DEFENSE THREAT REDUCTION AGENCY

BROAD AGENCY ANNOUNCEMENT

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Amendment 1

RESEARCH AND DEVELOPMENT INNOVATIONS

(Multiyear solicitation – 2022-2026)

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1.0 General Information

1.1 Broad Agency Announcement Introduction

This publication constitutes a Broad Agency Announcement (BAA) as described in Federal Acquisition Regulation (FAR) Part 35.016, FAR 6.102(d)(2), and DFARS 235.016. This BAA is a competitive solicitation of proposals focused on research and development of technologies to meet the mission of the Defense Threat Reduction Agency (DTRA). Formal Requests for Proposal regarding this announcement will not be issued.

1.2 BAA Open Period

This BAA is in effect from February 2022 (starting with date of posting) through February 2027. Proposal calls are anticipated to be released on an annual basis but could be more or less frequent based on needs. Proposal calls will be released via amendment modifications on the SAM website (https://sam.gov). **Offerors will be responsible to be aware of these proposal calls.** Submission information is provided in Section 3.3 of this BAA and estimated timelines are listed in Attachment 6.

1.3 Research Opportunity Description

DTRA enables the Department of Defense (DoD), U.S. Government, and international partners to counter and deter weapons of mass destruction (WMD) and emerging threats.

With this BAA, DTRA is soliciting innovative proposals for technologies in the technology readiness level (TRL) 1-7 range that will lead to new or improved technical solutions for countering and deterring WMD and other emerging threats. Guidance in the *2022 DTRA Strategy for Research, Development, Test, and Evaluation* describes emerging threats as "new or developing WMD materials or intent, including the hazard itself and/or its science, technology, methodology, development, production, proliferation, and means of delivery." For WMD, the development of materials or methodologies with the potential to create new, or increase the impact of existing forms of traditional WMD can be considered "emerging threats." A novel pathogen, a new means to deliver chemical or biological weapons, or the use of traditional WMD material in new or previously unknown ways, for instance, can all be seen in this light.

In executing the ***2022 DTRA Strategy for Research, Development, Test, and Evaluation***, DTRA seeks proposals that will advance research, development, test, and evaluation (RDT&E) priorities across five interrelated thrust areas:

- Understand current and emerging WMD situations, threats, and capabilities
- Enable effective and integrated WMD deterrence
- Control, disable, and defeat current and emerging WMD threats
- Protect the force and mitigate crises from WMD
- Enable cross-cutting capabilities

In order to **understand current and emerging WMD situations, threats, and capabilities** DTRA-sponsored RDT&E will focus on:

- Enhance and expand abilities to locate, identify, characterize, assess, and track: chemical, biological, radiological, and nuclear (CBRN) threats; subterranean facilities; and, emerging WMD threats.
- Enhance warfighter abilities to capture, catalogue, link, and illuminate nefarious WMD activities in a rapid manner using signatures through a wide range of scientific and technical exploitation disciplines that improve sensitivity, accuracy, and timeliness.
- Improve functional CWMD data query and analysis approaches across all domains and with mission partners to rapidly translate decisions into action that achieve operational and information advantage in competition, crises, and conflict.
- Improve nuclear and radiological hazard assessment techniques, methodologies, and analytic tools including the use of high-confidence modeling.
- Develop technologies for the direct and indirect detection of radiation and non-radiative signatures associated with nuclear threats, including non-technical threat enablers, to advance warfighter capabilities for rapidly locating, characterizing, and countering such threats.
- Develop and apply forecasting methodologies to anticipate future mid- to long-term emerging and disruptive threats, and other exploitable CWMD technologies.
- Improve understanding of the geopolitical strategic environment and its implications for the emerging and future WMD threat landscape.
- Support the Office of the Secretary of Defense's (OSD) Deputy Assistant Secretary (DASD) for Chemical and Biological Defense strategic S&T goals for chemical and biological defense programs. These goals broadly include integrated early warning, integrated layered defense, and preparing for surprise.

In order to **enable effective and integrated WMD deterrence**, DTRA-sponsored RDT&E will focus on:

- Modernize early warning, monitoring, and verification capabilities to ensure readiness and mission effectiveness for warfighters under an integrated deterrence paradigm.
- Develop and innovate technologies and concepts of operation that enable the survivability of U.S. strategic weapons and their cascading systems, as well as hold adversary underground facilities and covert programs at risk.
- Support DoD and Joint Force wargaming and analysis to explore options and courses of action for integrated deterrence impact on current and emerging WMD threats. Resulting outcomes are expected to reduce strategic risks and minimize miscalculations that could lead to unintended crisis or conflict escalation.
- Expand international project agreements with allies to determine mutual benefit in denial and dissuasion capabilities that usher in novel approaches to deter and monitor current and emerging WMD capable adversaries.
- Test and improve unattended perimeter monitoring technologies in dynamic environmental conditions to enhance integrated and automated system performance.

- Support Agency non-traditional planning and solution development across emerging WMD challenges. Plans and solutions should include preventing further WMD employment following adversary first use.

In order to **control, disable, and defeat current and emerging WMD threats**, DTRA-sponsored RDT&E will focus on:

- Develop and improve direct or indirect physical or functional defeat of underground facilities and WMD threats, as well as capabilities that render adversary WMD programs and systems inoperable, harmless, or nonexistent prior to use.
- Innovate applications, concepts, and capabilities that can interrupt adversary acquisition of weapon-related materials and expertise, or that defeat adversary physical and non-physical threats.
- Develop operationally-suitable, field-deployable solutions that mitigate risks to warfighters by improving stand-off surveillance, exploitation, defeat, and disablement capabilities.
- Develop and innovate technologies and concepts of operation that enable the Joint Force to fight, prevail, and win in battlefield WMD environments.
- Improve technologies and concepts directed at eliminating WMD and emerging threats in permissive and non-permissive environments.

