UNITED STATES ARMY FUTURES COMMAND
ARTIFICIAL INTELLIGENCE INTEGRATION CENTER
(AI2C)

BROAD AGENCY ANNOUNCEMENT

FOR

BASIC, APPLIED, AND ADVANCED
SCIENTIFIC RESEARCH

W519TC-24-S-AI2C
01 May 2024 – 31 May 2029

ISSUED BY:
U.S. Army Contracting Command-Rock Island

Table of Contents

I. OVERVIEW OF THE FUNDING OPPORTUNITY 4

A. Required Overview Content 4

B. Additional Overview Information 5

II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY 6

PROGRAM DESCRIPTION 6

A. Research Definitions 6

B. Areas of Interest 7
1. Autonomous Platforms 7
2. Artificial Intelligence and Machine Learning Algorithms (AI/ML) 7
3. AI/ML Decision Support 7
4. Human-AI Integration 8
5. Synthetic Environments 8
6. Distributed AI 8
7. Underpinning Methodologies 9
8. Special Topics 9

B. Federal Award Information 10
1. Procurement Contract 10
2. Grant 10
3. Cooperative Agreement 10
4. Technology Investment Agreement (TIA) 10
5. Other Transaction 11
6. Grants and cooperative agreements for institutions of higher education, nonprofit organizations, foreign organizations, and foreign public entities 11
7. Grants and cooperative agreements for for-profit and nonprofit organizations exempted from Subpart E - Cost Principles of 2 CFR Part 200 11
8. OT/TIAs are primarily governed by the following 11
9. The following websites may be accessed to obtain an electronic copy of the governing 12
regulations and terms and conditions 12

C. Eligibility Information 13
1. Eligible Applicants 13
2. Cost Sharing or Matching 13

III. APPLICATION AND SUBMISSION INFORMATION 14

A. Content and Form of Application Submission 14
1. General Information 14
2. Application Process Overview 15
3. White Paper Preparation 15

4. White Paper Submission....16
5. Review of White Papers....16
6. Preparation of Proposals....17
7. Proposal Format and Content....17
9. Conference and Symposia Grants....25
10. Submission of Proposals....26

IV. CRITERIA FOR SELECTION....30

A. Application Review Information....30
1. Criteria....30
2. Review and Selection Process....31
3. Recipient Qualification....32

B. Grant, Cooperative Agreement and OT Proposals....32

C. Contract Proposals....33

V. AWARD ADMINISTRATION INFORMATION....33

A. Award Notices....33
1. Administrative and National Policy Requirements....34
2. Policy Requirements....39
3. Reporting....45

VI. OTHER INFORMATION....46

A. CONTRACT PROPOSALS SAMPLES....46
Reasoning for Submitting a Strong Cost Proposal....47
1. Sample Cost Proposal – "Piece by Piece"....48
2. Direct Labor as proposed by our sample Applicant....48
3. Direct Material Costs....49
4. Direct Material costs included in our sample proposal....51
5. Travel portion Sample....54
6. Indirect Costs....54

ACRONYMS....56

I. OVERVIEW OF THE FUNDING OPPORTUNITY

A. Required Overview Content

Agency Name:

US Army Futures Command, Artificial Intelligence Integration Center (AI2C)

Issuing Acquisition Office:

U.S. Army Contracting Command-Rock Island Division

Research Opportunity Title:

United States Army Futures Command, Artificial Intelligence Intergration Center Broad Agency Announcement for Basic, Applied, and Advanced Research (Fiscal Years 2024-2029)

Announcement Type:

Updated Annoucement

Research Opportunity Number:

W519TC-24-S-AI2C

Catalog of Federal Domestic Assistance (CFDA) Number and Title:

12.630 – Basic, Applied, and Advanced Research in Science and Engineering

Response Dates (Submissions):

This BAA is a continuously open five-year announcement valid throughout the period beginning **01 May 2024 – 31 May 2029**. New start awards are normally obligated early within each fiscal year. Amendments to this BAA will be posted to SAM.gov. Interested parties are encouraged to periodically check SAM.gov for updates and amendments.

(End of Section)

B. Additional Overview Information

INTRODUCTION:

This Broad Agency Announcement (BAA), for the Army Artificial Intelligence Integration Center (AI2C), is issued under the provisions of paragraph 6.102(d)(2) and 35.016 of the Federal Acquisition Regulation (FAR), which provides for the acquisition of basic, applied, and advanced research and that part of development not related to the development of a specific system or hardware procurement. This will be done through the competitive selection of proposals, and 10 U.S.C. 4001, 10 U.S.C. 4021, and 10 U.S.C. 4022, which provide the authorities for issuing awards under this announcement for basic, applied, and advanced research. Proposals submitted in response to this BAA and selected for award are considered to be the result of full and open competition and in full compliance with the provisions of Public Law 98-369, "The Competition in Contracting Act of 1984" and subsequent amendments.

The Army Artificial Intelligence Integration Center (AI2C) is seeking artificial intelligence research and development whitepapers and proposals in support of new technologies and translational research-based approaches that support the identification, alignment, and exploitation of basic, applied, and advanced research.

This BAA may be used to award FAR based instruments (e.g., procurement agreements) or instruments not subject to the FAR (e.g., grants, Cooperative Agreements, Technology Investment Agreements, and Other Transactions). Those instruments not subject to the FAR may be referred to as Assistance Agreements in this BAA. AI2C will consider a wide range of funding constructs which might include, but are not limited to, Government funding, cost sharing, in-kind labor or facility sharing by all parties, or any other allowable mechanism. Applicants may propose cost sharing approaches, but they are not required. AI2C envisions opportunities to engage in other types of collaboration agreements where no funds are exchanged, such as Cooperative Research and Development Agreements (CRADAs) which are negotiated separately from this BAA.

To be eligible for an award under this announcement, a prospective awardee must meet certain minimum standards pertaining to financial resources and responsibility, ability to comply with the performance schedule, past performance, integrity, experience, technical capabilities, operational controls, and facilities. In accordance with Federal statutes, regulations, and Department of Defense (DoD) and Army policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the Army.
(End of Section)

II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY

PROGRAM DESCRIPTION

A. Research Definitions

Basic Research is defined as systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts that drive theory forward without being restricted to ideas that have known applications or products. Basic research may lay the foundation for future research aimed at developing tools, but that is not its goal.

Applied research is systematic study to understand the means to meet a recognized and specific need. It is a systematic expansion and application of knowledge to develop useful materials, devices, and systems or methods. It may be oriented, ultimately, toward the design, development, and improvement of prototypes and new processes to meet general mission area requirements. Applied research may translate promising basic research into solutions for broadly defined military needs, short of system development. This type of effort may vary from systematic mission-directed research beyond that in basic research to sophisticated breadboard hardware, study, programming, and planning efforts that establish the initial feasibility and practicality of proposed solutions to technological challenges. It includes studies, investigations, and non-system specific technology efforts. The dominant characteristic is that applied research is directed toward general military needs with a view toward developing and evaluating the feasibility and practicality of proposed solutions and determining their parameters. Applied Research precedes system specific technology investigations or development. Program control of the Applied Research program element is normally exercised by general level of effort. Program elements in this category involve pre-Milestone B efforts, also known as Concept and Technology Development phase tasks, such as concept exploration efforts and paper studies of alternative concepts for meeting a mission need.

