DEFENSE THREAT REDUCTION AGENCY

BROAD AGENCY ANNOUNCEMENT HDTRA122S0002



CHEMICAL / BIOLOGICAL TECHNOLOGIES

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1.0 Introduction

1.1 Overview

The Defense Threat Reduction Agency (DTRA) is issuing this Broad Agency Announcement (BAA) to seek participants for research and development projects in support of the Research & Development Directorate, Chemical / Biological Technologies (RD-CB) Department. This BAA constitutes a public notice for competitive opportunities as described in Federal Acquisition Regulation (FAR) Part 35.016 and FAR 6.102(d)(2).

1.2 BAA Purpose and Scope

The purpose of this BAA is to serve as a five-year (60-month) open continuous vehicle through which topics will be released as individual calls as they become available during the BAA open period. This BAA will remain open for five years from the date of release. This BAA, and any future topics released through calls, may be accessed via Contract Opportunities (https://sam.gov/). The submission of proposals must be associated with a specific release of topics and proposals submitted to the broad technical domains vice specific topics will not be considered. Proposers are encouraged to monitor Contract Opportunities.

The scope of this BAA is limited to projects that meet Technology Readiness Level (TRL) definitions in the TRL range of 3-6 (see ATTACHMENT 1 for TRL definitions). Upon completion of the proposed development efforts, solutions should strive to meet a TRL in the range of 4-6. Proposals that address technologies at TRL 4 or greater should also be aware of the Manufacturing Readiness Level (MRL) considerations.

All regulations cited within this BAA shall be considered to be "current version."

1.3 Technical Domains

The DTRA RD-CB mission was established by the Department of Defense (DoD) to provide state-of-the-art defense capabilities to allow military forces of the United States to operate and to successfully complete their missions in chemical and biological warfare environments. The scope of mission efforts and the priorities assigned to specific projects are influenced by changes in military and civilian Chemical and Biological Defense (CBD) science and technology, advanced developments, operational requirements, military threat assessments, and national defense strategies. To keep pace with defense capability requirements, the CBD Program (CBDP), as part of its mission, routinely promulgates chemical and biological research. The comprehensive

research program encompasses both intramural and extramural sources, and the role of each is vital to the fulfillment of the CBDP objectives.

DTRA is seeking optimum approaches to meet technology objectives within the areas listed below, with a goal to identify and select science and technology projects that can be transitioned to joint acquisition programs:

- ➤ <u>Detection Chemical and Biological:</u> The goal of the Detection area is to provide realtime capability to detect, identify, characterize, locate and warn against all known or validated Chemical and Biological (CB) warfare agents in addition to other chemical or biological threat materials (e.g., Toxic Industrial Chemicals).
- ▶ <u>Digital Battlespace Management:</u> The Digital Battlespace Management area aims to provide the warfighter with comprehensive CB data fusion and analytic capabilities to support situational awareness, decision making and threat management in a CB contested environment. This is achieved by rapidly transitioning software tools to Programs of Record (PORs), and where appropriate, expedite direct fielding of tools on existing platforms and operating systems to reduce integration and fielding costs.
- ➤ <u>Protection Individual and Collective:</u> The Protection capability area seeks to develop core capabilities to protect the force from biological and chemical warfare agents by preventing or reducing individual and collective exposures through respiratory, ocular, percutaneous, and collective protection. Advancing the fields of functional materials and filtration through a pipeline of innovative and revolutionary projects aimed at decreasing physiological burden, broadening the protection spectrum, effectively integrating components, and improving test methods.
- ➤ <u>Hazard Mitigation</u>: The Hazard Mitigation capability area seeks to develop core capabilities to conduct decontamination and reduce costs and the logistical burden of decontamination to enable the quick restoration of combat power, maintain/recover essential functions and critical infrastructure that are free from the effects of CBRN hazards, and facilitate the return to pre-incident operational capability as rapidly as possible.
- Threat Agent Science: The Threat Agent Science capability area seeks to maintain and develop scientific knowledge of current, non-traditional, and emerging threats in areas such as toxicity/inefectivity, agent fate, and technical surprise.
- Vaccines: The goal of the Vaccines capability area is to conduct research in order to develop lead candidate vaccines and pretreatments that can be administered before exposure to provide both specific and broad-spectrum protection against validated biological agents. Categories of threat agents addressed in this capability area include viruses, bacteria and toxins.

- Medical Diagnostics: Medical Diagnostics involves the diagnosis of infection by or exposure to bacterial, viral, or toxin agents (biological diagnostics) or of exposure to nerve, vesicant, respiratory and blood agents (chemical diagnostics) with the goal to rapidly identify the causative agent in a remote environment prior to onset of symptoms.
- Therapeutics: The goal of the Therapeutics capability area is to develop lead candidate medical treatments and pharmaceuticals that, when administered after exposure to a biological agent or toxin, mitigate or curtail the effects of that exposure and sustain forces operating in a bio-warfare hazard area. Medical Therapeutics encompasses bacterial and viral agent countermeasures as well as biological toxin and neurotoxin countermeasures.
- ➤ <u>Chemical Medical Countermeasures:</u> The Chemical Medical Countermeasures capability area seeks to discover, develop and/or repurpose and deliver novel medical concepts and technologies (i.e., pretreatments & therapeutics) to address current and emerging chemical threats to protect the lives of the Joint Force and maintain force lethality in a chemically contested environment.
- ➤ <u>Medical Futures:</u> The goal of the Medical Futures capability area is to identify and support innovation in developing capabilities and platforms in identifying, characterizing, protecting against, and mitigating the effects of new and emerging biological threats with a focus on pathogenesis/toxicity, high resolution structural data and AI-supported rapid discovery of medical countermeasures and precision medicine clinical solutions.
- ➤ Warfighter Integration: The Warfighter Integration capability area seeks to foster strategic partnerships with chemical and biological science & technology (S&T) communities to enhance technologies and deliver innovative DoD operational capabilities that address real-world challenges. The Warfighter Integration portfolio informs technology development by facilitating engagements with the warfighting and User communities early and often during the S&T process. These engagements address warfighter modernization and innovation needs by validating technology requirements, optimizing the utility of emerging technologies, demonstrating novel concepts/capabilities and informing potential rapid acquisition pathways to outmatch adversarial efforts to modernize CB threats against our warfighters. Technology engagement activities are tailored to best support the needs of the technology developer and will fall within one of the following thrust areas: Technology Concepts, User Assessments, and Advanced Technology Demonstrations.

2.0 BAA Particulars

2.1 BAA Process Overview

This BAA will utilize either a two-phase or one-phase evaluation process for each submission. The two-phase process will consist of the submission and evaluation of Phase I and Phase II proposals. While all interested parties may submit Phase I proposals, submission of Phase II proposals will be by invitation only. Please note that the two-phase process will apply to all topics released unless otherwise identified within a specific topic.

In the case of a two-phase process, the evaluation status of Phase I and Phase II proposals will be provided at two points. An email will be sent to each proposer after the completion of Phase I proposal evaluations. The email will either inform the proposer that their Phase I proposal is no longer under consideration, or it will provide instructions for the submission of a Phase II proposal. In a similar manner, proposers that submit a Phase II proposal will receive an email informing them that their proposal is either no longer under consideration or has been selected for award pending successful negotiations.

In the case of a one-phase process, the Government may engage in communications with proposers during the course of evaluations for the purpose of enhancing the Government's understanding of a research proposal and facilitating the evaluation process. These communications may be considered in rating proposals. Upon completion of evaluation and the subsequent selection decision, proposers will receive an email informing them that either their proposal is no longer under consideration or has been selected for award pending successful negotiations. Proposers should note that while proposal selection is premised upon a streamlined submission and evaluation process, a fully-supported cost proposal, technical basis of estimate and supplemental information will be required subsequent to the selection decision and notification. Successful proposers will be provided with proposal instructions at the appropriate time.

2.2 Proposal Submission Deadline

Submission deadlines are detailed in the calls released for each topic or set of topics. Proposals must be received by this date and time in order to be considered. Submission information is provided in Section 4.0 of this BAA.