In order to **protect the force and mitigate WMD crises**, DTRA-sponsored RDT&E will focus on:

- Protect mounted and dismounted forces, reduce casualties, and degrade adversary abilities to disrupt operations using chemical, biological, nuclear, and novel threat attacks.
- Develop state-of-the-art expeditionary biological, chemical, and radiological surveillance and exposure detection capabilities, medical diagnostic capabilities, and remote sensing and rapid field-identification capabilities for hazards, pathogens, and toxins including non-traditional agents.
- Develop survivability standards, hardening technologies, and experimental test capabilities that will enable critical DoD systems to accomplish missions in a nuclear weapons effects environment, so that essential functions can continue or be resumed after the onset of hostile action.
- Improve and harden conventional force capabilities so that they can survive, fight, and win on a nuclear battlefield.
- Develop medical countermeasures, pretreatments, prophylaxes, vaccines, and therapeutics to protect against and expedite response to a broad range of known and emerging chemical and biological toxins, pathogens, and threat agents.
- Reduce size and weight, and increase the performance of contamination mitigation capabilities for personnel, material, and sensitive equipment, including enhanced casualty and mortuary affairs decontamination.
- Enhance real-time worldwide health disease monitoring, surveillance systems and data-driven diagnostics for advanced early warning, disease prediction, forecasting, assessing, and monitoring of biological threats.

In order to **enable cross-cutting capabilities**, DTRA-sponsored RDT&E will focus on:

- Integrate capabilities that support 24/7 requests for information, situational awareness, hazard prediction, and strategic to tactical decision-making.
- Model system vulnerabilities and the effects of WMD warfare on U.S. and ally networks and infrastructure, as well as the compounding and cascading consequences across dependent networks with complex post-attack / detonation timelines.
- Improve test instrumentation capability and capacity for CWMD test data capture, integration, and curation.
- Enhance intuitive artificial intelligence and machine learning capabilities that augment warfighter and U.S. ally situational awareness and increase speed to decision regarding CWMD operations.
- Establish and scale a software development environment that is agile, tailorable, and consistent to meet software development life cycle needs.
- Conceptualize future WMD threats, conduct experiments on conceptual WMD threat operations, and assess and collaborate on the best emerging CWMD technologies worldwide to drive new CWMD solutions.
- Provide computational resources that enable numerical modeling and simulation support by accessing the DoD high performance computing modernization program.
- Develop and integrate technology designed around real-world opportunities and constraints to assist CWMD operational tactics, techniques, and procedures.
- Integrate end-to-end processes and stakeholder relationships to understand requirements and transition CWMD capabilities.
- Innovate and discover novel hypotheses within the sciences to reduce WMD threats and grow the next-generation scientific workforce to lead the future in combating the most catastrophic CBRN weapons.
- Provide strategic research in cooperation with leading non-government experts and practitioners on emerging and future WMD threats and implications for the Joint Force.

This BAA is limited to projects that meet TRL definitions in the TRL range 1–7. Upon completion of proposed developmental efforts, solutions should strive to meet a TRL in the range 3–7. Proposals that address technologies at TRL 4 or greater should also be aware of the Manufacturing Readiness Level (MRL) considerations. Solutions may focus on end-item prototypes or enabling technologies.

DTRA's awarding period for this BAA began efforts in Fiscal Year 2022 (FY22), with periods of performance in the range of 1–3 years. Exceptions, not to exceed five years, may be considered for projects that merit extensive test and evaluation. Proposals should be structured with a short base period (~6 months) followed by option periods (6-12 months) to provide timely decision points for down-selection of promising technologies. DTRA expects to fund individual contracts in the range $500,000–$5,000,000 over the full period of performance, yet these numbers should not be considered strict limits. DTRA will only accept proposals in the higher end of this funding range if they demonstrate the ability to deliver effective, innovative technologies directly to the warfighter.

1.4 BAA Process

This BAA will use a two-phased proposal process, consisting of the submission and evaluation of:

- Phase I: quad chart with white paper
- Phase II: full proposals

While all interested parties may submit Phase I proposals, submission of Phase II proposals will be by invitation only.

DTRA will communicate the evaluation status of submission after each phase. Offerors invited to submit a proposal at Phase II will be notified whether or not they have been selected for award pending successful contract negotiations.

As explained in Section 3.3.1, all submissions must be dated and unclassified. An exception is allowed in circumstances where the separate submission of classified information is necessary to convey a full description of the proposed work. In such cases, relevant classified information may be submitted in the form of a classified annex as described in Section 3.4.3.1.1 using the email address provided in Section 1.6.

The BAA process includes enhanced opportunities for communications between Government and industry as described in Section 3.2.3.

1.5 Award Vehicle

The full range of flexible, statutory, acquisition authorities available to DTRA are possible outcomes of this announcement, including but not limited to, contracts, task orders, and other transaction agreements (OTA). **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 Offerors and the Government. Except for OTAs, the Government actions under this BAA shall adhere to the requirements of the FAR and Defense Federal Acquisition Regulation Supplement (DFARS).

1.5.1 Contract Type

The Government intends to award Cost and Cost-Plus-Fixed-Fee (CPFF) contracts and, when in the Government's best interest, Fixed-Price contracts. Research and development contracts are typically Cost-Reimbursement contracts (Cost, CPFF). In accordance with FAR 16.301-3(a)(3), Cost-Reimbursement contracts require that the contractor'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, may preclude the Offeror from receiving a contract.** The Government will typically rely on the findings of a Defense Contract Audit Agency (DCAA) accounting system audit in making a determination of accounting system adequacy.

1.5.2 Limitation on OTAs

Offerors are advised that an OTA may only be awarded if there is:

a. At least one nontraditional defense contractor participating to a significant extent in the prototype project; or

b. 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 institutions; or

c. 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 cost share should generally consist of labor, materials, equipment, and facilities costs (including allocable indirect costs); or

d. 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 FAR/DFARS based 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.

Although use of one of these options is required to use an OTA as the procurement vehicle, no single option is encouraged or desired over the others.

In accordance with 10 U.S.C. § 4003(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.

NOTE: For purposes of determining whether or not a participant may be classified as a nontraditional defense contractor 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 this solicitation, any contract or subcontract for the Department of Defense that is subject to full coverage under the cost accounting standards prescribed pursuant to 41 U.S.C. 1502 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" means, but is not limited to, the following: the nontraditional defense contractor/nonprofit research

institution/small business is supplying a new key technology or product; is supplying a novel application or approach to an existing technology, product or process; is providing a material increase in the performance, efficiency, quality or versatility of a key technology, product or process; is accomplishing a significant amount of the prototype project; is accomplishing a significant amount of the effort wherein the role played is more than a nominal or token role in the research effort, or in some other way plays a significant part in causing a material reduction in the cost or schedule of the effort or an increase in performance of the prototype in question.

NOTE: Offerors are cautioned that if they propose the use of an OTA, the Government reserves the right to negotiate either a FAR based procurement contract, or OTA as it deems is warranted under the circumstances.