Advanced research includes development of subsystems and components and efforts to integrate subsystems and components into system prototypes for field experiments and/or tests in a simulated environment. Advanced research includes concept and technology demonstrations of components and subsystems or system models. The models may be form, fit, and function prototypes or scaled models that serve the same demonstration purpose. The results of this type of effort are proof of technological feasibility and assessment of subsystem and component operability and producibility rather than the development of hardware for service use. Projects in this category have a direct relevance to identified military needs. Advanced research demonstrates the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques. Advance research programs generally have Technology Readiness Levels of 4, 5, or 6. (For further

discussion on Technology Readiness Levels, see the Assistant Secretary of Defense for Research and Engineering's Technology Readiness Assessment (TRA) Guidance.) Projects in this category do not necessarily lead to subsequent development or procurement phases but should have the goal of moving out of Science and Technology (S&T) and into the acquisition process within the Future Years Defense Program (FYDP). Upon successful completion of projects that have military utility, the technology should be available for transition.

B. Areas of Interest

1. Autonomous Platforms

The Army is interested in research in autonomous ground and air vehicles, which must operate in open, urban, and cluttered environments. Robotics and autonomous systems regardless of their missions require similar concepts and technologies including:

a. Ability to move in cluttered, irregular, urban, and underground environments.
b. Ability to move effectively in contested environments and survive attacks.
c. Technologies to enable low electromagnetic and physical profiles.
d. Architectures to enable autonomous learning and adaptation under dynamic conditions.
e. Sensing methods to detect obscured and small targets and to characterize terrain obstacles.
f. Autonomous ground and air structures, propulsion, and mobility components.
g. Technologies to significantly reduce logistical burdens and/or make them autonomous.
h. Ability to have multiple land and air-based platforms collaborate to accomplish complex goals autonomously.

2. Artificial Intelligence and Machine Learning Algorithms (AI/ML)

The Army is interested in core algorithmic improvements such as:

a. Scaling machine learning methods to operate on larger data sets in shorter periods of time and/or with reduced computation, memory, and/or power requirements.
b. Improving the data efficiency of learning algorithms (e.g., low-shot, zero- shot learning).
c. Developing foundation models across multiple modalities such as language, vision, and segmentation.
d. Adapting existing foundation models to novel tasks.
e. Improving methods for collecting, labeling, managing, and tracking data and the models learned from them.

3. AI/ML Decision Support

The Army is interested in research on AI algorithms and systems to improve decision making across all echelons including:

a. Core reinforcement learning, game theoretic, optimal control algorithms.
b. Algorithms for improved online, operational decision making.
c. Algorithms for improved offline strategic planning including tactics and portfolio optimization of assets.
d. Algorithms for increased autonomy and speed in decision making.

4. Human-AI Integration

The Army is interested in AI/ML research in areas which can reduce the cognitive burden on humans and improve overall performance through human-machine integration. AI/ML research is needed in areas such as:

a. Speech and language algorithms that support more efficient human-machine integration.
b. Algorithms that raise the level of autonomy in systems (i.e., increase the number and size of tasks that can be accomplished without human input and/or reduce the level of details required in human commands to machines).
c. Methods to process and summarize large amounts of data for human analysis.
d. Robust and rigorous methods for evaluating the outputs of complex AI systems.
e. Methods for understanding and explaining AI/ML results and the uncertainty of those results.
f. Understanding the impacts of AI/ML on human decision making.
g. Ethical considerations for human-machine integrated formations in high risk and complex environments.
h. Quantitative approaches to measure ethical compliance of AI systems.
i. Methods to train users and developers at various technical skill-levels to interact and use AI and ML more effectively.
j. Techniques to investigate human and non-human behavior and interactions in various online social settings.

5. Synthetic Environments

The Army is interested in research that enables improved situational awareness and the visualization and navigation of large data sets to enhance operational activities and training and readiness. Research is needed in the visualization of data in following areas:

a. Novel visualization and synthetic environment approaches to enable improved training
b. Synthetic environments and networked instrumentation approaches for virtual-live validation of concepts and prototypes

6. Distributed AI

The Army is interested in effectively leveraging modern AI and ML techniques for both enterprise and tactical applications. Research is needed in the areas related to the following:

a. Methods for governing a large portfolio of distributed ML models.

b. Algorithms for efficiently leveraging hardware across a large, heterogeneous network of enterprise and tactical computer systems for various AI and ML tasks.
c. Methods for effective multi-agent collaboration and multi-agent systems.
d. Techniques to attack and compromise AI and ML systems.
e. Techniques and best practices for defending AI and ML models and infrastructure from attacks.
f. Improve ML performance of inference and training on small, rugged edge devices.
g. Cyber protection technologies, methodologies, and concepts to protect Army systems, especially in the context of distributed systems.

7. Underpinning Methodologies

The Army is interested in methodologies, frameworks, tools, facilities, techniques, and experimentation concepts, which underpin and enable advanced research and development, including those which enhance the following:

a. Collection, standardization, transformation, and maintenance of data to focus research and validate concepts.
b. Rapid modeling, development, and assessment of technologies across widely distributed research teams.
c. Integrate innovative technology applications into current or future warfighting systems, applications, and analysis systems to assess the potential operational effectiveness of novel new technology elements.
d. Frameworks that integrate testing and evaluation into the artificial intelligence workflow.

8. Special Topics

a. As a part of this BAA, AI2C will post specific areas with strong potential for funding as an amendment to this BAA on SAM.gov. These topics will generally have clear deadlines for submission and may have other specific preparation guidelines.

(End of Section)

B. Federal Award Information:

The Army Contracting Command- Rock Island (ACC-RI) has the authority to award a variety of instruments on behalf of AI2C. Anticipated awards may be made in the form of procurement contracts, grants, cooperative agreements, and technology investment agreements (TIAs), or other transactions (OTs). The ACC-RI reserves the right to use the type of instrument most appropriate for the effort proposed. Applicants should familiarize themselves with these instrument types and the applicable regulations before submitting a white paper or proposal.

1. Procurement Contract

A legal instrument, which consistent with 31 U.S.C. 6303, reflects a relationship between the Federal Government and a State, a local government, or other recipient when the principal purpose of the instrument is to acquire property or services for the direct benefit or use of the Federal Government.