2.3 Potential Award Instruments

A full range of flexible acquisition related statutory authority arrangements available to DTRA are possible results from this announcement, including but not limited to, contracts, Other Transaction Agreements (OTAs), and Interagency Agreements (IAs). **The Government does not intend to award grants or cooperative agreements under this solicitation**. Each of these procurement instruments offers different advantages, liabilities and responsibilities for proposers and the Government. Except for OTAs, the Government actions under this BAA shall adhere to the requirements of the Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS).

While proposers may suggest a proposed instrument, the Government contracting officer has the sole discretion to determine the award instrument type and negotiate all instrument terms and conditions with proposers.

2.4 Contract Considerations

The Government intends to award Cost and Cost-Plus-Fixed-Fee (CPFF) contracts. In accordance with FAR 16.301-3(a)(3), Cost-Reimbursement contracts require that the proposer's accounting system is adequate for determining costs applicable to the contract. **Determinations of accounting system inadequacy, or lack of evidence to support a determination of accounting system adequacy, will preclude the proposer from receiving a cost-type contract.** The Government will typically rely on the findings of a DCAA accounting system audit in making a determination of accounting system adequacy. The Government may consider award of fixed price contracts in appropriate circumstances.

In accordance with FAR 17.204(e), contract periods of performance shall be limited to a maximum of five years, inclusive of all options.

2.5 OTA Considerations

An OTA may only be awarded if it meets one of the following criteria:

- There is at least one nontraditional defense contractor participating to a significant extent in the prototype project.
- ➤ All significant participants in the transaction other than the Federal Government are small businesses (including small businesses participating in a program described under section 9 of the Small Business Act (15 U.S.C. 638)) or nontraditional defense contractors or nonprofit research institution.
- ➤ At least one third of the total cost of the prototype project is to be paid out of funds provided by sources other than the Federal Government.
- ➤ The senior procurement executive for the agency determines in writing that exceptional circumstances justify the use of a transaction that provides for innovative business arrangements or structures that would not be feasible or appropriate under a contract, or would provide an opportunity to expand the defense supply base in a manner that would not be practical or feasible under a contract.

For purposes of determining whether or not a participant may be classified as a nontraditional defense contractor or small business and whether or not such participation is determined to be participating to a significant extent in the prototype project, the following definitions are applicable:

"Nontraditional defense contractor" means an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the Department of Defense for the procurement or transaction, any contract or subcontract for the Department of Defense that is subject to full coverage under the cost accounting standards prescribed pursuant to section 1502 of title 41 and the regulations implementing such section.

"Small Business" means a small business concern as defined under Section 3 of the Small Business Act (15 U.S.C. § 632).

"Participating to a significant extent in the prototype project" includes, but is not limited to, the existence of one or more of the following considerations: whether the nontraditional defense contractor, small business or nonprofit research institution will supply a novel application or approach to an existing technology, product or process; provide a material increase in the performance, efficiency, quality or versatility of a key technology, product or process; accomplish a significant amount of the prototype project;

cause a material reduction in the cost or schedule of the prototype project; or, provide for a material increase in performance of the prototype project.

In accordance with 10 U.S.C. § 4022(f), the Government may award a follow-on production contract or OTA for any OTA awarded under this BAA if: (1) that participant in the OTA, or a recognized successor in interest to the OTA, successfully completed the entire prototype project provided for in the OTA, as modified; and (2) the OTA provides for the award of a follow-on production contract or OTA to the participant, or a recognized successor in interest to the OTA.

2.6 IA Considerations

In the event that a proposer is one of the three eligible federal sources listed below and the proposer's project is tentatively selected for award and funding, DTRA will work with the appropriate sponsoring agency to issue an IA pursuant to the Economy Act (31 U.S.C. § 1531) or other appropriate authority.

- ▶ DoD-sponsored Federally Funded Research and Development Center (FFRDC), as specified in DFARS 235.017-1
- ➤ University Affiliated Research Center (UARC), provided that it is permitted by the UARC's DoD sponsor
- ➤ Department of Energy (DOE) sponsored FFRDC or National Aeronautics and Space Administration (NASA) sponsored FFRDC, provided that authorization is obtained from the DOE or NASA sponsor

2.7 Fundamental Research

It is DoD policy that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. National Security Decision Directive (NSDD) 189 defines fundamental research as follows:

'Fundamental research' means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.

As of the date of publication of this BAA, the Government cannot identify whether the work to be awarded against each topic will be considered fundamental research and may award both fundamental and non-fundamental research.

For each topic, the Government shall have sole discretion to determine whether the proposed research shall be considered fundamental.

3.0 BAA Eligibility

3.1 Eligible Sources

Proposals submitted in response to this BAA will be considered from the following U.S. and Foreign Enterprises:

- Industrial/commercial concerns including small businesses
- Accredited Degree granting colleges and universities
- Not-for-profit organizations
- Other Non-U.S. sources
- ➤ DoD-sponsored FFRDCs specified in DFARS 235.017-1
- UARCs, provided that it is permitted by the UARC's DoD sponsor
- ➤ DOE-sponsored FFRDCs and NASA-sponsored FFRDCs, provided that authorization is obtained from the DOE sponsor or NASA sponsor

3.2 Non-Eligible Sources

The following entities may not participate as prime contractors, nor furnish Principal Investigators (PIs) in awards made under individual topics, but may act as subcontractors:

- ➤ Federal laboratories other than those DoD, DOE and NASA sponsored FFRDCs specified above
- > U.S. Government agencies and organizations
- Academic institutions that are federal government organizations (e.g., Naval Postgraduate School)

4.0 Proposal Submission Information

4.1 General Instruction Information

To assure timely and equitable evaluation of proposals, proposers must follow the instructions contained herein, unless otherwise provided within an individual topic. Proposers are required

to meet all solicitation requirements, including terms and conditions, representations and certifications, technical requirements, and proposal content and format requirements. Failure to meet a requirement or to follow the specific proposal instructions provided may preclude consideration of the proposal and/or result in a proposal being ineligible for award. Additionally, proposers must clearly identify any exception to the solicitation terms and conditions and provide complete accompanying rationale. It is the proposer's responsibility to ensure the completeness of the proposal. Evaluation of a proposal will be conducted only on the basis of the information contained within it and the Government will not assume that a proposer possesses any capabilities not specified.

Proposals shall be clear, concise, and include sufficient detail for effective evaluation and for substantiating the validity of stated claims. The proposer shall assume that the Government has no prior knowledge of the proposer's capabilities.

4.2 Registration for the DTRA Proposal Submission Website

All proposers are required to register at the DTRA proposal submission website prior to submission of proposals. Detailed registration and submission instructions are available at the website: https://www.dtrasubmission.net.

The registration must be submitted by a central Business Point of Contact (BPOC) rather than individual PI personnel. A BPOC is a person who is given the responsibility of coordinating all submissions from individual PIs at his or her work location and is the only individual who may access the DTRA proposal submission website. The intent is that all submissions from an organization be coordinated and submitted by a single, identified responsible party. Failure to register in accordance with instructions may render a proposer ineligible for participation in this BAA.

Proposers must be aware that it is their responsibility to ensure that e-mail notifications reach the designated BPOC and that e-mail notifications are not blocked due to the use of 'spam blocker' software or other means that the recipient's Internet Service Provider may have implemented as a means to block the receipt of certain e-mail messages.

Additionally, it is the responsibility of the BPOC to inform DTRA of any updates to e-mail addresses for both themselves as the registered BPOC and for the designated PI.

IMPORTANT: Registration at the DTRA proposal submission website is NOT the same as registering at the System for Award Management or SAM.GOV websites. Failure to register at the

DTRA proposal submission website will prevent a proposer's submission of documents required and thus render the proposer ineligible for participation in this BAA.

4.3 Registration for the System for Award Management (SAM) Website

DTRA requires that all proposers be registered in the SAM database at the time of proposal submission. Contractors must keep their registration current for the life of the contract. Proposers may register with SAM online at https://sam.gov/.

NOTE: Once all of the information has been entered in SAM.gov, new registrations can take an average of <u>7-10 business days</u> to process. SAM.gov must send out information for validation with outside parties before your registration can be activated; this includes TIN validation with the IRS and CAGE, validation/assignment with DoD.