1.5.3 Contract Period of Performance Limitation

DTRA began funding successful efforts in Fiscal Year 2022 (FY22) with periods of performance in the range of 1–3 years. Exceptions may be considered for projects that merit extensive test and evaluation. In accordance with FAR 17.204(e), contract periods of performance shall be limited to a maximum of 5 years, inclusive of all Options.

1.6 Points of Contact

E-mail address for all BAA correspondence and questions	dtra.belvoir.rd.mbx.rd-baa-inbox@mail.mil
SIPR E-mail address for all classified annex submissions up to SECRET//NOFORN	dtra.belvoir.rd.mbx.rd-baa-inbox@mail.smil.mil
BAA Announcements posted in .SAM	https://sam.gov
DTRA Proposal Submission Website (requires registration prior to proposal submission)	https://www.dtrasubmission.net
DTRA Website	https://www.dtra.mil

1.7 Technical and Administrative Support by Non-Government Personnel

DTRA intends to use non-government personnel (contractor support) in the review and administration of all submissions (Phase I and II) for this BAA. Participation in the BAA requires DTRA Advisory and Assistance Services (A&AS) and Systems Engineering and Integration (SE&I) support contractor employees, contract specialists, and proposal submission website support personnel to have access to proposal information including information that may be considered proprietary. A&AS and SE&I support contractors

provide technical input to the Government in an advisory role as subject matter experts and provide administrative support in the management of the proposals and their technical review. DTRA support contracts contain organizational conflict of interest provisions and include contractual requirements for the non-disclosure of proprietary contractor information.

Phase I and II proposals may be reviewed by additional subject matter experts (peer reviewers) from other Government agencies such as the National Nuclear Security Administration (NNSA) and the Department of Homeland Security (DHS), some of whom may be non-government personnel. All individuals in this category with access to proprietary data shall execute nondisclosure agreements certifying that no conflict of interest exists between the individual and the Offeror and any proposed subcontractor and that they will not disclose any information pertaining to this BAA including any submittal, the identity of any Offerors, or any other information relative to specific proposals, and will use the information for evaluation purposes only.

All Offerors to this BAA consent to the disclosure of their information to the aforementioned companies, their subcontractors, and external Government agencies under these conditions.

2.0 Eligibility

Except as specified below, this BAA is open to all responsible sources capable of responding to the Government's requirements.

2.1 Eligible Sources

Proposals submitted for 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 Federally Funded Research and Development Centers (FFRDCs) specified in DFARS 235.017-1.
- University Affiliated Research Centers (UARCs), provided that it is permitted by the UARC's DoD sponsor.
- Department of Energy (DOE) sponsored FFRDCs and National Aeronautics and Space Administration (NASA) sponsored FFRDCs, provided that authorization is obtained from the DOE or NASA sponsor.

2.2 Non-Eligible Sources

The following entities may not participate as prime contractors nor furnish principal investigators in awards made under this BAA, 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).

3.0 Instructions to Offerors

To assure timely and equitable evaluation of proposals, Offerors must follow the instructions contained herein. Offerors 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 may result in an offer being ineligible for award. Additionally, Offerors must clearly identify any exception to the solicitation terms and conditions and provide complete accompanying rationale. It is the Offeror'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 an Offeror 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 Offeror shall assume that the Government has no prior knowledge of the Offeror's capabilities.

3.1 Administrative Requirements

3.1.1 Registration to the DTRA Proposal Submission Website

All Offerors are required to register at the DTRA proposal submission website (see link in Section 1.6) prior to submission of Phase I proposals. Detailed registration and submission instructions are available at the site.

The registration must be submitted by a central Business Point of Contact (BPOC) rather than individual Principal Investigator personnel. A BPOC is the person given the responsibility for coordinating all submissions from individual Principal Investigators 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 them ineligible for this BAA.

Offerors must be aware that it is their responsibility to ensure that email 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 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 and the designated Principal Investigator.

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

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

3.1.2 Registration to the System for Award Management (SAM) Website

DTRA requires that all Offerors be registered in the SAM database at the time of Phase I proposal submission. Contractors must keep their registration current for the life of the contract. Offerors may register with SAM online at https://sam.gov. Offerors will NOT be able to complete their SAM registration until SAM has confirmed the Offeror's Employer Identification Number (EIN) or Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS).

NOTE: It will take 24-48 hours for the IRS to validate the TIN. According to the IRS, if Offerors do not currently have an EIN and need to apply for one over the phone or Internet, they will be given a tentative EIN, but the EIN may not become active for up to two weeks. Questions regarding an EIN may be directed to 1-800-829-4933.

3.2 Communications

3.2.1 Questions about this BAA

Send questions regarding the technical and administrative content of this BAA to: dtra.belvoir.rd.mbx.rd-baa-inbox@mail.mil. The response timeline is listed in Attachment 6. Questions submitted to other e-mail addresses will be disregarded. All questions must include the BAA number in the subject line. DTRA will post answers to questions on the SAM website. It is the Offeror's responsibility to check the SAM website periodically to view postings of questions and answers, in addition to any applicable amendments to the BAA.

3.2.2 Communication Guidelines Prior to Receipt of Phase I Proposal

DTRA supports technical dialogue between DTRA Technical Subject Matter Experts (SMEs) and proposers after release of this BAA Topic Call and prior to receipt of the Phase I proposals. All technical inquiries shall be submitted to the BAA e-mail box (refer to Section 3.2.1). Attempts to contact DTRA Technical SMEs through methods other than the BAA e-mail box will be disregarded. Following submission of questions to the BAA e-mail box, technical dialogue may occur by e-mail or phone. General guidelines for dialogue between the DTRA Technical SMEs and proposers prior to receipt of a proposal include the following:

- DTRA Technical SMEs will not be obligated by any discussion with a potential proposer. Communications between the DTRA Technical SMEs and potential proposer shall not constitute a commitment by the Government to subsequently fund or award any proposed effort.
- DTRA Technical SMEs cannot attempt to replace the potential Offeror's original ideas with their own ideas.

- DTRA Technical SMEs cannot share ideas, technical solutions or proprietary information provided to them by another potential Offeror.
- If DTRA Technical SMEs provide information concerning the objectives/goals/requirements of the BAA to one proposer, they must provide this information to all proposers. Similarly, information provided to an Offeror that expands on information contained in the published solicitation or is otherwise publically available must be made publically available to all potential Offerors. Answers to questions concerning objectives, goals, or requirements of this BAA Call will be shared with all Offerors and posted to the SAM website.