Procurement contracts awarded by the ACC Rock Island Division will contain, where appropriate, detailed special provisions concerning patent, rights in technical data and computer software, reporting requirements, equal employment opportunity, etc. No fee or profit will be allowed on travel and equipment.
Contracts are primarily governed by the following regulations:

a. Federal Acquisition Regulations (FAR)
b. Defense Federal Acquisition Regulations (DFARS)
c. Army Federal Acquisition Regulation Supplement (AFARS)

2. Grant

A legal instrument, that consistent with 31 U.S.C. 6304, is used to enter into a relationship in which:

a. The principal purpose is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law or the United States, rather than to acquire property or services for the Department of Defense's direct benefit or use.
b. Substantial involvement is not expected between the Department of Defense and the recipient when carrying out the activity contemplated by the grant.
c. No fee or profit is allowed.

3. Cooperative Agreement

A legal instrument which, consistent with 31 U.S.C. 6305, is used to
enter into the same kind of relationship as a grant (see definition "grant"), except that substantial involvement is expected between the Department of Defense and the recipient when carrying out the activity contemplated by the cooperative agreement. The term does not include "cooperative research and development agreements" as defined in 15 U.S.C. 3710a. No fee or profit is allowed.

4. Technology Investment Agreement (TIA)

An assistance instrument as described in 32 CFR Part 37. A TIA may be a cooperative agreement or an Other Transaction for Research under 10 U.S.C.4021 both with provisions tailored for involving commercial firms or research involving commercial application. To the

maximum extent practicable, TIAs shall provide for a 50/50 cost share between the Government and the applicant. No fee or profit is allowed on TIAs.

5. Other Transaction

A legal instrument, consistent with 10 U.S.C. 4021, which may be used for basic, applied, and advanced research projects. The research covered under this instrument cannot be duplicative of research being conducted under an existing DoD program. To the maximum extent practicable, OTs for research are to provide for a 50/50 cost share between the Government and the applicant. An applicant's cost share may take the form of cash, independent research, and development (IR&D), foregone intellectual property rights, equipment, access to unique facilities, and/or other means. Due to the extent of cost share, and the fact that an OT for research does not qualify as a "funding agreement" as defined at 37 CFR 401.2(a), the intellectual property provisions of this instrument can be negotiated to provide expanded protection to an applicant's intellectual property. No fee or profit is allowed on OTs for research. Please refer to the Office of the Under Secretary of Defense for Acquisition and Sustainment Other Transaction Guide version 1.0 dated November 2018 for additional information. This document, along with additional other transaction agreement (OTA) resources, may be accessed at the following link:
https://www.acq.osd.mil/asda/dpc/cp/policy/other-policy-areas.html

6. Grants and cooperative agreements for institutions of higher education, nonprofit organizations, foreign organizations, and foreign public entities
   a. Are governed by the following:
   b. Federal statutes
   c. Federal regulations c. 2 CFR Part 200
   d. 2 CFR 1104
   e. 32 CFR Parts 21, 22, 26, and 28
   f. DoD Research and Development General Terms and Conditions
   g. Agency-specific Research Terms and Conditions

7. Grants and cooperative agreements for for-profit and nonprofit organizations exempted from Subpart E - Cost Principles of 2 CFR Part 200
   a. Are governed by the following:
   b. Federal statutes
   c. Federal regulations
   d. 32 CFR Part 34 - Administrative Requirements for Grants and Agreements with For-Profit Organizations
   e. 32 CFR Parts 21, 22, 26, and 28
   f. DoD Research and Development General Terms and Conditions
   g. Agency-specific Research Terms and Conditions

8. OT/TIAs are primarily governed by the following:
   a. Federal statutes
   b. Federal regulations

c. 32 CFR Part 37 – Technology Investment Agreements
d. DoD Research and Development General Terms and Conditions e. Agency-specific Research Terms and Conditions
e. Office of Secretary of Defense implementation guidance titled Other Transactions (OT)
f. Guide for Prototype Projects (November 2018, Version 1

9. The following websites may be accessed to obtain an electronic copy of the governing regulations and terms and conditions

a. FAR, DFARS, and AFARS: https://www.acquisition.gov
b. Code of Federal Regulations (CFR): http://www.ecfr.gov

(End of Section)

C. Eligibility Information

1. Eligible Applicants

White Papers and Proposals are sought from institutions of higher education, non-profit organizations, and for- profit organizations, domestic or foreign, for research and development (R&D) in those areas specified in SECTION II. of this BAA. Foreign organization and foreign public entities are advised that security restrictions may apply that could preclude their participation in these efforts. Countries included on the U.S. State Department List of Countries that Support Terrorism are excluded from participation in these efforts.

Government Laboratories, Federal Funded Research and Development Centers (FFRDCs), and U.S. Service Academies are not eligible to participate as prime Contractors or Recipients under this BAA. If a proposal selected for award includes the involvement of a Government laboratory, Federally Funded Research and Development Center, or U.S. Service Academy, award funds allocated for the involvement of Government laboratories, FFRDCs, and/or U.S. Service Academies will be directly provided from AI2C to the respective Government laboratory, FFRDC or U.S. Service Academy via a Military Interdepartmental Purchase Request (MIPR). No award funds will be channeled directly from a prime awardee (e.g., Contractor or Recipient) to a government laboratory, FFRDC, or U.S. Service Academy.

2. Cost Sharing or Matching

Generally, there is no requirement for cost sharing, matching, or cost participation to be eligible for award under this BAA. Cost sharing and matching is not an evaluation factor used under this BAA. Exceptions may exist if the applicant is proposing the use of an OT for research or prototype as an award instrument. Cost-sharing requirements may be found at 32 CFR Part 37 and in the DoD Other Transaction Guide for Prototype Projects (DOD Other Transactions Guide | www.dau.edu). Applicants are encouraged to consider cost sharing schemes in cooperation with AI2C.

(End of Section)

III. APPLICATION AND SUBMISSION INFORMATION

Address to View Broad Agency Announcement:

Contract Opportunities (www.sam.gov)
Grants.gov (www.grants.gov)

A. Content and Form of Application Submission

1. General Information

Completeness of Information: Proposals must include all of the information specified in this BAA to prevent delays in evaluation. Be sure to specify the Commercial and Government Entity (CAGE Code), the DUNS Number, and the Taxpayer Identification Number (TIN) with your submission. Completion of the Representations and Certifications as well as registration in the System for Award Management (SAM) are prerequisites before receiving an award.

Classified Submissions: **Do not** submit any proposals that include classified information.

Use of Color in Proposals: All proposals received will be stored as electronic images. Electronic color images require a significantly larger amount of storage space than black- and-white images. As a result, Applicant's use of color in proposals should be used only when necessary to convey specific information.

Government Property/Government Furnished Equipment and Facilities: Normally, title to equipment or other tangible property purchased with Government funds vests with nonprofit institutions of higher education or with nonprofit organizations whose primary purpose is conducting scientific research if vesting will facilitate scientific research performed for the Government. For-profit organizations are expected to possess the necessary plant and equipment to conduct the proposed research. Deviations may be made on a case-by-case basis to allow for-profit organizations to purchase equipment, but regulatory disposition instructions must be followed.