4.4 General Proposal Instructions

All proposals must be submitted electronically through the DTRA proposal submission website: https://www.dtrasubmission.net. Any proposal submitted by any means other than the DTRA proposal submission website will not be considered (e.g., hand-carried, postal service, commercial carrier, e-mail).

Proposers are responsible for ensuring submission of their proposals by the date and time specified in the calls released for each topic or set of topics. **Time management is wholly the responsibility of the proposer. If a timely submission is not fully uploaded prior to the cutoff date/time, the proposal will not be considered. No exceptions will be made.** The proposer must verify the submission of their proposal package by printing the electronic receipt (time and date stamped) that appears on the final screen following the compliant submission of a proposal to the DTRA proposal submission website.

Using the DTRA proposal submission website, all proposers must prepare proposal cover sheets for each proposal submitted (Phase I and Phase II, if applicable). All data point requirements must be completed in every cover sheet. Once the cover sheet is saved, the system will assign a unique proposal number for each submission. Cover sheets may be edited as often as necessary until the submission period closes. All submissions must be dated and **unclassified**.

If multiple proposals are being submitted by the same proposer in response to more than one topic, separate cover sheets must be generated for each proposal and the full proposal files must be uploaded with the associated cover sheet, since a unique document number will

automatically be assigned to each submission by the electronic proposal tracking system. All documents submitted to the DTRA proposal submission website are considered works in progress and are not eligible for evaluation until the proposer submits the final proposal package for consideration. Once all proposal files have been uploaded and the proposer is ready to submit their application, select the green "Submit" button on the page. A confirmation message will appear on the page once the submission has gone through. Perform a virus check before uploading any proposal files. If a virus is detected, it may cause rejection of the file.

Proposers **must** submit proposals to the appropriate topic. Failure to do so will render the proposal ineligible for evaluation and award.

4.5 Late Submissions and Withdrawal of Proposals

Proposers are responsible for access to the DTRA proposal submission website and for submitting electronic proposals so as to be received at the Government site indicated in this BAA no later than the closing date and time stated in the calls released for each topic or set of topics. Untimely proposals will not be considered.

When sending electronic files, the proposer will account for potential delays in file transfer from the originator's computer server to the Government website/computer server. Proposers are encouraged to submit their proposals early to avoid potential file transfer delays due to high demand or problems encountered in the course of the submission. Proposers should also print, and maintain for their records, the electronic date/time stamped receipt that appears on the final screen following submission of a proposal on the DTRA proposal submission website. All submissions shall be fully uploaded before the cut off time/date in order to be considered.

Proposals may be withdrawn by written notice received at any time before award. Withdrawals are effective upon receipt of notice via the e-mail address listed in Section 8.1.

4.6 Proposal File Requirements

Proposers shall submit the required components of each proposal volume as specified below. Additional files will not be accepted. All proposal files must not be encrypted, and submission of files using older versions of the software below may not be accepted. It is recommended that all files be created using the most up to date versions of the software listed below.

4.6.1 Phase I Proposal

- Quad Chart Microsoft (MS) PowerPoint
- White Paper Portable Document Format (PDF) compatible with Adobe Acrobat
- Draft Statement of Work (SOW) MS Word

4.6.2 Phase II Proposal

4.6.2.1 Technical Volume

- Technical Proposal PDF compatible with Adobe Acrobat
- Basis of Estimate (BOE) PDF compatible with Adobe Acrobat
- SOW MS Word

4.6.2.2 Cost Volume

- Cost Narrative / Supporting Documentation PDF compatible with Adobe Acrobat
- Cost Spreadsheet MS Excel, or compatible format

4.6.2.3 Supplemental Information Volume

• Unless specified in Section 4.8.2.3, all documents within this volume shall be submitted as PDF compatible with Adobe Acrobat

4.7 Proposal Format Requirements

Proposals shall conform to the format requirements specified below.

4.7.1 Phase I Proposal

4.7.1.1 Quad Chart

- Paper Size: 8.5 x 11 inches, landscape orientation
- Page Limit: No more than one (1) page. Pages in excess of the page limitation will not be read or evaluated
- Classification: Unclassified
- Restrictive Markings: The Quad Chart must not contain information deemed trade secret, confidential or proprietary by the proposer

4.7.1.2 White Paper

- Paper Size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Page Limit: No more than six (6) pages. Pages in excess of the page limitation will not be read or evaluated
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 4.7.3

4.7.1.3 Draft SOW

- Paper Size: 8.5 x 11 inchesSpacing: Single-spaced
- Margins: One-inchPage Limit: None
- Classification: Unclassified
- Restrictive Markings: The draft SOW must not contain information deemed trade secret, confidential or proprietary by the proposer; reference ATTACHMENT 2 for additional information

4.7.2 Phase II Proposal

4.7.2.1 Technical Volume

4.7.2.1.1 Technical Proposal

- Paper Size: 8.5 x 11 inches
- Spacing: Single-spaced
- · Margins: One-inch
- Page Limit: No more than twenty-five (25) pages. Pages in excess of the page limitation will not be read or evaluated
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 4.7.3

4.7.2.1.2 BOE

- Paper Size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Page Limit: None
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 4.7.3

4.7.2.1.3 SOW

- Paper Size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Page Limit: None
- · Classification: Unclassified
- Restrictive Markings: The SOW must not contain information deemed trade secret, confidential or proprietary by the proposer; reference ATTACHMENT 2 for additional information

4.7.2.2 Cost Volume

4.7.2.2.1 Cost Narrative / Supporting Documentation

Paper Size: 8.5 x 11 inchesSpacing: Single-spacedMargins: One-inch

• Page Limit: None

• Classification: Unclassified

• Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 4.7.3

4.7.2.2.2 Cost Spreadsheet

- Format shall be in accordance with ATTACHMENT 5
- All formulas shall be preserved
- Page Limit: None
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 4.7.3

4.7.2.3 Supplemental Information Volume

Paper Size: 8.5 x 11 inchesSpacing: Single-spacedMargins: One-inch

• Page Limit: None

• Classification: Unclassified

• Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 4.7.3

4.7.3 Restrictive Markings and Disclosure of Proprietary Information

Proposal content submitted in response to this BAA (with the exception of the SOW) may contain technical information and other data that the proposer does not want disclosed to the public or used by the Government for any purpose other than proposal evaluation. Public release of information in any submission will be subject to existing statutory and regulatory requirements. If proprietary information which constitutes a trade secret, proprietary commercial or financial information, confidential personal information, or data affecting national security is provided by a proposer, it will be treated in confidence, to the extent permitted by law, provided that the following legend appears and is completed on the front of the submission:

"For any purpose other than to evaluate the proposal, this data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part, provided that, if an award is made to the proposer as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the agreement. This restriction does not limit the right of the Government to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction is contained in page(s) of this proposal."

Any other legend may be unacceptable to the Government and may constitute grounds for removing the proposal from further consideration without assuming any liability for inadvertent disclosure. The Government will limit dissemination of properly marked information to official channels.

In addition, the pages indicated as restricted must be marked with the following legend: "Use or disclosure of the proposal data on lines identified by an asterisk (*) are subject to the restriction on the front page of this proposal." The Government assumes no liability for disclosure or use of unmarked data and may use or disclose such data for any purpose.

In the event that properly marked data contained in a proposal submitted in response to this BAA is requested pursuant to the Freedom of Information Act, 5 U.S.C. § 552, the proposer will be advised of such request and, prior to such release of information, will be requested to expeditiously submit to DTRA a detailed listing of all information in the proposal to which the proposer believes to be exempt from disclosure under the Act. Such action and cooperation on the part of the proposer will ensure that any information released by DTRA pursuant to the Act is properly identified.

By submission of a proposal, the proposer understands that proprietary information may be disclosed outside the Government for the sole purpose of technical evaluation. The contracts office will obtain a written agreement from the evaluator that proprietary information in the proposal will only be used for evaluation purposes and will not be further disclosed or utilized.

4.8 Proposal Content Requirements

Proposals shall conform to the content requirements specified below.