3.2.3 Communication Guidelines after Receipt of Phase I or Phase II Proposal

The Government reserves the right to engage in communications with Offerors during the course of evaluations regarding proposer's Phase I Quad Charts and White Papers, or after the receipt of a Phase II invited proposal, prior to selection for the purpose of enhancing the Government's understanding of research proposals and facilitating the evaluation process. These communications will not constitute communications or discussions within the meaning of FAR Part 15. These communications may be executed as best determined by the Government and Offeror, e.g., via email, teleconference, or in person. Depending on the Offeror's clearance level, the communications may extend above the unclassified level. Information obtained through these communications may be considered in rating proposals.

The primary focus of these communications is to address any proposal ambiguity that may preclude the evaluation of the merits of a quad chart, white paper or full proposal. The purpose of the communication is to seek clarifications and discuss technical aspects of the proposed effort to enhance the Government's understanding and facilitate the evaluation process. Accordingly, the Government's decision to engage in communications with a proposer will be on a case-by-case basis, as needed to facilitate the evaluation process..

3.3 Proposal Submission Instructions

3.3.1 General Instructions

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

Offerors will be notified on their Phase I and Phase II proposals by the timeline specified in Attachment 6. The Offeror should verify the submission of their proposal package by printing the electronic receipt (time and date stamped) that appears on the final screen following compliant submission of a proposal to the DTRA proposal submission website.

Using the DTRA proposal submission website, all Offerors must prepare Proposal Cover Sheets for each Phase I and Phase II proposal submitted. All required data must be completed in every cover sheet. Once the Offeror saves the cover sheet, the system will

assign a unique proposal number for each Phase I submission and a different unique proposal number for each invited Phase II submission. The Offeror may edit cover sheets as often as necessary until the submission period closes.

All submissions to the DTRA proposal submission website must be dated and **unclassified**. In circumstances where the separate submission of classified information is necessary, relevant classified information may be submitted in the form of a classified annex as described in Section 3.4.3.1.1.

Offerors submitting multiple proposals must prepare separate cover sheets for each proposal and upload the full proposal files 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 Offeror submits the final proposal package for consideration. Once the Offeror has uploaded all proposal files and is ready to submit their application, the Offeror selects 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.

3.3.2 Withdrawal of Proposals

Offerors are responsible for obtaining access to the DTRA proposal submission website and for submitting electronic proposals to the website. When sending electronic files, the Offeror will account for potential delays in file transfer from the originator's computer server to the Government website/computer server. Offerors 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.

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 1.6.

3.4 Proposal Format Requirements

3.4.1 Submission File Format

Offerors shall submit each required proposal volume as a separate Portable Document File (PDF) compatible with Adobe Acrobat ® version 11.0.0 or earlier. Additionally, each Phase I proposal shall contain a Quad Chart provided in Microsoft (MS) PowerPoint .PPTX format and a White Paper provided in MS Word .DOCX format, and each Phase II proposal shall also contain a Statement of Work (SOW) provided in MS Word .DOCX format and a Cost Spreadsheet provided in MS Excel .XLSX format. Additional specific format requirements are provided below. Files with extensions .DOC, .XLS and .PPT will not be accepted.

File size must not exceed 10 MB. Movie and sound file attachments, or other additional files, will not be accepted. The proposal files must not be encrypted.

3.4.2 Phase I Proposal

Offerors must submit Phase I proposals in accordance with instructions provided in this section of the BAA; failure to do so may preclude consideration of the Phase I proposal. Additionally, Offerors are required to complete a cover sheet using the DTRA proposal submission website. All Phase I proposals shall consist of a Quad Chart and White Paper conforming to the following format requirements:

3.4.2.1 Quad Chart

- Paper size: 8.5 x 11 inches, Landscape orientation
- Font: Arial, 28 point bold for Header, 10 point for body
- Page Limit: No more than one (1) page. Pages in excess of the page limitation will not be read or evaluated.
- Format: MS PowerPoint
- Classification: Unclassified
- Restrictive Markings: The Quad Chart must not contain information deemed trade secret, confidential or proprietary by the Offeror.

3.4.2.2 White Paper

- Paper size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Font: Times New Roman, not smaller than 12 point
- Page Limit: No more than ten (10) pages. Pages in excess of the page limitation will not be read or evaluated.
- Classification: Unclassified
- Restrictive Markings: White Papers containing proprietary information shall contain the restrictive markings indicated in Section 3.4.4.

3.4.3 Phase II Proposal

Offerors invited to submit a Phase II proposal must follow the instructions provided in this section of the BAA; failure to do so may preclude consideration of the proposal for award. All Phase II proposals shall consist of a Technical Volume, Cost Volume, and Supplement Information Volume conforming to the following format requirements:

3.4.3.1 Technical Volume

The Technical Volume shall consist of the Offeror's Technical Proposal, Technical Approach, Basis of Estimate (BOE), and SOW conforming to the following format requirements:

3.4.3.1.1 Technical Proposal

- Paper size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Font: Times New Roman, not smaller than 12 point
- Page Limit: No more than twenty-five (25) pages (total includes classified annex, if applicable). 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 3.4.4.
- Classified Annexes, if applicable:
  - Limited to two pages or less
  - Must follow the same formatting requirements as the Technical Proposal
  - Counts toward total Technical Proposal page limit of 25 pages
  - Shall be referenced in the unclassified proposal, as applicable
  - All markings shall be in accordance with DoDM 5200.01 DoD Manuals (whs.mil)
  - Annexes shall not be higher than SECRET//NOFORN and contain no other caveats
  - Annexes must be referenced to the Phase II proposal using the proposal number in both the document and email subject line
  - Annexes MUST be received no later than the Phase II submission deadline

3.4.3.1.2 Technical Approach and BOE

- Paper size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Font: Times New Roman, not smaller than 12 point
- Page Limit: None
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 3.4.4.

3.4.3.1.3 Statement of Work

- Paper size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Font: Times New Roman, not smaller than 12 point
- Page Limit: None; typically 3-5 pages
- Classification: Unclassified
- Restrictive Markings: The SOW must not contain information deemed trade secret, confidential or proprietary by the Offeror nor Contractor-specific

references such as headers and footers with company name and/or logo. See Attachment 2 for more information.

3.4.3.2 Cost Volume

The Cost Volume shall consist of the Offeror's Cost Narrative / Supporting Documentation, Cost Spreadsheets, which shall conform to the following format requirements:

3.4.3.2.1 Cost Narrative / Supporting Documentation

- Paper size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Font: Times New Roman, not smaller than 12 point
- Page Limit: None
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 3.4.4.