Post-Employment Conflict of Interest: There are certain post-employment restrictions on former Federal officers and employees, including special Government employees (Section 207 of Title 18, U.S.C.). If an Applicant believes a conflict of interest may exist, the Applicant should discuss the situation with the Army legal counsel.

Statement of Disclosure Preference: Additionally, proposals containing data that is not to be disclosed to the public for any purpose or used by the Government except for evaluation purposes shall include the following statement on their
cover page:

> This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate this proposal. If, however, an award is made to this Applicant 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 resulting award. This restriction does not limit the Government's right to use information contained in this proposal if the information has been obtained from another source without restriction. The data subject to this restriction are contained in sheets.

The Applicant shall also mark each sheet of data it wants to restrict with the following legend:

"Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal."

2. Application Process Overview

The application process is in three stages as follows:

Stage 1- Provide a valid unique entity identifier (formerly DUNS). Please verify the accuracy of your Unique Entity Identifier (formerly DUNS) at the Dun and Bradstreet (D&B) website http://fedgov.dnb.com/webform before registering with the System for Award Management System (SAM). Prospective Applicants must be registered in SAM at https://www.sam.gov prior to submitting its application.

Stage 2 - Prospective Applicants are encouraged, but not required, to submit White Papers prior to the submission of a complete proposal. The purpose of submitting a White Paper is to minimize the labor and cost associated with the production of a detailed proposal that has little chance of being selected for funding.

Stage 3 - Interested Applicants are required to submit a proposal. All proposals submitted under the terms and conditions cited in this BAA will be reviewed regardless of whether an Applicant submitted a White Paper.

3. White Paper Preparation

A White Paper should focus on describing details of the proposed research, including how it is innovative and how it could substantially advance the state of the science. Army relevance and potential impact should also be described, as well as a rough estimate of total cost and time required for the proposed effort. White Papers should present the effort in sufficient detail to allow evaluation of the concept's technical merit and its potential contributions to the Army mission.

A White Paper must be limited to three pages including a cover page.

All files and forms must be compiled into a single PDF file or MS Word document before submitting. Reviewers will not review any pages beyond the **3-page limit**.

<u>TECHNICAL INFORMATION FOR A WHITE PAPER:</u>

Technical Approach: A brief discussion of the effort's scientific research objectives, approach, relationship to similar research, and level of effort. If known, include how the research is relevant to the Army.

Timeline: An estimated research timeline mapped to the research objectives described in the technical approach.

Cost Estimate: The cost portion of the whitepaper shall contain a brief cost estimate including research hours, burden, material costs, travel, etc.

Collaborators: Include the key collaborators, principal investigators, and institutions that will contribute to the research.

RESTRICTIVE MARKINGS ON WHITE PAPERS:

The Applicant must clearly identify and mark any proprietary data the Applicant intends to be used only by the Government. The Applicant must also identify any technical data or computer software contained in the White Paper that is to be treated by the Government as limited rights or restricted rights, respectively. In the absence of such identification, the Government will assume to have unlimited rights to all technical data or computer software presented in the White paper.

An Applicant is cautioned, however, that portions of a White Paper may be subject to release under terms of the Freedom of Information Act, 5 U.S.C. 552, as amended.

4. White Paper Submission

A White Paper of the proposed effort may be submitted electronically to usarmy.pittsburgh-pa.futures-cmd.mbx.ai2c-baa-submissions@army.mil. A with e-mail subject line "AI2C BAA White Paper | W519TC-24-S-AI2C| Technical Area: <Autonomous Platforms>" with the appropriate areas filled in with information specific to your research.

An Applicant preparing a White Paper for submission may follow any convenient format desired if the submission complies with guidance above in Section 3, "White Paper Submission." Please enclose an e-mail address and a telephone number where you can be reached.

5. Review of White Papers

TPOCs will receive and consider all whitepapers submitted. A response will be provided if the Government encourages the offerer to submit a proposal. The Government will not provide a response if the Government does not want the offerer to submit a proposal.

6. Preparation of Proposals

PROPOSAL PREPARATION INSTRUCTIONS:

General Information: The proposal is the only vehicle available to the Applicant for receiving consideration for award. The proposal must stand on its own merit; only information provided in the proposal can be used in the evaluation process leading to an award. The proposal should be prepared simply and economically, providing straightforward, concise delineation of capabilities necessary to perform the proposed work. The technical volume must be accompanied by a fully supported cost volume as cost and technical considerations are reviewed simultaneously; the cost volume should assume a start date of no earlier than 01 November 2023. In preparing proposals, it is important that the Applicant keep in mind the characteristics of a proposal acceptable for evaluation. A proposal must include all the information specified in this announcement in order to receive consideration.

All proposals must include:

a. An Abstract, Background, Application Potential, Technical Approach, Reference List, Curriculum Vitae/Resumes of proposed researchers, and cost information, as described below.

b. Contact information such as e-mail addresses and telephone numbers for both the Principal Investigator and Institutional Representative to allow technical and contracting questions to be addressed.

c. Institutional endorsement, signature of the proposed Principal Investigator, time frames for all phases of the project, and detailed accounts of proposed work and cost by task.

d. Provide the name, address, and phone number of Applicant's cognizant Defense Contract Audit Agency (DCAA) office, if known. All Applicants must be registered in the System for Award Management (SAM) before an award can be made. Applicants must also provide their DUNS number (Duns and Bradstreet Data Universal Numbering System).

e. Proposals should be very well written, and Applicant's intention should be clear to technical reviewers who, while having expertise in behavioral sciences, may lack concentrated knowledge in the proposed domain. Proposals should be sufficiently detailed to be responsive to the criteria, described below, for evaluation.

7. Proposal Format and Content

To ensure all proposals receive proper consideration, the Government-recommended proposal format shown below (Volume I Technical) should be followed. This format can most easily be

incorporated as the proposal table of contents and serves as a final checklist as well. Proposals must address at least one of the domains for basic or applied/advanced research cited in SECTION II. A of this BAA.

Proposal documents (excluding illustrations, tables, and required forms) must use the following page format:

- Page Size – 8 ½ x 11 inches
- Margins – 1 inch
- Spacing – single
- Font – Times New Roman, 12 point

NOTE: The Abstract, Background, Application Potential and Technical Approach sections of a proposal, including any appendices, tables, or figures, must be no greater than 23 pages in length. (The cover page, table of contents, proposal reference list, curriculum vitae, cost information and institutional information are not included in the 23-page limit). Reviewers will not review any pages beyond the **23-page limit**.

