EOD and CQB/SWAT during tactical response.
- Develop information sources to influence interagency research and development and enhance response capability.
- Develop improved tools and equipment to increase the performance and reliability of remote controlled vehicles.

Submit candidate projects that are new (or improved) technologies or emerging technological capabilities pertaining to the IDD Subgroup mission described above that may be of interest to the TSWG.

Areas not to be considered are: commercial off the shelf systems or long-term research efforts. Unspecified requirements (R-000) are for proposing unique innovations that have not yet been identified by TSWG. Submissions against a particular subgroup's unspecified requirement may fall under any aspect of that subgroup's mission. TSWG does not budget funds towards unspecified requirements. If TSWG evaluators determine an unspecified requirement submission is promising enough to merit pursuing, funds may be identified at that point. Because proposed technologies from the unspecified requirements will be competing against proposed technologies for identified and prioritized interagency requirements, TSWG may not make any awards against the unspecified requirements.

R1158 Smokeless Diversionary Device

Develop lightweight and portable smokeless noise/flash diversionary device. The system may be thrown or placed. The system should withstand deployment at a standoff distance from the intended target. The system must operate indoors and outside in all weather environments and cause minimal collateral property damage. The system must incorporate 1.5-2 second delay and

not present a safety hazard to the response team (temporary blinding/hearing loss). The system should be fragmentation free and generate an audible signal of 175 decibels at 5 feet and produce a bright flash of approximately 2 million candlepower.

R1161 Fragmentation Free Micro-Detonator

Develop a micro-detonator that eliminates initiator-generated fragmentation during breaching operations. The detonator must have the same initiation capabilities as a standard blasting cap and allow proximate detonation of nominal explosive amounts (< .1 pounds) during tactical operations. The system must reliably detonate commercially available PETN and RDX based explosives using conventional shock tube initiation. The system must have the same logistic requirements as conventional detonators. The system must be easily employed during hostile maneuvers and within tactical environments. The system must meet commercial safety protocols.

R1162 Dynamic Entry Warning Device

Develop breacher's warning system that, when initiated, overrides tactical communications with an alert tone and a three second message notifying team members of imminent explosives use. The system operation will override the tactical communications system for a distance of up to 100 feet to alert all in the area of explosive operations. The system should be compact (small as a pager), lightweight (less than 6 ounces), easy to activate when wearing gloves, battery powered (AA or 9 volt) and fit into a ballistic vest pocket. The system, activated by the lead tactical breacher, should enable operators to maintain a covert approach and setup through use of currently deployed tactical radios and earpieces.

5.5. Infrastructure Protection (IP) Mission Area/Subgroup

The Infrastructure Protection (IP) Subgroup identifies and pursues user requirements for the protection and assurance of critical Government, public, and private infrastructure systems required to maintain the national and economic security of the United States.

R1163 National Critical Infrastructure Database (NCID)

Background: Approximately 80% of the critical infrastructure in this country is in private hands; hence the primary focus of vulnerability or risk assessments has been based on the intrinsic costs (e.g., loss of power, local flooding, etc.). What have not been taken into account are issues from a national perspective. What is the symbolic importance? How will the economy of the region or country be affected? These types of questions are not usually addressed by individual owners of critical infrastructure systems. However, to develop a National perspective on what is critical infrastructure there must first be a definition of critical and a common set of criteria by which to make such judgments. Identification and prioritization of critical infrastructures must take into account their importance to national, regional and local interests including, but not limited to, how the loss or partial loss of the structures would affect the following: human lives, economy, key military facilities and defense movements, key industrial sites, large population centers, key energy/communication corridors, large multi-modal transportation locations, symbolic value to the Nation, etc. Once the data are in one place and defined by a common set of criteria, then a strategy can be developed to guide investments to protect the most vulnerable or the infrastructure with the greatest potential consequences first.

Requirement: Develop a National Critical Infrastructure Database (NCID) system for critical infrastructures. This software package will at a minimum:

1. Allow a user to aggregate vulnerability assessments at the national level using a common set of assessment criteria. For example: Compare the vulnerability of a bridge in the east with a dam in the west and a sea port in the south and a monument in our Nation's Capital in terms of the common criteria.
2. Accommodate a common set of assessment criteria developed in cooperation with stakeholders.
3. Provide users the ability to manage a national vulnerability reduction investment program.
4. Provide users a database built on the common set of assessment criteria in the context of an

infrastructure interdependency model for "what-if" analysis.

5. Collect risk assessment data and common criteria data from any existing software or manual system as input.

6. System must be compatible with Windows XP, 2000, 98 and NT as a Web service thereby making the system available via a Web browser on PCs, PDAs, or other devices with Web access.

Note: This system will not perform assessments on individual infrastructures. Assessments will continue to be performed by individual infrastructure owners in the same way that they are being conducted today. This system will be a collection point that allows for aggregation of assessment data from all sources, systems, methodologies, and processes that adopt the common set of vulnerability assessment criteria.

5.6. Personnel Protection (PP) Mission Area/Subgroup

The Personnel Protection (PP) Subgroup is responsible to identify, prioritize, and execute research and development projects that satisfy interagency requirements for unique equipment and systems to alert and prevent attacks on VIP protectees. This includes hardware and tools that provide security to both the VIPs and their protectors. Inherent in this development is additional emphasis on life safety and emergency response equipment.

R896 Personal Duress Alarm System

Develop a point to point duress system consisting of a transmitter and receiver. System must be compact and lightweight and operate in a spread spectrum digital frequency hopping mode to increase resistance to jamming or interference. System must be easy to operate and to change batteries in the field. System should provide multiple alert means similar to standard pager. System must also include a confidence link to allow users to determine that they are linked to other users in the vicinity.