3.4.3.2.2 Cost Spreadsheets

- File Format: MS Excel
- Format: In accordance with Attachment 4
- Formulas: All formulas shall be preserved.
- Page Limit: None
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 3.4.4.

3.4.3.3 Supplemental Information Volume

The Supplemental Information Volume shall conform to the following format requirements:

- Paper size: 8.5 x 11 inches
- Spacing: Single-spaced
- Margins: One-inch
- Font: Times New Roman, not smaller than 12 point
- Page Limit: None
- Classification: Unclassified
- Restrictive Markings: Documents containing proprietary information shall contain the restrictive markings reflected in Section 3.4.4

3.4.4 Restrictive Markings and Disclosure of Proprietary Information

The White Paper portion of the Phase I submission and all Phase II volumes submitted in response to this solicitation (with the exception of the SOW) may contain technical information and other data that the Offeror 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 an Offeror, 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 White Paper/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 Offeror 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 White Paper/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 White Paper/proposal data on lines identified by an asterisk (*) are subject to the restriction on the front page of this White Paper/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 White Paper/proposal submitted in response to this BAA is requested pursuant to the Freedom of Information Act, 5 U.S.C. § 552, the Offeror 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 White Paper/proposal which the Offeror believes to be exempt from disclosure under the Act. Such action and cooperation on the part of the Offeror will ensure that any information released by DTRA pursuant to the Act is properly identified.

By submission of a White Paper/proposal, the Offeror 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 White Paper/proposal will only be used for evaluation purposes and will not be further disclosed or utilized.

3.5 Proposal Content Requirements

3.5.1 Phase I Proposal

Offerors must submit Phase I proposals in accordance with instructions provided in this section of the BAA; failure to do so may preclude consideration of the Phase I proposal. All Phase I proposals shall consist of a Quad Chart and white paper conforming to the following requirements:

3.5.1.1 Quad Chart

The Quad Chart must be included in the Phase I proposal as well as in Volume III, Supplemental Information, of the Phase II proposal. Proposed Quad Charts must conform to the following template:

Heading:

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

Upper Left Quadrant:

- Objective – provide a clear and concise description of the goal of the effort.
- Description of Effort – provide a brief description of the technology proposed for investigation and the methodologies to be used during the course of investigation.

Lower Left Quadrant:

- Benefits of Proposed Technology – provide a brief description of the net advantages of the proposed technology over current practices and other competing technologies.
- Challenges – provide a bullet list of the technical or scientific challenges being addressed.
- Maturity – describe the maturity of proposed technology with respect to Technical Readiness Level (TRL) at project start and the anticipated TRL at project end. See Attachment 1 for TRL definitions.

Upper Right Quadrant:

- Picture or graphic illustrating proposed technology development

Lower Right Quadrant:

- Period of Performance – 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.

- Major goals/milestones and deliverables – 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.
- Cost – provide a rough order of magnitude (ROM) cost estimate. If using multiple project periods of performance, provide the ROM estimates for each period and for the overall project.

3.5.1.2 White Paper

The White Paper shall include the following sections in the order given below. Information shall be consistent with and expand upon details provided in the Quad Chart:

(1) Describe the following elements of the project technical approach.

- Project objectives, scope, and description of the proposed effort. Provide sufficient information on the proposed research to establish its technical merit (e.g., the hypothesis, theories, concepts, approaches, data measurements, and analysis, etc.).
- Major goals/milestones by fiscal year.
- Overview of tasks and methods planned to achieve each objective and the final deliverable and/or project end-state.
- Key personnel Offerors must demonstrate they possess sufficient technical expertise to successfully execute the technical approach.
- Facilities/Equipment necessary to carry out the proposed effort.

(2) Provide a project overview describing:

- How the technology will benefit 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.
- Any applicable technical and/or scientific challenges associated with the proposed project, and how the Offeror intends to address these challenges.

(3) Describe how the proposed project is achievable within the proposed schedule. Discuss potential risks and their proposed mitigation.

(4) Describe the estimated costs for the proposed technical approach for each project period of performance.

3.5.2 Phase II Proposal

Offerors invited to submit a Phase II proposal must follow the instructions provided in this section of the BAA; failure to do so may preclude consideration of the proposal for award. All Phase II proposals shall consist of a Technical Volume, Cost Volume and Supplemental Information Volume conforming to the following requirements:

3.5.2.1 Technical Volume

The Technical Volume shall be comprised of a Technical Proposal, Technical Approach and BOE, and SOW which conforms to the following requirements:

3.5.2.1.1 Technical Proposal

The Technical Proposal shall be submitted in accordance with the following:

3.5.2.1.1.1 Abstract

Offerors shall provide a brief abstract.

3.5.2.1.1.2 Scope

Offerors shall provide a detailed description of project scope, to include project objectives, background, programmatics, and relevance. 8 pages are suggested.

A. Objective. Offerors shall state clearly and concisely the objective of the proposed project.

B. Background. Offerors shall provide the necessary technical and scientific background to support the scientific and/or technical merit of the proposed project.

C. Programmatic. Offerors shall describe their organization's program management plan for the proposed project. Offeror's shall list supporting and collaborating centers, and roles and responsibilities of each identified academic and/or industrial subcontractor supporting this project.

D. Relevance. Offerors 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.

3.5.2.1.1.3 Credentials

Offerors shall provide credentials and qualifications (of all persons that will be involved with the proposed effort), limited to those which are directly relevant to the proposed work.

A. Summary of Organizational Credentials and Qualifications. Offerors shall describe their organizational qualifications and credentials to perform the proposed project.

B. Summary of Qualifications for PI and Key Personnel. Offerors shall list summary qualifications for the proposed Principal Investigator and other Key Personnel.

C. Summary of Facilities to Perform the Proposed Work. Offerors shall summarize the credentials of the primary performing center, and supporting academic and industrial subcontractors to perform the work. Offerors shall describe specific examples of similar work performed, and equipment and/or facilities available to perform the proposed work.

3.5.2.1.1.4 Performance Schedule and Expenditure Plan

Gantt Chart. Offerors shall provide a Gantt chart that lists each individual SOW task and provides the duration of performance for each.

3.5.2.1.1.5 References

Offerors shall list any relevant documents used to develop the technical approach.