VOLUME I – TECHNICAL

i. Cover Page
ii. Table of Contents
iii. Abstract
1. Background
2. Application Potential
3. Technical Approach
4. Reference List
5. Curriculum Vitae/Resumes of Key Personnel

i Cover Page: A cover page is required. Proposals will not be processed without:

A SF 424 R&R Form (required for assistance agreement proposals submitted online via Grants.gov (see section 8- Submission of Proposals).

NOTE: If an Applicant elects to submit a contract proposal via Grants.gov instead of via e-mail, the SF 424 R&R Form is required. Proposals for Grants or cooperative agreements only require the SF 424 R&R Form.

The cover page should include the BAA number, Research Area(s) of Interest, name, and telephone number for the principal points of contact (both technical and contractual), proposed project title, and any other information that identifies the proposal. The cover page should also contain the proprietary data disclosure statement, if applicable (ARO FORM 52 or 52A). The title of the proposed project should be brief, scientifically representative, intelligible to a scientifically literate reader, and suitable for use in the public domain. Should the project be carried out at a branch campus or other component of the submitting organization, that branch campus or component should be identified in the space provided (Block 12 on the SF 424 R&R).

To evaluate compliance with Title IX of the Education Amendments of 1972 {20 U.S.C. A§ 1681 Et. Seq.), the Department of Defense is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in STEM disciplines. To enable this assessment, each application must include the following forms completed as indicated.

Research and Related Senior/Key Person Profile (Expanded) form:
The Degree Type and Degree Year fields on the Research and Related Senior/Key Person Profile (Expanded) form will be used by DoD as the source for career information. In addition to the required fields on the form, applicants must complete these two fields for all individuals that are identified as having the project role of PD/Pl or Co-PD/Pl on the form. Additional senior/key persons can be added by selecting the "Next Person" button.

Research and Related Personal Data form:
This form will be used by DoD as the source of demographic information, such as gender, race, ethnicity, and disability information for the Project Director/Principal Investigator and all other persons identified as Co-Project Director{s)/Co-Principal Investigator(s). Each application must include this form with the name fields of the Project Director/Principal Investigator and any Co-Project Director(s)/Co-Principal Investigator(s) completed; however, provision of the demographic information in the form is voluntary. If completing the form for multiple individuals, each Co-Project Director/Co-Principal Investigator can be added by selecting the "Next Person" button. The demographic information, if provided, will be used for statistical purposes only and will not be made available to merit reviewers. Applicants who do not wish to provide some or all of the information should check or select the "Do not wish to provide" option.

The proposed duration for which support is requested should be consistent with the nature and complexity of the proposed activity and associated budget. The Federal awarding agency reserves the right to make awards with shorter or longer periods of performance. Specification of a desired starting date for the project is important and helpful. However, requested effective dates cannot be guaranteed.

Pursuant to 31 U.S.C. 7701, as amended by the Debt Collection Improvement Act of 1996 [Section 31001(I)(1), Public Law 104-134], Federal agencies shall obtain each awardee's Taxpayer Identification Number (TIN). This number may be the Employer Identification Number (EIN) for a business or non-profit entity or the Social Security Number for an individual. The TIN is being obtained for purposes of collecting and reporting on any delinquent amounts that may arise out of an awardee's relationship with the Government. Applicants must provide their organization's Data Universal Numbering System (DUNS) number. The DUNS number is a nine-digit number assigned by Dun and Bradstreet Information Services.

Applicants must provide their assigned Commercial and Government Entity (CAGE) code. The CAGE code is a 5-character code assigned and maintained by the Defense Logistics Service Center (DLSC) to identify a commercial plant or establishment.

ii Table of Contents:

Use the following format for the Table of Contents. Forms are available at https://www.arl.army.mil/business/broad-agency-announcements/baa-forms/

It is highly recommended that the Applicant follow the above table of contents (Volume I, "Technical") and use it for a final quality-control checklist.

iii Abstract:

The abstract allows the Applicant to present briefly and concisely the important aspects of its proposal. It should summarize the proposed research objectives, expectations, and the basic approaches to be used in the proposed effort. The abstract must identify implications for applied research if the project is successful. The abstract should be 250 words or less. Abstracts longer than 250 words will not be read.

1. **Background**: This section should describe the research problem, discuss relevant theory, and summarize existing research. It is important that the proposal identify specific, relevant hypotheses following discussion of theory. When integrating theories or research domains, an overarching framework supporting such integration should be described. When appropriate, a graphic depiction of the conceptual model and hypotheses may be provided.

2. **Technical Approach**: The technical approach should follow and expand upon the background section and provide a detailed description of the proposed research. This account should be much like the methods section of a research paper. The technical approach should include: a description of the data to be collected, the methods for collecting the data, the number and source of participants (e.g., using power analysis) and how they will be acquired, the research design, the measures to be used, and the analysis plan. Proposals for secondary research (e.g., meta- analyses) should provide estimates of the likely number of primary studies and/or effects available in the research literature for analysis. If the intermediate or final product of research will include training packages, simulation models, or other software-based device, the proposal should relate the product to the research hypotheses and provide sufficient detail to permit understanding and evaluation.

The technical approach should detail and set a schedule for the major tasks to be performed and products to be produced. In the case of a one-year proposal, the research plan should be divided by quarters of the year. In the case of multi-year proposals, it should be divided semi-annually or by major tasks within a year. The technical approach should specifically identify what tasks will be performed by which party and why each subcontractor, if any,

was selected to perform its task(s).

3. **Technical Discussion**: No technical approach is without its limitations or shortcomings. Every issue should be identified and compared with the successes/failures of previous approaches. A trade-off analysis is a good way to make this comparison and should be supported by theory, simulation, modeling, experimental data, or other sound engineering and scientific practices. If the Offeror has a "new and creative" solution to the problem(s), that solution should be developed and analyzed in this section. The preferred technical approach should be described in as much detail as is necessary or useful to establish confidence in the approach. The technical discussion should include the following:

- A complete discussion stating the background and objectives of the proposed work, the scientific approaches to be considered, the relationship to competing or related research, and the level of effort to be employed; include the nature and extent of the anticipated results and how they will significantly advance the scientific state-of-the- art; if known, include the manner in which the work will contribute to the accomplishment of the Army's mission; ensure the proposal identifies any scientific uncertainties and describes specific approaches for the resolution of the uncertainties

- A brief description of your organization

- The names of other Government agencies or other parties receiving the proposal and/or funding the proposed effort (if none, so state); concurrent or later submission of the proposal to other organizations will not prejudice its review by AI2C if we are kept informed of the situation

- A statement regarding possible impact, if any, of the proposed effort on the environment considering as a minimum its effect upon water, atmosphere, natural resources, human resources, and any other values

- The Offeror shall provide a statement regarding the use of Class I and Class II ozone-depleting substances. Ozone-depleting substances mean any substance designated as Class I by the Environmental Protection Agency (EPA), including but not limited to chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform and any substance designated as Class II by EPA, including but not limited to hydrochlorofluorocarbons. See 40 C.F.R. Part 82 for detailed information. If Class I or II substances are to be utilized, a list shall be provided as part of the Offeror's proposal. If none, so state.