4.8.1 Phase I Proposal

4.8.1.1 Quad Chart

4.8.1.1.1 Heading

- Title of Project
- Topic Number
- Principal Investigator
- Organization

4.8.1.1.2 Upper Left Quadrant

- Objective Provide a clear and concise description of the goal of the effort
- <u>Description of Effort</u> Provide a brief description of the technology proposed for investigation and the methodologies to be used during the course of investigation

4.8.1.1.3 Lower Left Quadrant

- <u>Benefits of Proposed Technology</u> Provide a brief description of the net advantages of the proposed technology over current practices and other competing technologies
- <u>Challenges</u> Provide a bullet list of the technical or scientific challenges being addressed
- <u>Maturity</u> Describe the maturity of proposed technology with respect to the TRL at project start and the anticipated TRL at project end. Reference ATTACHMENT 1 for TRL definitions

4.8.1.1.4 Upper Right Quadrant

• Picture or graphic illustrating proposed technology development

4.8.1.1.5 Lower Right Quadrant

- <u>Period of Performance</u> Provide the project period of performance. If the project incorporates multiple periods of performance, separated by logical and meaningful milestones and go/no-go decision points, provide the duration of each period
- <u>Major Goals/Milestones and Deliverables</u> Provide a bullet list of the major project goals, milestones and deliverables. If utilizing multiple project periods

- of performance, provide the goals, milestones and deliverables for each period and for the overall project
- <u>Cost</u> Provide a Rough Order of Magnitude (ROM) cost estimate. If utilizing multiple project periods of performance, provide ROM estimates for each period and for the overall project

4.8.1.2 White Paper

The white paper shall include the following sections in the order given below:

- (1) Proposers shall describe the following elements of the project technical approach:
 - Project background, objectives and scope
 - Overview of the tasks and methods planned to achieve each objective and the final deliverables and/or project end state
 - <u>Current Capabilities</u> Describe the proposer's current capabilities in terms of key personnel, facilities, and equipment that will be dedicated to the execution of the technical approach
 - Required Capabilities Explain what capabilities will be required to successfully execute the technical approach, and describe how the proposer plans to fill any capability gaps in terms of expertise, facilities, and equipment (e.g. subcontractor teaming arrangements, consultants, equipment purchases, etc.)
 - Evidence of Teaming Arrangements For each of the capability gaps described in the "Required Capabilities" bullet, provide evidence of teaming arrangements or explain what steps have been taken to ensure a commitment to perform from the parties who will provide the necessary capabilities. Supporting documentation, such as a signed Memorandum of Agreement (MOA) or Memorandum of Understanding (MOU) from potential team members, shall not be subject to the page limitation. Narratives explaining actions taken to secure commitments from potential team members shall be subject to the page limitation
 - Any applicable technical and/or scientific challenges associated with the proposed project and how the proposer intends to address these challenges
- (2) Proposers shall provide a narrative project overview describing:
 - How the technology addresses the topic requirement
 - How the technology can be implemented or utilized by DoD end-users and the impact of the technology on end-user mission capability
 - The current TRL of the technology and the anticipated TRL at the end of the proposed project

(3) Proposers shall describe the estimated costs for the proposed technical approach relevant to the ROM cost estimate required as part of the Quad Chart. Proposers shall provide a breakout of estimated costs for each period and for the overall project.

4.8.1.3 Draft SOW

The draft SOW shall be submitted in accordance with the sample template provided in ATTACHMENT 2.

4.8.2 Phase II Proposal

4.8.2.1 Technical Volume

4.8.2.1.1 Technical Proposal

4.8.2.1.1.1 Abstract

Proposers shall provide a brief abstract

4.8.2.1.1.2 Scope

Proposers shall provide a detailed description of project scope, to include project objectives, background, programmatics and relevance.

- A. <u>Objective</u> Proposers shall state clearly and concisely the objective of the proposed project
- B. <u>Background</u> Proposers shall provide the necessary technical and scientific background, and preliminary data, to support the scientific and/or technical merit of the proposed project
- C. <u>Technical Approach</u> Proposers shall describe in detail the proposed technical approach
- D. <u>Relevance</u> Proposers shall describe the relevance of the proposed project in terms of DTRA mission, end-user needs and the state-of-the-art of the proposed technology
- E. <u>References</u> Proposers shall list any relevant documents used to develop the technical approach

4.8.2.1.1.3 Credentials

Proposers shall provide credentials and qualifications, limited to that which is directly relevant to the proposed work.

- A. <u>Summary of Organizational Credentials and Qualifications</u> Proposers shall describe their organizational qualifications and credentials to perform the proposed project
- B. <u>Summary of Qualifications for PI and Key Personnel</u> Proposers shall list summary qualifications for the proposed PI and other key personnel

4.8.2.1.1.4 Project Management

Proposers shall provide a project management plan, their capabilities to perform the proposed work, a Gantt chart, and a time-phased expenditure plan.

- A. <u>Project Management Plan</u> Proposers shall describe their organization's project management plan for the proposed project. The proposer shall address each of the following:
 - 1. Explain how the proposer will manage the project, ensuring that the required performance outcomes are achieved within the required schedule, at or below the contract cost ceiling
 - 2. Provide the processes and techniques that demonstrate the proposer's ability to act as a resource integrator with the capability to effectively manage all aspects of execution of the technical approach, to include:
 - a.) Identifying and addressing project technical risk;
 - b.) leveraging and managing resident expertise, teaming arrangements and/or other partnerships to provide the required capabilities to successfully execute the technical approach and accomplish the tasks identified in the SOW;
 - c.) effectively and efficiently managing and leading assigned tasks, including those assigned to external organizations; and
 - d.) identifying key personnel to include a program/project manager responsible for providing cohesive technical and administrative leadership and direction to facilitate the successful completion of contract requirements
 - 3. Explain the risks associated with achieving proposed project goals, objectives and milestones (what will be done), and risks associated with the technical approach (how it will be done). For all identified risks, proposers shall indicate how they plan to manage these risks (e.g. avoidance, acceptance, mitigation, transfer) and provide a detailed narrative explaining the corresponding risk management actions that will be taken for each identified risk
- B. <u>Capabilities to Perform the Proposed Work</u> Proposers shall describe the roles and responsibilities that will be assigned to each proposed team member (e.g. proposer, subcontractor, consultant, CRO, etc.). The proposer shall also describe the capabilities each proposed team member possesses, to include expertise, facilities, and equipment, to successfully execute the proposed project, and substantiate these capabilities with examples of past performance/relevant experience executing similar work.

- C. <u>Gantt Chart</u> Proposers shall provide a Gantt chart that lists each individual SOW task and provides the duration of performance for each
- D. <u>Time-phased Expenditure Plan</u> Proposers shall provide a time-phased expenditure plan, provided in chart format, that provides estimated cost accruals by month, by project period. For example, if the proposed project includes three periods of performance, each lasting twelve months, the proposer's chart will be broken out into three separate twelve-month periods

4.8.2.1.2 BOE

- A. For **each** proposed SOW task, proposers shall address the following:
 - 1. SOW Task
 - 2. <u>Technical Approach</u> The proposed technical approach to execute the individual SOW task
 - 3. <u>Milestones, Metrics, Objectives and Deliverables</u> The milestones, metrics, objectives, and deliverables associated with the individual SOW task
 - 4. <u>BOE</u> The proposed resources to execute the technical approach, covering all cost elements in accordance with the below information and format requirements. No cost information shall be provided with the BOE. Address each of the following requirements:

a) **Direct Labor**

- i. <u>Direct Labor Breakout</u> Provide a chart that lists each individual labor category assigned to this task and the number of hours allocated to each listed labor category
- ii. <u>Direct Labor Justification</u> Proposers shall explain in detail, how the estimate was developed (e.g. bottom-up analysis, analogy), the rationale supporting the chosen estimating technique, and why each proposed labor category, and the hours allocated to each labor category, is reasonable and necessary to execute the technical approach. Proposers shall also explain any assumptions that were relied upon, and risks that were considered, in the development of the estimate

b) **Subcontracts**

- i. <u>Subcontractor Breakout</u> Provide a chart that lists each individual subcontractor assigned to this task
- ii. <u>Subcontractor Justification</u> Proposers shall explain, in detail, why each proposed subcontractor is appropriate and necessary to execute the technical approach