3.5.2.1.2 Technical Approach and BOE

A. General. The Offeror shall address the following requirements:

1. Provide a detailed narrative summary of the proposed technical approach.

2. Provide project milestones and objectives. Explain why the proposed technical approach is valid and suitable to achieve SOW requirements, project milestones and objectives.

B. Risks. The Offeror shall address the following requirements:

1. Explain the risks associated with proposed project goals, objectives and milestones (what will be done), and risks associated with the technical approach (how it will be done).

2. For all identified risks, Offerors 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.

C. Approach and BOE. For **each proposed SOW task**, Offerors shall address the following:

1. Technical Approach: The proposed technical approach to execute the individual SOW task.

2. Milestones, Metrics, Objectives and Deliverables: The milestones, metrics, objectives and deliverables associated with the individual SoW task.

3. Basis of Estimate: 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 technical approach and BOE. Cost data is limited to the Cost Volume only. Address each of the following requirements.

   a) Direct Labor

      i. Direct Labor Breakout – 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. Direct Labor Justification – Offerors 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

   b) Subcontracts

      i. Subcontract Breakout – provide a chart that lists each individual subcontractor assigned to this task.

      ii. Subcontractor Justification – Offerors shall explain, in detail, why each proposed subcontractor is appropriate and necessary to execute the technical approach.

   c) Consultants

      i. Consultant Breakout – provide a chart that lists each individual consultant assigned to this task and the number of hours allocated to each consultant.

      ii. Consultant Justification – Offerors shall explain, in detail, why each proposed consultant, and associated level of effort/hours, is appropriate and necessary to execute the technical approach.

   d) Materials/Supplies

      i. Material/Supplies Breakout – provide a chart that lists each individual material and supply item assigned to this task and the quantity for each.

ii. Material/Supplies Justification – Offerors 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.

e) Equipment

i. Equipment Breakout – provide a chart that lists each individual equipment item assigned to this task and the quantity for each.

ii. Equipment Justification – Offerors 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.

f) Travel

i. Travel Breakout – provide a chart that lists each individual travel event, and for each individual travel event, lists the following: a) reason for travel, b) destination, c) number of travelers, d) applicable labor categories, and e) duration of travel.
ii. Travel Justification – Offerors 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.

g) Other Direct Costs (ODC)

i. ODC Breakout – provide a chart that lists each individual ODC item assigned to this task and the quantity for each.

ii. ODC Justification – Offerors 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.

The technical approach and BOE MUST clearly and accurately reflect the proposed SOW. Offerors 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 technical basis of estimate addressing each of the above requirements.

3.5.2.1.3 SOW

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

3.5.2.2 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 Offeror. The cost proposal must include cost estimates sufficiently detailed for meaningful evaluation. Further, the Offeror must also bear the burden of proof in establishing reasonableness of proposed costs; therefore, it is in the Offeror'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.

The Cost Volume shall contain the following content:

3.5.2.2.1 Cost Spreadsheet

The Offeror shall prepare the Cost Spreadsheet using Attachment 4 – Cost Spreadsheet. The Cost Spreadsheet is in Microsoft Excel format. Offerors shall follow all instructions, including provided Notes, contained within the Cost Spreadsheet.

3.5.2.2.2 Cost Narrative/Supporting Documentation

All Offerors shall provide documentation, and analysis as required, to support the proposed costs contained within Attachment 4. Specific information requirements for this section are included in the Attachment 4 Notes.

3.5.2.3 Supplemental Information Volume

The Supplemental Information Volume shall be submitted in accordance with the content requirements provided in Section 7.1.

4.0 Evaluation Criteria

4.1 General Evaluation Information

Evaluation of proposals will be conducted based upon a 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 in the same topic area. All documents necessary for the review and evaluation of the Phase I and Phase II proposal submissions must be provided as described in Section 3 of this BAA.

4.2 Adjectival Ratings

With the exception of Phase II Factor 4 – Cost Realism, the Government will evaluate proposals using the adjectival ratings below. Phase II Factor 4 – Cost Realism will be assigned a rating of either Acceptable or Unacceptable. Offerors are advised that a strength is an aspect of a proposal that has merit 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 combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

Rating	Description
Outstanding (O)	The proposal is a technically exceptional submission pertinent to program goals and objectives. The proposal contains multiple strengths, exceptional features or innovations that should substantially benefit the program. The risk of unsuccessful performance usually is low.
Good (G)	The proposal is a technically thorough submission pertinent to program goals, and objectives. The proposal contains at least one strength that indicates the proposed approach will benefit the program. Weaknesses, if any, are more than offset by strengths. The risk of unsuccessful performance usually is low. The proposal may be recommended for acceptance but are at a lower priority than submissions rated 'Outstanding'.
Acceptable (A)	The proposal is a technically adequate submission 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 usually is no worse than moderate. The proposal may be recommended for acceptance but is at a lower priority than submissions rated either 'Outstanding' or 'Good'.

Marginal (M)	The proposal is a technically weak submission 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. The proposal may be recommended for acceptance but is at a lower priority than submissions rated 'Outstanding', 'Good' or 'Acceptable'.
Unacceptable (U)	The proposal is not pertinent to program goals and objectives and contains one or more deficiencies. The proposal is not awardable.

4.3 Proposals

The evaluation of Phase I quad charts/white papers will be based on two factors (listed in order of decreasing importance below): 1) Scientific and Technical Merit and 2) Relevance to DTRA Goals and Objectives. These criteria will be scored as Outstanding (O), Good (G), Acceptable (A), Marginal (M) or Unacceptable (U); any score of Unacceptable (U) will render the white paper "Not Selectable".

The evaluation of Phase II proposals will be based on four criteria: 1) Scientific and Technical Merit, 2) Relevance to DTRA Goals and Objectives, 3) Offeror Capabilities, and 4) Cost Realism and Reasonableness.

The first three criteria will be scored as Outstanding (O), Good (G), Acceptable (A), Marginal (M), or Unacceptable (U). Proposals with a score of Unacceptable for any of the first three criteria will be deemed "Not Selectable" and will not be considered further for funding. Of the four criteria, Scientific and Technical Merit and Offeror Capabilities are of highest and equal importance. The criterion of Relevance to DTRA Goals/Objectives is of next highest importance.

The fourth criterion (Cost Realism and Reasonableness) will be scored as either Acceptable (A) or Unacceptable (U); proposal costs rated Unacceptable potentially may be addressed through the negotiations process. Costs will be evaluated for realism and reasonableness in accordance with FAR 15.404-1. The criterion of Cost Realism and Reasonableness is of lowest importance.