- Requested support (if any) in the following areas: facilities, equipment, and Materials. Requests for Government Support: The type of support, if any that the Applicant requests of the Government (such as facilities, equipment, demonstration sites, test ranges, software, personnel, or materials) shall be identified as Government Furnished Equipment (GFE), Government Furnished Information (GFI), Government Furnished Property

(GFP), or Government Furnished Data (GFD). Applicant shall indicate any Government coordination that may be required for obtaining equipment or facilities necessary to perform any simulations or exercises that would demonstrate the proposed capability.

4. **Reference List:** All cited references must be listed. Do not include publications that are not referenced. The references list must be in American Psychological Association format, APA 6th Edition.

5. **Curriculum Vitae/Resumes of Key Personnel**: Curriculum vitae or résumés should be included for all proposed researchers with special emphasis on the Principal Investigator, Co-Principal Investigator(s), and Consultants; documents are limited to five (5) pages per investigator to include name, brief biography, and list of recent, relevant publications.

VOLUME II – COST

The cost volume shall justify the need for and amount of major direct expense categories, including (but not limited to) labor, equipment, and travel. The cost estimate for the proposed effort should sufficiently detail elements of cost and the need for these items to allow for meaningful evaluation. The cost volume should clearly and closely align with the planned methodology presented in the technical approach section. A cost estimate should be detailed for each task of the proposed work and should include the following:

a. A complete detail of direct labor to include, by category, labor hours and rates
b. Fringe benefits rate and base
c. An itemized list of equipment showing cost of each item and justification for inclusion
d. Description and cost of expendable supplies
e. Complete detail of travel to include number of people and duration of travel, reason/need for travel, destination, airfare, per diem, rental car, etc. Note that in recent years, travel costs for one conference per year to present work from the funded research effort has been a typical request
f. Complete detail of any subcontracts to include labor categories, skill levels, and labor rates and hours
g. Other direct costs (reproduction, computer, etc.)
h. Indirect cost rates and bases with an indication whether rates are fixed or provisional and the time frame to which they are applied
i. Proposed fee, if any and if applicable
j. Cost sharing, if any and if applicable
k. Any documentation which supports all items above
i. Applicants should furnish the name and telephone number of their cognizant audit agency

COST PROPOSAL PREPARATION:

1. Cost Reimbursement or Fixed Price Award: Selection of the type of award (cost reimbursement or fixed price) is based upon various factors, such as (1) award instrument selected, (2) type of research to be performed, (3) the contractor's experience maintaining cost records, and (4) the ability to detail and allocate proposed costs and performance of the work. Cost-type awards are most commonly used because of their suitability in supporting research and development efforts as they permit some flexibility in the redirection of efforts due to recent research experiment results or changes in Army guidance. Fixed-price-type awards are used when the research project costs can be estimated accurately, the services to be rendered are reasonably definite, and the amount of property, if any, is fixed. The negotiated price is not subject to any adjustment on the basis of the Applicant's cost experience in performing the contract. An Applicant may propose either cost-reimbursable or fixed-price contract arrangements as well as assistance awards, but the award type may vary in accordance with relevant factors as determined by AI2C and ACC Rock Island contracting. Cooperative Agreement awards will be cost reimbursable without profit or fee.

2. Cost Proposal Content: A proposal should represent an Applicant's best response to the solicitation, including cost information. Any inconsistency, whether real or apparent, between promised performance and cost or price data must be fully explained in the proposal. Failure to explain any significant inconsistencies may demonstrate an Applicant's lack of understanding of the nature and scope of the work required. Accordingly, the cost volume must be sufficient to establish the reasonableness, realism, and completeness of the proposed cost/price. Further, any modifications made to the initial proposal resulting in a change in the cost volume must likewise be thoroughly supported in writing regardless of whether such changes are made during negotiations or at the time of a proposal revision. The estimate should be detailed for each task of the proposed work. The cost volume should be limited to the minimum number of pages necessary to satisfy the specific requirements set forth herein. Submission of volumes of computer-generated data to support the cost volume is not necessary or desired. If computer-generated data is essential to support the cost volume, it may be submitted as an addendum and must be clearly cross-referenced to the material it supports in the cost volume.

Each proposal must contain a budget for each year of support requested and a cumulative budget for the full term of requested support. The proposal may list funds under any of the categories listed so long as the item is considered necessary to perform the proposed work and is not precluded by applicable cost principles. In addition to the forms, the budget should include no more than five (5) pages of budget justification narrative for each year.

A signed summary budget page must be included. The documentation pages should be titled "Budget Explanation Page" and numbered chronologically starting with the budget form. The need for each cost element should be explained clearly.

All cost data must be current and complete. Costs proposed must conform to the following principles and procedures:

Before award it must be established that an approved accounting system and financial management system exist for an Applicant.

The following specific information is required:

a. Summary by cost element and profit or fee for total proposal (**NOTE**: Profit/Fee not allowed for grants, cooperative agreements, or technology investment agreements for the prime recipient of the award or any subrecipients)

b. Labor summary for total proposal by labor categories, proposed hours per labor category, and hourly rates per labor category

c. Explanation of how labor rates are computed including base rates (actuals), fringe, and escalation, if and Interdivisional transfers (detailed breakout of costs), if applicable

d. Identification of indirect rates by fiscal year and explanation of how established and base to which they apply

e. Bill of materials detailing items by type, quantity, unit price, total amount, and source of estimate (provide vendor written quotes)

f. Summary of all travel by destination, purpose, number of people and days, air fare, per diem, car rental, etc.

g. Consultant(s) by name, hourly rate, and number of hours (furnish copy of consulting agreement and identify prior agreement(s) under which the consultant commanded proposed rate)

h. Computer use by type, rate, and quantity

i. Other direct costs by type, amount, cost per unit, and purpose (specifically identify any costs for printing or publication)

j. DD Form 1861 (if proposing facilities capital cost of money)

k. Forecast of monthly and cumulative dollar commitments for the proposedperformance period

l. Subcontractor's proposal, with prime Applicant's price/cost analysis ofsubcontractor's proposal (if subcontract was not competed, include justification)

3. Subawardee Cost Proposals: Subawardees' cost proposals must be similarly structured. All subcontracted work must be properly identified as such. If a subcontractor elects to submit an abbreviated proposal to an Applicant, it is Applicant's responsibility to see that the subcontractor simultaneously submits a complete detailed proposal properly identified directly to the Government Contracting or Grants Officer. An Applicant's proposal must:

a. Identify principal items/services to be subcontracted
b. Identify prospective subcontractors and the basis on which they were selected
c. (if non- competitive, provide selected source justification)
d. Identify the type of contractual arrangement contemplated for each
e. subcontract and the rationale for the same
f. Identify the cost or pricing data or information other than cost or
g. pricing data submitted by each subcontractor
h. Provide an analysis concerning the reasonableness, realism, and completeness
i. of each subcontractor's proposal; if the analysis is based on a comparison with prior research efforts, identify the basis on which the prior costs or prices were determined to be reasonable

9. Conference and Symposia Grants

Introduction: Through the award of a grant, the Army supports conferences and symposia (as defined in the DoD Travel Regulations) in areas of science that bring experts together to discuss recent research or educational findings or to expose other researchers or advanced graduate students to new research and educational techniques. The Army encourages the convening in the United States of major international conferences, symposia, and assemblies of international alliances.