c) Consultants

- i. <u>Consultant Breakout</u> Provide a chart that lists each individual consultant assigned to this task and the number of hours allocated to each consultant
- ii. <u>Consultant Justification</u> Proposers shall explain, in detail, why each proposed consultant, and associated level of effort/hours, is appropriate and necessary to execute the technical approach. Proposers shall also explain any assumptions that were relied upon, and risks that were considered, in the development of the estimate

d) Materials/Supplies

- i. <u>Material/Supply Breakout</u> Provide a chart that lists each individual material and supply item assigned to this task and the quantity for each
- ii. Material/Supply Justification Proposers shall explain, in detail, how the estimate was developed (e.g. bottom-up analysis, analogy), the rationale supporting the chosen estimating technique, and why each proposed material and supply item is appropriate and necessary to execute the technical approach. Proposers shall also explain any assumptions that were relied upon, and risks that were considered, in the development of the estimate

e) Equipment

- i. <u>Equipment Breakout</u> Provide a chart that lists each individual equipment item assigned to this task and the quantity for each
- ii. Equipment Justification Proposers shall explain, in detail, how the estimate was developed (e.g. bottom-up analysis, analogy), the rationale supporting the chosen estimating technique, and why each proposed equipment item is appropriate and necessary to execute the technical approach. Proposers shall also explain any assumptions that were relied upon, and risks that were considered, in the development of the estimate

f) Travel

 Travel Breakout – Provide a chart that lists each individual travel event, and for each individual travel event, list the following: a) reason for travel, b) destination, c) number of travelers, d) applicable labor categories, and e) duration of travel ii. <u>Travel Justification</u> – Proposers shall explain, in detail, why each proposed travel event and the proposed travelers (by labor category) are appropriate and necessary to execute the technical approach. Proposers shall also explain any assumptions that were relied upon, and risks that were considered, in the development of the estimate

g) Other Direct Costs (ODCs)

- i. <u>ODC Breakout</u> Provide a chart that lists each individual ODC item assigned to this task and the quantity for each
- ii. <u>ODC Justification</u> Proposers shall explain, in detail, how the estimate was developed (e.g. bottom-up analysis, analogy), the rationale supporting the chosen estimating technique, and why each proposed ODC item is appropriate and necessary to execute the technical approach. Proposers shall also explain any assumptions that were relied upon, and risks that were considered, in the development of the estimate

The BOE <u>must</u> clearly and accurately reflect the proposed SOW. Proposers must complete the above for each proposed project period of performance (e.g. Base Period, Option Period 1, etc.). Each proposed subcontractor must also provide a BOE addressing the above requirements.

4.8.2.1.3 SOW

The SOW shall be submitted in accordance with the sample template provided in ATTACHMENT 2.

4.8.2.2 Cost Volume

All proposals may be subject to the requirements of the Truth in Negotiations Act (TINA). A proposal tentatively selected for award exceeding the threshold listed in FAR 15.403-4(a)(1) may be required to submit a certificate of current cost and pricing data in the format described in FAR 15.406-2 upon conclusion of successful negotiations.

The responsibility for providing adequate supporting data and attachments lies solely with the proposer. The cost proposal must include cost estimates sufficiently detailed for meaningful evaluation. Further, the proposer must also bear the burden of proof in establishing reasonableness of proposed costs; therefore, it is in the proposer's best interest to submit a fully supportable and well-prepared cost proposal. The basis and rationale for all proposed costs should be provided in the cost narrative so that Government personnel can place reliance on the information as current, complete, and accurate.

4.8.2.2.1 Cost Narrative / Supporting Documentation

All proposers shall provide documentation, and analysis as required, to support the proposed costs contained within ATTACHMENT 5. Specific information requirements for this section are also included within ATTACHMENT 5

4.8.2.2.2 Cost Spreadsheet

The proposer shall prepare the Cost Spreadsheet utilizing ATTACHMENT 5. Proposers shall follow all instructions, including those referenced as 'Notes' contained within the Cost Spreadsheet

4.8.2.3 Supplemental Information Volume

Proposers must complete the Supplemental Volume Cover Sheet provided as ATTACHMENT 4. Any required supplemental volume items not addressed by the information sheet must be uploaded to the supplemental volume section of the proposal submission website. Additional details about each specific item are located in the below sections. If any particular item is not relevant to the proposed effort, include a reference to the requested information and state that the particular information is not applicable in order to confirm a negative response.

4.8.2.3.1 Representations and Certifications

Proposers must complete the annual representation and certifications electronically via SAM. In addition, the proposer is also required to execute the following representations and certifications that are not in SAM by completing and submitting ATTACHMENT 6.

- FAR 52.204-16 Commercial and Government Entity Code Reporting
- FAR 52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment
- FAR 52.209-7 Information Regarding Responsibility Matters
- FAR 52.209-13 Violation of Arms Control Treaties or Agreements-Certification
- FAR 52.229-11 Tax on Certain Foreign Procurements-Notice and Representation
- DFARS 252.203-7005 Representation Relating to Compensation of Former DoD Officials
- DFARS 252.204-7008 Compliance with Safeguarding Covered Defense Information Controls
- DFARS 252.204-7017 Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services-Representation
- DFARS 252.204-7019 Notice of NIST SP 800-171 DoD Assessment Requirements

- DFARS 252.209-7011 Representation for Restriction on the Use of Certain Institutions of Higher Eduction
- DFARS 252.225-7003 Report of Intended Performance Outside the United States and Canada-Submission with Offer
- DFARS 252.225-7057 Preaward Disclosure of Employment of Individuals Who Work in the People's Republic of China
- DFARS 252.225-7059 Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region-Representation
- DFARS 252.225-7973 Prohibition on the Procurement of Foreign-Made Unmanned Aircraft Systems Representation
- DFARS 252.225-7055 Representation Regarding Business Operations with the Maduro Regime

Additionally, the proposer is required to verify that the electronic representations and certifications are current, accurate and complete and applicable to this BAA in accordance with FAR 4.1201.

4.8.2.3.2 Intellectual Property

A. <u>Patents</u> – Proposers must list any known patents, patent applications, or inventions which the proposer may be required to license in order to perform the work described in the proposer's proposal, or which the Government may be required to license to make or use the deliverables of the contract, should the proposer's proposal be selected for award. For any patent or patent application listed above, the proposer must provide the patent number or patent application publication number, a summary of the patent or invention title, and indicate whether the proposer is the patent or invention owner. If a patent or invention is in-licensed by the proposer, identify the licensor.

If any listed patent, patent application or invention is owned or licensed by the proposer, the proposer must provide a statement, in writing, if it either owns or possesses the appropriate licensing rights to the patent, patent application or invention to perform the work described in the proposal and/or to grant the Government a license to make or use of the deliverables for this program. If any listed patent, patent application or invention is not owned or licensed by the proposer, then the proposer must explain how it will obtain a license, how the Government may obtain a license and/or whether the proposer plans to obtain these rights on behalf of the Government.

Be advised that no patent, patent application or invention disclosure will be accepted if identified in the Data Rights Assertion List described in subsection 4.8.2.3.2 (B) below. Existing inventions, patents and patent applications should be discussed in the above list. Government rights in any technology that might be invented or reduced to practice under the contract are addressed in the

patent rights clause to be included in the contract.

B. <u>Data Rights</u> – Proposals submitted in response to this BAA shall identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the proposer, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure, in accordance with DFARS 252.227-7017, Identification and Assertion of Use, Release or Disclosure Restrictions, and DFARS 252.227-7028, Technical Data or Computer Software Previously Delivered to the Government. The proposer's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers, shall be submitted as an attachment to its offer, utilizing ATTACHMENT 3, dated and signed by an official authorized to contractually obligate the proposer. If the proposer will deliver all technical data and computer software to the Government without restrictions, enter "NONE" in this table under the heading "Technical Data or Computer Software to be Furnished with Restrictions."

Proposers responding to this BAA requesting an OTA shall specifically identify any asserted restrictions on the Government's use of intellectual property contemplated under those award instruments. For this purpose, proposers must propose specific Intellectual Property terms and conditions and a data deliverable list. Proposers are encouraged to model their data rights assertions list to the template provided in DFARS 252.227-7017.