R932 RAIDS III

Develop a small radar system that has capability to detect very small radar cross section targets such as radio controlled aircraft or unmanned aerial vehicles (UAVs) in both urban and open environments. The system must have a detection range of at least three miles.

5.7. Tactical Operations Support (TOS) Mission Area/Subgroup

The Tactical Operations Support (TOS) Subgroup is responsible to identify, prioritize, and execute research and development projects that satisfy interagency requirements for unique equipment and systems to support specialized force offensive operations directed against terrorist activities and groups. The subgroup will transition non-sensitive prototype hardware to commercial production to assist state and local law enforcement agencies.

R1150 Care Under Fire - Virtual Medical Trainer

Develop a system that can immerse up to six personnel in a single virtual reality simulator to provide realistic medical training to assault force medics and corpsmen under combat conditions. The system is desired to have as wide a field of view as possible; minimum desired is 270 degrees in vertical and horizontal with 360 degrees being the goal. The system shall consist of a full size patient simulator whose casualty conditions can be established and modified through a computer (preferably laptop wireless) interface. The patient simulator should provide realistic symptoms for various combat casualty situations, with a means to record data for post - treatment analysis and training. The interface with the control computer shall provide a means to provide dynamic response as the situation changes, and result in realistic responses of the "victim" based on the aid provided. The training system shall support instructor/cyber input and feedback. The training system shall provide operators with controlled, individual or small team tactical medical scenario-based training in the following areas: Care Under Fire, Tactical Field Care, CASEVAC, Advanced Cardiac Life Support (ACLS), NBC and Bio-terrorism, Self-Aid and Buddy Care for non-medics, and Advanced Trauma Life Support (ATLS). The system shall also be designed to be expanded as new scenarios

are added. The training system must include the means to impose combat-like environmental conditions (such as sound effects) to increase the stress that is included in combat.

ATTACHMENT A – ACRONYMS AND ABBREVIATIONS

ACLS	Advanced Cardiac Life Support	HUB Zone	Historically Underutilized Business Zone
ATLS	Advanced Trauma Life Support		
ATP	Active Thermal Protection	IDD	Improvised Device Defeat (mission area/subgroup designation)
BAA	Broad Agency Announcement	IED	Improvised Explosive Device
BIDS	BAA Information Delivery System	IP	Infrastructure Protection (mission area/subgroup designation)
CASB-CMF	Cost Accounting Standards (CAS) Board - Cost of Money Factors	JPEG	Joint Photographic Experts Group
CASEVAC	Casualty Evacuation	K	Thousand
CB	Chemical, Biological, Radiological and Nuclear Counter Measures (Also CBRNC or CBRN or CBR) (mission area/subgroup designation)	KB	Kilobyte
		Lbs	Pounds
CCR	Central Contractor Registration	LIC	Low Intensity Conflict
CD	Compact Disk	LVB	Large Vehicle Bomb(s)
CFR	Code of Federal Regulations	MB	Megabyte
COTS	Commercial-off-the-shelf	MI	Minority Institutions
CPFF	Cost Plus Fixed Fee	mm	millimeter
CQB/SWAT	Close Quarter Battle/Special Weapons Assault Team	NAICS	North American Industry Classification System
CTTSO	Combating Terrorism Technology Support Office	NBC	Nuclear, Biological, and Chemical
		NCID	National Critical Infrastructure Database
DC	Direct Current	PCs	Personal Computers
DFARS	Defense Federal Acquisition Regulation Supplement	PDA	Personal Digital Assistants
		PDF	Portable Data file
DPI	Dots per inch	PETN	pentaerythritol tetranitrate
DUNS	Data Universal Numbering System	PL	Public Law
ED	Explosives Detection (mission area/subgroup designation)	PP	Personnel Protection (mission area/subgroup designation)
EDT	Eastern Daylight Time	PPE	Personal Protective Equipment
EL	Explosive Ordnance Disposal/Low Intensity Conflict (mission area/subgroup designation)	QC	Quad Chart
		R&D	Research and Development
EOD/LIC	Explosive Ordnance Disposal/Low Intensity Conflict	Rad	Radians
		RAM	Random Access Memory
EST	Eastern Standard Time	RDX	Cyclotrimethylenetrinitramine
ET-SCBA	Expedient Tactical Self Contained Breathing Apparatus	SBA	Small Business Administration
		SCUBA	Self-Contained Breathing Apparatus
FAQ	Frequently Asked Question	SDB	Small Disadvantaged Business
FAR	Federal Acquisition Regulation	SF	Standard Form
FCCM	Facilities Capital Cost Of Money	SIT	Submitter Internal Tracking (Number)
FOIA	Freedom of Information Act	SOF	Special Operations Forces
FP	Full Proposal	SOW	Statement of Work
fsw	Feet of sea water	SVGA	Super Video Graphics Array
ft	Feet	TOS	Tactical Operations Support (mission area/subgroup designation)
FY	Fiscal Year		
GFE	Government Furnished Equipment	TSWG	Technical Support Working Group
GFI	Government Furnished Information	UAV	Unmanned Air Vehicle
GFM	Government Furnished Material	USC	United States Code
GIF	Graphics Interchange Format	VBIEDs	Vehicle Borne Improvised Explosive Devices
GIS	Geographic Information System		
GOTS	Government-off-the-shelf	VIP	Very Important Person
GPS	Global Positioning System	WP	White Paper
GUI	Graphical User Interface		
HBCU	Historically Black Colleges and Universities		