Eligibility: Notwithstanding the Army's authority to provide grant support for such events, only non-commercial scientific, technical, or professional organizations that qualify for tax exemption may receive a conference grant/symposia grant. Those who meet this requirement should also be aware that the DoD does not permit "co- sponsorship" (as defined in DoD 5500.07- R) absent additional high-level staffing and approval. In other words, the conference grant support identified in this BAA is NOT DoD sponsorship or co-sponsorship since AI2C is neither an organizer, nor provider, of any substantial logistical support for the conferences addressed in this section.

Conference Support: Conference support proposals should be submitted a minimum of six (6) months prior to the date of the conference. It is anticipated that support for conferences and symposia may take multiple forms including financial support for the meeting, travel support for speakers, or travel support to allow attendance and participation by advanced graduate students and junior faculty.

Technical Proposal Preparation: The technical portion of a proposal for support of conference or symposium should include:

a. A one page or less summary indicating the objectives of the project,
b. The topics to be covered,
c. The location and probable date(s) and why the conference is considered appropriate at the time specified,
d. An explanation of how the conference and requested support will relate to the research interests of the Army as identified in Section II. A of this BAA and how it will contribute to the enhancement and improvement of scientific, engineering, and/or educational in general and activities as outlined earlier in the research areas of this BAA,

a. The name of chairperson(s)/(PI)(s) and his/her biographical information,
b. If applicable, a list of proposed participants,
c. The methods of announcement or invitation,
d. A summary of how the results of the meeting will be disseminated, and
e. A signed cover page.

Cost Proposal Preparation: The cost portion of the proposal should show:

a. Total project conference costs by major cost elements.
b. Anticipated sources of conference income and amount from each.
c. Anticipated use of funds requested.
d. A signed budget.

Support for Federal Employee Attendance:
Funds provided cannot be used for payment to any federal government employee for support, subsistence, or services in connection with the proposed conference or symposium.

Cognizant POC: It is highly recommended that potential applicants contact the appropriate POC identified earlier in the research areas of this BAA for advice and assistance before preparation of a conference/symposia proposal.

10. Submission of Proposals

Proposals must be submitted through the Applicant's organizational office having responsibility for Government business relations. The proposal must contain the signature of an authorized official. All signatures must be that of an official(s) authorized to commit the organization in business and financial affairs. The cover of the proposal should be marked with the BAA Solicitation Number W519TC-24-S-AI2C along with the name of the research scientific area of interest(s) (see Section II. A of this BAA). Applicants are requested to provide their e-mail addresses upon submission of a proposal and also the name, address, and telephone number of their cognizant Defense Contract Audit Agency (DCAA) office, if known.

Proposals for Contracts, TIAs, OTs may be submitted via e-mail or online via Grants.gov. Proposals for Grants or cooperative agreements (assistance) MUST be submitted online via Grants.gov. Further, it is recommended a copy of any proposal submitted also be furnished to usarmy.pittsburgh-pa.futures-cmd.mbx.ai2c-baa-submissions@army.mil.

CONTRACT, TIA, OT PROPOSAL SUBMISSION:

Proposals for contracts may be e-mailed directly to usarmy.pittsburgh-pa.futures-cmd.mbx.ai2c-baa-submissions@army.mil. or submitted online via Grants.gov, http://Grants.gov. All submissions must include AI2C BAA W519TC-24-S-AI2C in the subject line.

All e-mailed proposals must contain the information outlined in Section III. A. 6

(Preparation of Proposals) including all the electronic forms.

All forms requiring signature must be completed, printed, signed, and scanned into a PDF document. All documents must be combined into a single PDF formatted file to be attached to the e-mail.

Proposals are to be provided in electronic MS Word or Adobe PDF format. The proposal must include the complete technical and cost volumes of the proposal. Electronic versions of the technical and cost volumes must be combined into one electronic file. The proposal must include the signature of the authorized institutional representative. If the electronic version does not include a signature from the appropriate representative of the Applicant, the Government Procurement Contracting Officer must be provided a signed and dated copy prior to award if selected.

GRANT AND COOPERATIVE AGREEMENT PROPOSAL SUBMISSION: (mandatory submission portal for grant and cooperative agreement proposals; optional submission portal for contract proposals). Please e-mail a courtesy copy of proposals to usarmy.pittsburgh-pa.futures-cmd.mbx.ai2c-baa-submissions@army.mil. A Grants.gov registration must be accomplished prior to application through this process.

Proposals requesting Assistance agreements must be submitted via Grants.gov; proposals requesting a Contract or OT may be submitted either via Grants.gov or email (instructions above).

Grants.gov Registration must be accomplished prior to application submission in Grants.gov.

Each organization that desires to submit applications via Grants.Gov must complete a one-time registration. There are several one-time actions your organization must complete in order to submit applications through Grants.gov (e.g., obtain a Unique Entity Identifier, register with the SAM, register with the credential provider, register with Grants.gov and obtain approval for an authorized organization representative (AOR) to submit applications on behalf of the organization). To register please see
http://www.grants.gov/web/grants/applicants/organization- registration.html

Please note the registration process for an organization or an Individual can take between three to five business days or as long as four weeks if all steps are not completed in a timely manner.

Questions relating to the registration process, system requirements, how an application form works, or the submittal process should be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

NOTE: All web links referenced in this section are subject to change by Grants.gov and may not be updated here.

Specific forms are required for submission of a proposal. The forms are contained in the

Application Package available at http://www.grants.gov under the **specific opportunity you are submitting under**. When viewing an opportunity, select the "Package" tab and then select "View." A Grant Application Package and Application Instructions are available for this BAA through the Grants.gov Apply portal under Funding Opportunity Number W519TC-24-S-AI2C. To apply, select "Apply" and then "Apply Now Using Workspace."

NOTE: Effective 31 December 2017, applicants must apply online at Grants.gov using the application Workspace. For access to complete instructions on how to apply for opportunities using Workspace refer to https://www.grants.gov/web/grants/applicants/workspace--overview.html.

The following documents are mandatory:
Application for Federal Assistance (R&R) (SF 424 (R&R)), and Attachments form.