4.8.2.3.3 Subcontracting Plan

Any proposer, other than small businesses, submitting a proposal for an award with a value more than the amount listed in FAR 19.702(a)(1) and that has subcontracting possibilities, must submit a subcontracting plan in accordance with FAR 19.7. 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.

A subcontracting plan identifies the proposer's approach to awarding subcontracts to small business, small disadvantaged business, women-owned small business, service-disabled veteran owned small business, and Historically Underutilized Business Zone (HUB Zone) small business concerns, on this effort. **The narrative in the subcontracting plan must**

address each element listed in FAR 19.704(a)(1)-(15). The emphasis of the plan must be to maximize small business participation to the maximum extent practicable. The current DoD subcontracting goals can be referenced at the following link: https://business.defense.gov/About/Goals-and-Performance/

Note 1: Provide rationale if the Small Disadvantaged Business goal cannot be achieved per DFARS 219.705-4(d), or if subcontracting possibilities do not exist (reference FAR 19.705-2(c)).

Note 2: A Defense Contract Management Agency (DCMA) approved master plan may be incorporated into an individual plan.

4.8.2.3.4 Organizational Conflict of Interest

Certain post-employment restrictions on former federal officers and employees may exist, including special Government employees (including but not limited to Section 207 of Title 18, United States Code, the Procurement Integrity Act, 41 U.S.C. § 2102, and FAR 3.104). If a prospective proposer believes that a conflict of interest exists that relates to the above restrictions, the situation should be raised to the DTRA Contracting Officer before time and effort are expended in preparing a proposal. Send notification of potential conflicts of interest via an email message to the mailbox listed in Section 8.1 of this BAA.

All proposers and proposed subcontractors also must affirmatively disclose whether or not they are providing scientific, engineering and technical assistance (SETA), Advisory and Assistance Services (A&AS) or similar support, through an active contract or subcontract, to any DTRA technical office(s), the Joint Program Executive Office for Chemical and Biological Defense (JPEO), Office of the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs (OASD(NCB). All disclosures must state which office(s) the proposer supports, and identify the prime contract number. Disclosures must be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed, including facts not specifically described above. The disclosure must include a description of the action the proposer has taken or proposes to take to avoid, neutralize, or mitigate such conflict.

4.8.2.3.5 Protection of Human Subjects in DoD Supported Research

If the proposed research involves the use of human subjects, to include research involving the use of human biospecimens (human anatomical substances)* and/or human data, hereafter referred to as "research," the research cannot begin until the U.S. Army Medical Research Development

Command, Office of Research Protection (MRDC ORP), Human Research Protection Office (HRPO) provides written authorization that the research may proceed. HRPO authorization is required for any prime (lead performers) and subcontractors (subrecipients) that will use funds from this award to conduct research. Applicants are required to: a) justify and b) outline the use, and c) include the source of the human subjects, human biospecimens and/or human data involved in the research. The DTRA Research Oversight Board (ROB) will provide ongoing oversight throughout the duration of the effort to ensure proper approvals are in place.

*This prohibition does not apply to research under this award that solely uses only one of both of the following types of human biospecimens to accomplish its aims: (1) established/existing commercially available human cell lines; (2) established/existing patient-derives xenograft (PDX) models.

DTRA Instruction 3216.01 establishes the DTRA Human Research Protection Program (HRPP), sets forth the policies, defines the applicable terms, and delineates the procedures necessary to ensure DTRA compliance with federal and DoD regulations and legislation governing research. The requirement to comply with the regulations applies to new starts and to continuing research.

The HRPO and ROB conduct site visits as part of its responsibility for compliance oversight. Prime and subcontractors must comply with all applicable human research protections requirements. Accurate and complete study records must be maintained and made available to representatives of the HRPO and ROB. Noncompliance with these terms and conditions may result in withholding of funds and/or the termination of the award. The HRPO review is separate from, and in addition to, the ROB and the responsible IRB reviews. Further information may be required if the proposal is successful.

DFARS and DTRA clauses will be included in all contracts. The Government shall not be responsible for any costs incurred for research prior to approvals by the MRDC HRPO and DTRA ROB.

4.8.2.3.6 Animal Use

If the proposed research involves the use of animals, the research cannot begin until the U.S. Army Medical Research Development Command, Office of Research Protection (MRDC ORP), Animal Care and Use Review Office (ACURO) provides authorization that the research may proceed. Applicants are required to: a) justify and b) include detailed information on the use of animals, and c) include the location(s) of where the animal work is to be performed. The DTRA Research Oversight Board (ROB) will provide

ongoing oversight throughout the duration of the effort to ensure proper approvals are in place.

DoD Instruction 3216.01 establishes the DTRA Animal Use Oversight Program (AUOP), sets forth policies, defines the applicable terms, and delineates the procedures necessary to ensure DTRA compliance with federal and DoD regulations and legislation governing research involving the use of animals. The requirement to comply with the regulations applies to new starts and to continuing research.

The ACURO and ROB conducts site visits as part of its responsibility for compliance oversight. Prime and subcontractors must comply with all applicable research involving animal use protections requirements. Accurate and complete study records must be maintained and made available to representatives of the ACURO and ROB. Non-compliance with these terms and conditions may result in withholding of funds and/or the termination of the award. The ACURO review is separate from, and in addition to, the ROB and the responsible IRB reviews. Further information may be required if the proposal is successful.

4.8.2.3.7 Biological Defense Research Program (BDRP) Requirements: Biosecurity and Select Agent Use; Chemical Agent Use

Proposals must specify what select agent work will be conducted at the proposer's facility and what select agent work will be performed in other facilities. Proposals also must provide the source of the select agents, any appropriate registration information for the facilities, and specify the Laboratory Biosafety Level. All select agent work is subject to verification of information and certifications.

For those contractors conducting research with Bio-safety Levels 3 and 4 material, a Facility Safety Plan must be prepared and made available during the project award phase in accordance with 32 Code of Federal Regulations (CFR) 626.18. DTRA requires that research using select agents not begin or continue until DTRA has reviewed and approved the proposed agent use.

Proposals that will employ the use of chemical agents, either neat agent or dilute agent, the proposer must provide approved Facility Standard Operating Procedures that conform to federal, state, and local regulations and address the storage, use and disposition of these chemical materials.

4.8.2.3.8 Modified Pre-award Checklist - Standard Form (SF) 1408

Any proposer awarded a cost type contract must be in compliance with FAR 16.301-3 restrictions. Specifically, the proposer's accounting system must be

adequate for determining costs applicable to the contract and will be subject to DCAA audit and surveillance during performance to provide reasonable assurance that efficient methods and effective cost controls are being used. Any proposer that has not been subject to a DCAA pre or post-award accounting system audit is required to submit a Modified Preaward Checklist (SF 1408), provided as ATTACHMENT 7, which will expedite the pre-award survey of the accounting system by DCAA. Refer to https://www.dcaa.mil/ for further assistance in preparing an adequate cost proposal. Proposer's that have been subject to a DCAA accounting system audit shall provide the resultant audit report in lieu of the SF1408.

4.8.2.3.9 Forward Pricing Rate Agreement/Provisional Billing Rates

Proposers shall include a copy of any current Forward Pricing Rate Agreements or Provisional Billing Rate Agreements with Government agencies, such as DCMA, the Office of Naval Research (ONR) or the Department of Health and Human Services (DHHS). If no agreement has been made with a Government representative, proposers shall provide all rates, factors, and bases by year utilized in the development of the proposal and the basis of those rates and factors.

4.8.2.3.10 DoD Laboratories and FFRDCs

Proposed collaboration with a DoD laboratory should be clearly identified in the proposal and must be supported with a letter of intent from that laboratory's Commander.

Proposers choosing to use the services of Government laboratories in the performance of work proposed may be required to enter into a Cooperative Research and Development Agreement (CRADA) with the laboratory. A CRADA is not a FAR-based agreement; it is authorized by 15 U.S. Code Section 3710a. A CRADA will be separate from the DTRA procurement instrument, with its own unique terms, in particular related to Intellectual Property. It would be prudent for the proposer to discuss those unique terms with the laboratory prior to submitting a proposal under this BAA. DTRA will not facilitate, nor be involved in, the negotiation of the agreements with Government laboratories.