Additionally, pursuant to FAR 35.016(e), fund availability shall be a consideration during evaluation.

4.3.1 Factor 1 – Scientific and Technical Merit

This criterion reflects the extent that the Offeror has a unique, high payoff, and comprehensive technical approach based on sound scientific principles; it also reflects the extent that the degree of risk in the proposed work is appropriate to the potential payoff.

The proposed work must employ original, innovative approaches and improvements in technology with potential to advance the "state-of-the-art" capabilities. Offerors must communicate that they understand the scope of work for the problem(s) they propose to solve, that their approach is unique, that the technical approach is sound, that they have an understanding of critical technical issues and risk, and that they have a plan to reasonably mitigate those risks, where possible.

4.3.2 Factor 2 – Relevance to DTRA Goals and Objectives

This criterion reflects the extent that the proposal leads toward full development and integration of a technology for new or improved operational capability. The Offeror must communicate that advancements in countering WMD are among the key outcomes of the proposed work, and that the accomplishments are significant with respect to the remaining effort to fully develop the resulting technology into a useable capability. The proposed work must result in an advancement in technology readiness (although not necessarily a full increment of the Technology Readiness Level) relevant to the Counter WMD Capability Goals stated in the 2022 DTRA Strategic Plan for RDT&E and must have a transition path that, if resourced, would lead to a new or improved operational capability.

4.3.3 Factor 3 – Offeror Capabilities

This criterion reflects the extent that the Offeror's team has the requisite experience, skills and resources necessary to perform the proposed program**.** This includes an assessment of the team's management construct, key personnel, and facilities**.** Offerors must demonstrate that their team has the necessary background and experience to perform this project**.** Offerors should describe their facilities and discuss 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**.**

4.3.4 Factor 4 – Cost Realism and Reasonableness

This criterion reflects that the proposed costs are reasonable and realistic for the technical approach offered, and that the Offeror has a practical understanding of the effort.

4.4 Basis for Selection Decision

Phase II proposal invitations will be extended to, and contract awards will be made to, the best proposals that are determined to be most beneficial 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 Offeror, as may be necessary, to evaluate the Offeror's assertions. Proposals may be selected for funding which are not rated as highly as others are 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 received in response to this BAA. The Government reserves the right to make awards without opening discussions with Offerors. The Government also reserves the right to conduct discussions if determined necessary.

Additionally, the Government reserves the right to perform responsibility checks which includes a review of past performance and may also factor into the determination for award. Sources for past performance review may include Contractor Performance Assessment Reporting System (CPARS), Federal Awardee Performance and Integrity Information System (FAPIIS), and Government sources such as Defense Advanced Research and Projects Agency (DARPA) and Army Research Office (ARO). Government program managers and contracting officers who are familiar with the Offeror's relevant past performance may also be contacted.

4.5 Notification to Offerors

Selection and non-selection notifications will be sent via e-mail to Offerors - specifically, the registered BPOC and the designated Principal Investigator as entered on the DTRA proposal submission website. The e-mail will be sent from the DTRA proposal submission website on or about the timeline specified in Attachment 6. Additionally, notification of apparent successful Offerors will be posted to https://sam.gov/ on or about the timeline specified in Attachment 6.

4.6 Debriefing

The Government will provide written debriefings to Offerors if a request is submitted and received within five working days of Phase II proposal non-selection notifications. Debriefings will not be provided for Phase I proposal submissions.

4.7 Other Considerations

4.7.1 Negotiations

Phase II proposals selected for award may be subject to negotiations, which may include costs and price, technical scope, and terms and conditions. Additionally, the Government may elect to fund only part of a submitted proposal and may incrementally fund any or all awards under this BAA. 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.

During the course of negotiations, Offerors whose proposals are selected for potential award may be contacted to provide additional information required to facilitate the negotiation process and to allow for award. Offerors that are not responsive to Government requests for information in a timely manner, defined as meeting government deadlines established and communicated with the request, may be removed from award consideration. Offerors may also be removed from award consideration if the Offeror and

the Government fail to negotiate mutually agreeable terms within a reasonable period of time.

4.7.2 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 12 months after the date of selection. All awards are subject to the availability of funds.

4.7.3 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.

5.0 Contract Data Requirements List (CDRL)

Resultant contracts will contain specific deliverable requirements contained within DD Form 1423. The CDRL lists those data deliverables that are required, under the terms of the contract, to be delivered to the Government in accordance with the information in the CDRL and the contract itself. The CDRL will identify the necessary information needed by the contractor to deliver acceptable data items to the Government. This includes a description of the data item, any acceptance criteria, the format of the deliverable, and any delivery information.

While project requirements will determine the deliverables that apply, all resultant contracts will contain the following minimum set of deliverable requirements:

- Monthly Status Reports
- Contractor Work Breakdown Structure
- Integrated Master Schedule
- Research Management Plan (RMP) for New and/or Modified Efforts w/in Program
- Program Reviews and Technical Interchange Meetings
- Test Plan
- Test Results
- Final Report
- Patents - Reporting of Subject Inventions

Final CDRL requirements will be negotiated prior to contract award.

6.0 Research Opportunity Requirements

Proposals that combine Basic Research with Applied Research, Applied Research, and/or Advanced Technology Development as specified in each topic will be accepted and considered. See Section 1.3 for TRL and MRL requirements. Offerors may propose efforts necessary to evaluate integrated advanced development to expedite technology transition from the laboratory

to operational use under a final option and limited to a period of one year while a new competitive effort can be awarded.

DTRA is interested in soliciting proposals from the research opportunity areas listed in section 1.3 of this document.

6.1 Supplemental Information Volume Content Requirements

This volume contains supplemental data and must address all of the items listed below. Offerors must complete the Supplemental Volume Cover Sheet provided as Attachment 8 to this BAA. Any required supplemental volume items not addressed by the cover sheet must be uploaded as a single merged file to the supplemental volume section of the proposal submission website. Additional details about each specific item are located in the sections referenced below. 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. It is the responsibility of the Offeror to ensure all of the items listed below are submitted via the DTRA proposal submission website and in accordance with the instructions in Section 3.4.3.3 of this BAA document.

6.1.1 Authorized Negotiators

Offerors must include the name, title, DUNS number, CAGE code, mailing address, telephone number, fax number, and e-mail address of the company, BPOC and any personnel authorized to negotiate with the Government and who is authorized to obligate the Offeror contractually.