DoD-sponsored FFRDCs should review DFARS 235.017 to ensure compliance with the requirement for a DoD-approved conflict of interest policy.

In accordance with FAR 17.503(e), DOE Order 481.1E and DOE Acquisition Regulation DEARS 970.1707-3, DOE FFRDC participants must provide a copy of the written certification from the DOE sponsor authorizing its

performance of the proposed effort. The DOE sponsor must provide written certification that the proposed work –

- (1) is consistent with or complimentary to missions of DOE and the facility to which the work is to be assigned,
- (2) will not adversely impact programs assigned to the facility, and
- (3) will not create a detrimental future burden on DOE resources.

In accordance with FAR 17.503(e), 35.017(a)(2) and 35.017-3, FFRDC participants (other than DOE FFRDCs) must provide documentation from the FFRDC sponsor authorizing its performance of the proposed effort.

4.8.2.3.11 Quad Chart

Proposers shall include a copy of the updated Quad Chart that conforms to the instructions provided in Section 4.8.1.1.

4.8.2.3.12 Export Control Notification

Proposers are responsible for ensuring compliance with all export control laws and regulations that may be applicable to the export of and foreign access to their proposed technologies. Proposers may consult with the Department of State with any questions regarding the International Traffic in Arms Regulation (ITAR) (22CFR Parts 120 – 130) and/or the Department of Commerce regarding the Export Administration Regulations (EAR) (15 CFR Parts 730-774). The Department of State publishes guidance on the ITAR at https://www.pmddtc.state.gov/ddtc public.

Department of Commerce guidance on the EAR is located at https://www.bis.doc.gov/index.php/regulations/export-administration-regulations-ear.

4.8.2.3.13 Information Technology

Proposers shall not propose any solutions approach or course of action that will result in government ownership of any data center assets as defined in H1540CR.HSE - National Defense Authorization Act for Fiscal Year 2012 or in establishing a government data center as defined in OMB Memorandum M-16-19, "Data Center Optimization Initiative (DCOI)". This includes any effort resulting in the procurement of a server(s), whether in a production, test, staging, development, or any other environment. Where the proposer's proposals depend upon utilization of data computing and storage capacity, proposers shall specify the processor, compute, memory and storage hereby referred to as compute capacity, necessary to support the proposed course of action. Subject to the requirements otherwise stated by the Government, proposers may elect to acquire the specified compute capability using one of the

following approaches:

- Proposers may propose the use of Government Furnished Equipment (GFE) in the form of compute capacity. DTRA will then acquire said capacity from either DISA or a FedRAMP-Authorized service provider with a DoD Provisional Authorization for the Information Impact Level appropriate to the data being processed, and provide access to that capacity to the proposer. Access to GFE cloud capability will include government provided roles/accounts within the provisioned space along with appropriate credentials. Increases in the access bandwidth or installation requirements for direct connections to the provisioned cloud service provider shall be the responsibility of the proposers. Should the proposer propose the use of GFE, the proposal shall clearly identify the requirement using publicly available commercial cloud cost calculators. In addition, the proposal shall identify the anticipated Impact Level of the data and provide a narrative detailing why that Impact Level is appropriate.
- The proposer may propose to either furnish existing compute capacity, either directly or through a Cloud Service Provider that is a FedRAMP-Authorized service provider with a DoD Provisional Authorization for the Information Impact Level appropriate to the data being processed. In doing so, the proposer would invoice the government for cost of capacity IAW the proposer's approved accounting procedures and practices. Data center assets owned or purchased by the proposer shall remain the property of the proposer and impose no ownership liabilities to the government. The proposal shall clearly identify the anticipated Impact Level of the data and provide a narrative detailing why that Impact Level is appropriate. Details regarding Impact Level characterization can be found in the Department of Defense Cloud Computing Security Requirements Guide.

4.8.2.3.14 Software/Cyber Security Guidance

Software development efforts must identify Source code as a contract deliverable and require the performer to employ standard coding best practices, including the avoidance of proprietary techniques, algorithms, or code. The performer must ensure configurations and installations are designed to meet the Cybersecurity requirements set forth in DoDI 8500.1. Cybersecurity implementations must be certified in accordance with DoDI 8510.01. Performer must provide developers with security clearances commensurate with the security environment / network the work is to be done on in accordance with DoD 8570.01-M. SISO review and acceptance of the documented source code analysis findings will however, be required prior to

installation of any software deliverable on any DTRA operational network, integration with any operational system, or to support a Certificate of Networthiness issued by DTRA.

4.8.2.3.15 Covered Defense Information – National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171 Assessment

Reference DFARS 252.204-7008 and DFARS 252.204-7019. The supplemental volume shall detail whether or not performance of the proposed effort will involve covered defense information, and whether or not an assessment has been completed and posted in the Supplier Performance Risk System (SPRS). Covered defense information is defined as unclassified controlled technical information or other information, as described in the Controlled Unclassified Information (CUI) Registry at http://www.archives.gov/cui/registry/categorylist.html, that requires safeguarding or dissemination controls pursuant to and consistent with law, regulations, and Governmentwide policies, and is (1) Marked or otherwise identified in the contract, task order, or delivery order and provided to the contractor by or on behalf of DoD in support of the performance of the contract; or (2) Collected, developed, received, transmitted, used, or stored by or on behalf of the contractor in support of the performance of the contract. In accordance with DFARS 252.204-7019, when covered defense information applies, offerors must address assessment requirements in order to be considered for award. Note that the final determination regarding covered defense information will be made by the Government.

4.8.2.3.16 Statement of Current and Pending Support

Proposers must include a statement of current and pending support of all related work that is currently receiving or may potentially receive financial support. This information must be included for each key person listed in the proposal and include the following items:

- A list of all current projects the individual is working on, in addition to any future support the individual has applied to receive, regardless of the source.
- Title and objectives of the other research projects.
- Period of performance for the other research projects.
- The total amount of support the individual is receiving in connection to each of the other research projects or will receive if other proposals are awarded.
- The percentage per year to be devoted to the other projects.

 Name and address of the agencies and/or other parties supporting the other research projects.

Proposers must complete the 'Current and Pending Project Support' templates provided within ATTACHMENT 4, as applicable. Should additional templates be required, please attach additional forms or provide the required information within the continuation spaces provided.

5.0 Proposal Evaluation Information

5.1 General Evaluation Information

Evaluation of proposals will be conducted based upon a either a one, or two-phase, technical subject matter expert review as described in FAR subparts 6.102(d)(2) and 35.016. Each proposal will be evaluated based on the merit and relevance of the specific proposal as it relates to the DTRA program rather than against other proposals for research submitted in response to the BAA. All documents necessary for the review and evaluation of the proposal submissions must be provided as described in Section 4.8 of this BAA.

The criteria by which submissions subject to the two-phase approach will be evaluated and selected for each phase are outlined below. The criteria by which submissions subject to the one-phase approach will be evaluated and selected will be detailed within the specific topic release. A one-phase approach is a streamlined method that will merge elements from Phase I and Phase II into a single approach, and is not a significant deviation from the two-phase process.

5.2 Evaluation Criteria and Adjectival Ratings

The Government will evaluate proposals using the adjectival ratings below. Proposers are advised that a strength is an aspect of a proposal that exceeds specified performance or a capability requirement in a way that will be advantageous to the Government during contract performance. A weakness means a flaw in the proposal that increases the risk of unsuccessful contract performance. A deficiency is a material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

Rating	Description
Outstanding (0)	The proposal is a technically exceptional submission that is pertinent to program goals and objectives. The proposal contains multiple strengths that will provide significant benefit to the Government, and that far outweigh any weaknesses. The risk of unsuccessful performance is low.
Good (G)	The proposal is a technically thorough submission that is pertinent to program goals and objectives. The proposal contains at least one strength that will provide benefit to the Government, and that outweighs any weaknesses. The risk of unsuccessful performance is low to moderate.
Acceptable (A)	The proposal is a technically adequate submission that is pertinent to program goals and objectives. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. The risk of unsuccessful performance is no worse than moderate.
Marginal (M)	The proposal is a technically weak submission that is pertinent to program goals and objectives. The proposal has one or more weaknesses which are not offset by strengths. The risk of unsuccessful performance is high.
Unacceptable (U)	The proposal does not meet requirements, or is not pertinent to program goals and objectives and contains one or more deficiencies. The proposal is unawardable.

5.2.1 Evaluation of Proposals

5.2.1.1 Phase I Proposal

The evaluation of Phase I proposals will be based on the two criteria listed below. Each factor will be assigned one of the following adjectival ratings: Outstanding (O), Good (G), Acceptable (A), Marginal (M) or Unacceptable (U). Any factor scored as "Unacceptable (U)" will render the proposer's proposal "Unawardable," and the proposal will not be considered further.

Phase I evaluation criteria to be used to evaluate and select Quad Charts/White Papers are listed below in order of decreasing importance.

5.2.1.1.1 Criterion 1 – Scientific and Technical Merit

The objective of this criterion is to assess the extent to which:

- The proposer has proposed an innovative technical approach based on sound scientific principle,
- the proposed technology is unique, high payoff, and represents improvement over current chemical and biological technology capability,

- the proposed technology aligns with current DoD CBDP priorities, and
- the proposer demonstrates an understanding of critical technical issues and risks.

5.2.1.1.2 Criterion 2 – Capability to Perform

The objective of this criterion is to assess the extent to which:

- the proposer has demonstrated an understanding of the capabilities and resources required to successfully execute the proposed project, and
- the proposer has demonstrated the ability to acquire these required capabilities and resources.

5.2.1.2 Phase II Proposal

The evaluation of Phase II proposals will be based on the two criteria listed below. Each factor will be assigned one of the following adjectival ratings: Outstanding (O), Good (G), Acceptable (A), Marginal (M) or Unacceptable (U). Any factor scored as "Unacceptable (U)" will render the proposer's proposal "Unawardable," and the proposal will not be considered further.

Phase II evaluation criteria to be used to evaluate and select full proposals are listed below in order of decreasing importance. Additionally, pursuant to FAR 35.016(e), funding availability shall be a consideration during the evaluation.

5.2.1.2.1 Criterion 1 – Scientific and Technical Merit

The objective of this criterion is to assess the extent to which:

- The proposer has proposed an innovative, comprehensive and sound technical approach based on sound scientific principle,
- the proposed technology is unique, high payoff, and represents improvement over current chemical and biological technology capability,
- the proposed technology aligns with current DoD CBDP priorities, and
- the proposer demonstrates an understanding of critical technical issues and risks and has developed a plan for mitigating those risks.

The objective of this criterion is to assess the extent to which:

- the proposer has proposed a sound project management plan,
- the proposer's team has the requisite expertise and skills necessary to perform the proposed project, and
- the proposer's team possesses the requisite facilities and equipment necessary to perform the proposed project.

This includes an assessment of the team's management construct, key personnel, facilities and past technical experience in conducting similar efforts of the proposed scope. Proposers must demonstrate that their team has the necessary background and experience to perform this project. Facilities must be detailed with discussion of any unique capabilities pertinent to the research. Subcontractors may include Government facilities or agencies; however, the unique expertise or specialized facilities provided through their inclusion must be clearly presented.

5.3 Technical/Administrative Support by Non-Government Personnel

It is the intent of DTRA to use non-government personnel (e.g. contractor support personnel) in the review and administration of all submittals for this BAA. Participation in the BAA requires DTRA A&AS support contractor employees, contracted contract specialist support and proposal submission website support to have access to proposal information including information that may be considered proprietary. The contracts for provision of support personnel contain Organizational Conflict of Interest provisions and include contractual requirements for non-disclosure of proprietary contractor information. Additionally, employees in a role as an A&AS support contractor to DTRA will provide technical input in an advisory role as subject matter experts (SMEs) to the Government reviewers in addition to providing administrative support in the management of the proposals and their technical review.

Proposals, in some instances, may require other non-government personnel from Academia to serve as peer reviewers with access to proposal information, including information that may be considered proprietary. All individuals in these categories having access to any proprietary data shall execute nondisclosure agreements certifying that they do not have conflicts of interest and will not disclose any information pertaining to this solicitation including any proposal submittals, the identity of any submitters, or any other information relative to the proposer's proposal, and will use the information for evaluation purposes only.

All proposers to this BAA consent to the disclosure of their information to the aforementioned non-government personnel under these conditions. Any proposer may request a list of the specific companies providing support for the review and administration of the BAA submittals by submitting a request to the email address provided in Section 8.1.

6.0 Selection Decision Information

6.1 Basis for Selection Decision

Selection decisions will be based on an assessment of overall benefit to the Government, with appropriate consideration given to the evaluation factors, order of importance and selection preferences. Other factors that may be considered include duplication with other research, program balance across research topics, and budget limitations. The Government may also evaluate the impact of any asserted data/software restrictions or patents during the selection and/or negotiation process, and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. Proposals may be selected for funding which are not rated as highly as others and which may be of higher risk and higher cost. Multiple awards are anticipated.

The Government reserves the right to:

- > select for negotiation all, some, one, or none of the proposals;
- segregate portions of awards into pre-priced options;
- fund proposals in increments and/or with options for continued work at the end of one or more phases;
- > request additional information once the award instrument has been determined or during the course of negotiations; and
- remove proposers from award consideration should the parties fail to reach an agreement on award terms within a reasonable time or the proposer fails to provide requested additional information in a timely manner, defined as meeting government deadlines established and communicated with the request.

6.2 Notification to Proposers

Selection and non-selection notifications will be sent via e-mail to proposers - specifically, the registered BPOC and the designated PI as entered on the proposal cover page on the DTRA proposal submission website.

6.3 Debriefing

The Government will provide written debriefings to proposers if a request is submitted and received within three working days of an emailed non-selection notification. However, debriefings will not be provided for Phase I proposal submissions.

6.4 Reserve List of Selected Proposals Subject to Availability of Funds

The Government reserves the right to create and maintain a reserve list of proposals for potential funding, in the event that sufficient funding becomes available. The reserve list will remain active and available for funding for up to 18-months after the date of selection. All awards are subject to the availability of funds.

7.0 Post-Selection Activities

7.1 Request for Additional Information

Should a proposer be selected for tentative award, they will be contacted by the DTRA contracting office and provided instructions regarding the finalization of the SOW and/or any additional supplemental documentation/information required.

7.2 Negotiations

When the selected award instrument type is a contract, any negotiations and/or awards will use the procedures under FAR 15.4. Selected proposals will be subject to negotiations, which will include cost and price and may include technical scope. The Procuring Contracting Officer (PCO) will have the ultimate authority and responsibility to make final scope determinations for selections of proposals that will not be totally funded to ensure the portion selected meets the solicited requirements and does not represent a substantial change to the original scope

of work proposed.

7.3 Responsibility Determination

The PCO shall make a final determination on selectees' responsibility and responsiveness to BAA terms and conditions. Any of these determinations may render an impending proposal or selectee ineligible for contract award.

8.0 BAA Contact Information

8.1 Questions about this BAA

Questions regarding the technical and administrative content of this BAA must be sent to the following DTRA e-mail address: dtra.belvoir.rd.mbx.rd-cb-baa@mail.mil

Questions and/or inquiries that are not submitted to the aforementioned e-mail address will be disregarded. All questions must include the BAA number (HDTRA122S0002) in the subject line. Questions and Answers (Q&A) pertaining to this BAA will remain open for as long as the BAA is open. It is the proposer's responsibility to periodically check the Contract Opportunities website to view postings of questions and answers, in addition to any

applicable amendments and/or additional topics released for the BAA.

9.0 List of Attachments

ATTACHMENT 1: Technology Readiness Level (TRL) Definitions

ATTACHMENT 2: Statement of Work Format and Preparation Instructions

ATTACHMENT 3: Data Rights Assertions List

ATTACHMENT 4: Supplemental Volume Cover Sheet

ATTACHMENT 5: Cost Proposal Template

ATTACHMENT 6: Reps and Certs

ATTACHMENT 7: SF1408