6.1.2 Confirmed Proposal Expiration Date

Offerors shall provide written confirmation that cost proposals will remain valid for a period of one year after the Phase II submission closing date. Offerors may be asked to revalidate their proposal expiration date.

6.1.3 Identification of Team Members

Offerors shall include a list of team members (e.g. subcontractors/consultants) that are being proposed and their role in the proposed work (e.g. electrical engineer). Offerors shall also include the estimated percentage of the effort to be performed by the Offeror and percentage of work to be performed by proposed team members.

6.1.4 Representations and Certifications

Representations and Certifications must be completed at the time of Phase II submission. The Offeror must complete the annual representations and certifications electronically via the SAM website at https://sam.gov. After reviewing the SAM information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months.

The Offeror is also required to complete and submit Attachment 5 – Representations & Certifications.

Additionally, the Offeror is required to verify that the electronic representations and certifications are current, accurate, complete, and applicable to this BAA, including the business size standard applicable to the NAICS code referenced (541715) for this BAA, as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201).

6.1.5 Intellectual Property

6.1.5.1 Patents

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

If any listed patent, patent application or invention is owned or licensed by the Offeror, the Offeror must provide a statement, in writing, if it either owns or possesses the appropriate licensing rights to 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 the deliverables for this program. If any listed patent, patent application or invention is not owned or licensed by the Offeror, then the Offeror must explain how it will obtain a license, how the Government may obtain a license and/or whether the Offeror 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 7.1.5.2 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.

6.1.5.2 Data Rights

Offers 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 Offeror, 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 Offeror's assertions, including the assertions of its subcontractors or suppliers or

potential subcontractors or suppliers, shall be submitted as an attachment to its offer in the following format, dated and signed by an official authorized to contractually obligate the Offeror. If the Offeror 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."

Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software.

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished With Restrictions*	Basis for Assertion**	Asserted Rights Category***	Name of Person Asserting Restrictions****
(LIST)*****	(LIST)	(LIST)	(LIST)

*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

**Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

***Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

****Corporation, individual, or other person, as appropriate.

*****Enter “none” when all data or software will be submitted without restrictions.

Date:_____

Title:_____

Printed Name:_____

Signature:_____

(End of identification and assertion)

Offerors 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, Offerors must propose specific Intellectual Property terms and conditions and a data deliverable list. Offerors are encouraged to model their data rights assertions list to the template provided in DFARS 252.227-7017.

6.1.6 Subcontracting Plan

Any Offeror, 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 Offeror'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 subcontract plan must address each element listed in FAR 19.704(a)(1)-(11). The emphasis of the plan must be to maximize small business participation to the maximum extent practicable. The current DoD subcontracting goals are as follows (FY23 goals as of 12/15/22):

Percentage of subcontracted dollars	
Small Business	30%
HUB Zone Small Business	3%
Small Disadvantaged Business	5%
Women-Owned Small Business Concerns	5%
Service-Disabled Veteran Owned Small Business	3%

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 DCMA approved master plan may be submitted in lieu of an individual contract plan. The master plan must include an addendum that include DoD subcontracting goals for the proposed effort.

6.1.7 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 Offeror 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 conflict of interest via an e-mail message to the e-mailbox listed in the BAA.

All Offerors and proposed subcontractors also must affirmatively disclose whether or not they are providing scientific, engineering and technical assistance (SETA), A&AS or similar support, through a contract or subcontract, to any DTRA technical office(s), the Joint Program Executive Office for Chemical and Biological Defense (JPEO), Assistant to the Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs (ATSD-NCB), or the Office of the Special Assistant for Chemical and Biological Defense and Chemical Demilitarization Programs (OSA (CBD&CDP)). All disclosures must state which office(s) the Offeror 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 Offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict.

6.1.8 Protection of Human Subjects

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 USAMRDC Office of Human and Animal Research Oversight (OHARO), Office of Human Research Oversight (OHRO) provides written authorization that the research may proceed. OHRO authorization is required for any prime (lead performers) and subcontractors (subrecipients) that will use funds from this award to conduct research. Offerors 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 or 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 OHRO 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 OHRO and ROB. Non-compliance with these terms and conditions may result in withholding of funds and/or the termination of the award. The OHRO 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 OHRO and DTRA ROB.

6.1.9 Animal Use

If the proposed research involves the use of animals, the research cannot begin until the USAMRDC Office of Human and Animal Research Oversight (OHARO), Animal Care and Use Review Office (ACURO) provides authorization that the research may proceed. Offerors 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.

6.1.10 Statement of Current and Pending Support

Offerors 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 investigator listed in the proposal.

6.1.11 Modified Pre-award Checklist – SF 1408

Any Offeror awarded a cost type contract must be in compliance with FAR 16.301-3 "Limitations" restrictions. Specifically, the Offeror'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 Offeror 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), which will expedite the pre-award survey of the accounting system by DCAA. Refer to www.dcaa.mil for further assistance preparing an adequate cost proposal. Offeror's that have been subject to an DCAA accounting system audit shall provide the resultant audit report in lieu of the SF1408.

6.1.12 Forward Pricing Rate Agreement/Provisional Billing Rates

Offerors shall include a copy of any current Forward Pricing Rate Agreements or Provisional Billing Rate Agreements with Government agencies, such as Defense Contract Management Agency (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, Offerors shall provide all rates, factors, and bases by year utilized in the development of the proposal and the basis of those rates and factors.

6.1.13 Collaboration with Government Laboratories and Federally Funded Research and Development Centers (FFRDC)

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.

Offerors 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 Offeror 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.

6.1.14 Additional FFRDC Requirements

DoD-sponsored FFRDCs should review DFARS 235.017 to ensure compliance with the requirement for a DoD-Approved Conflict of Interest Policy, which should accompany the Phase II proposal submission.

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.

6.1.15 Quad Chart

Offerors shall include a copy of the updated Quad Chart that conforms to the instructions provided in Section 3.5.1.1 of this BAA Document.

6.2 Export Control Notification

Offerors 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. Offerors 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. Department of Commerce guidance on the EAR is located at https://www.bis.doc.gov.

7.0 List of Attachments

ATTACHMENT 1: Technology Readiness Level and Manufacturing Readiness Level Definitions

ATTACHMENT 2: Statement of Work Template

ATTACHMENT 3: Standard Form 1408

ATTACHMENT 4: Cost Spreadsheet

ATTACHMENT 5: Representations & Certifications Worksheet

ATTACHMENT 6: Estimated Timelines

ATTACHMENT 7: Supplemental Volume Cover Sheet