The SF 424 (R&R) form is to be used as the cover page for all proposals submitted via Grants.gov. The SF 424 (R&R) must be fully completed. AOR usernames and passwords serve as "electronic signatures" when your organization submits applications through Grants.gov. By using the SF 424 (R&R), proposers are providing the certification required by 32 CFR Part 28 regarding lobbying. Block 11, "Descriptive Title of Applicant's Project," must reference the research topic area being addressed in the effort by identifying the specific paragraph from Section III.A of this BAA.

The Attachments form must contain the documents outlined in Section III.A.6 reparation of Proposals". All documents must be combined into separate and single PDF formatted files using the Table of Contents names. Include "W519TC-24-S-AI2C in the title so the proposal will be distinguished from other BAA submissions and upload each document to the mandatory Attachments form.

The applicant must include with its proposal submission the representations required by Section III.F.2.a.ii of this BAA. The representations must include applicant POC information and be signed by an authorized representative. Attach the representations document to an available field within the Attachments form.

NOTE: If the applicant's online SAM Representations and Certifications include its response to the representations, a hard copy representation is not required with proposal submission.

The Grants.gov User Guide at
https://www.grants.gov/help/html/help/index.htm#t=GetStarted%2FGetStarted.htm
will assist AORs in the application process. Remember that you must open and complete the Application for Federal Assistance (R&R) (SF 424 (R&R)) first, as this form will automatically populate data fields in other forms. If you encounter any problems, contact customer support at 1-800- 518-4726 or at support@grants.gov. If you forget your username or password, follow the instructions provided in the Credential Provider tutorial. Tutorials may be printed by right- clicking on the tutorial and selecting "Print".

As it is possible for Grants.gov to reject the proposal during this process, it is strongly recommended that proposals be uploaded at least two days before any established deadline in the BAA so that they will not be received late and be ineligible for award consideration. It is also recommended to start uploading proposals at least two days before the deadline to plan for any potential technical and/or input problems involving the applicant's own equipment.

Unique Entity Identifier and System for Award Management (SAM)

Each applicant (unless the applicant is an individual or Federal agency that is exempt from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the agency under 2 CFR 25.110(d)) is required to: (i) Be registered in the System for Award Management (SAM) https://www.sam.gov prior to submitting its application; (ii) provide a valid DUNS number in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by an agency. An award will not be made to an applicant until the applicant has complied with all applicable DUNS (call 1-866-705-5711 toll free or visit http://fedgov.dnb.com/webform) and SAM requirements.

Submission Dates and Times

Proposals will be accepted via the methods noted previously through **11:59 PM Eastern Daylight Time on 31 MAY 2029**.

It is the Applicant's responsibility to assure that a proposal submission is received by the respective date and time specified above. If your proposal submission is not received at the initial point of entry to the Government (received through web-based system, e-mail or post-marked if applicable) by the exact date and time specified above, it will be determined late and will not be evaluated.

Grants.gov: After a proposal is submitted to Grants.gov, the AOR will receive a series of three emails from Grants.gov. The first two emails will be received within 24 to 48 hours after submission. The first email will confirm time of receipt of the proposal by the Grants.gov system and the second will indicate that the proposal has either been successfully validated by the system prior to transmission to the grantor agency or has been rejected due to errors. A third email will be received once the grantor agency has confirmed receipt of the proposal. Reference the Grants.gov User Guide at https://www.grants.gov/help/html/help/index.htm#t=GetStarted%2FGetStarted.htm for information on how to track your application package.

Intergovernmental Review

Not Applicable

Funding Restrictions

There are no funding restrictions associated with this BAA.

Other Submission Requirements

a. Information to Be Requested from Successful Applicants: Applicants whose proposals are accepted for funding will be contacted before award to provide additional information required for award. The required information may include requests to clarifying budget explanations, representations, certifications, and some technical aspects.

b. Performance Work Statements (PWS). Prior to award the Contracting Officer, Agreements Officer, or Grants Officer may request that the contractor submit a PWS for the effort to be performed, which will be incorporated into the contract at the time of award.

(End of Section)

IV. Criteria for Selection

A. Application Review Information

1. Criteria

Proposals will initially be evaluated as to whether they constitute basic, applied, or advanced technology development research.

Basic research is defined as systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific application of processes or products in mind, whereas applied research provides a systematic expansion and application of knowledge to design and develop useful strategies, techniques, methods, tests, or measures that provide the means to meet a recognized and specific Army need. Advanced research includes the development of technologies, components, or prototypes that can be tested in field experiments and/or simulated environments. Projects in this category have a direct relevance to identified military needs. These projects should demonstrate the general military utility or cost reduction potential of technology in the areas of personnel selection, assignment, and retention; advanced data analytics and models applied to talent management; development of higher-order competencies for Soldiers and Leaders; holistic assessment of unit readiness; and team and unit mission effectiveness. These projects should be focused on a more direct operational benefit and, if successful, the technology should be available for transition.
Proposals received in response to this BAA will be evaluated by scientific peers internal, and possibly external to the Army, using the following criteria. AI2C may solicit input on technical aspects of proposals from non-Government consultants/experts who are strictly bound by non-disclosure requirements. Criterion (a) is most important; the other criteria are of equal

importance to one another. All evaluation factors/criteria other than cost, when combined, are significantly more important than cost or price:

a. Scientific and Technical Merit- The overall scientific and/or technical merits of the proposed research;
b. Potential Contribution- The potential contributions to Army mission and the extent to which the research effort will contribute to balancing the overall AI2C research program;
c. Qualifications/Capabilities – Proposed principal investigator and key personnel qualifications, capabilities, related experience, and techniques and also institutional resources and facilities;
d. Cost-Addresses the level of support requested. Will be considered for realism, affordability, and appropriateness, and may be grounds for rejection independent of evaluation on other factors.
e. The applicant's record of past performance.

NOTE: Cost sharing will not be considered in the evaluation.

2. Review and Selection Process

a. Upon receipt of a proposal, the AI2C staff will perform an initial review of its scientific merit and potential contribution to the Army mission, and also determine if funds are expected to be available for the effort. Proposals not considered having sufficient scientific merit or relevance to the Army's needs, or those in areas for which funds are not expected to be available, may not receive further review.

b. All proposals are treated as procurement sensitive and are disclosed only for the purpose of evaluation. Proposals not declined as a result of an initial review will be subject to a peer review by highly qualified government scientists. The applicant must indicate on the appropriate proposal form (Form 52 or 52A) any limitation to be placed on disclosure of information, e.g., potentially proprietary, or proprietary information, contained in the proposal.

c. Each proposal will be evaluated based on all the evaluation criteria of this BAA rather than against other proposals for research in the same general area.

d. Upon completion of an evaluation against the criteria, a proposal selected for possible award may be analyzed for the realism and reasonableness of costs. Proposal costs must be determined reasonable and realistic before the Government can make an award.

e. Consistent with FAR 35.016(e), “[t]he primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and fund availability.”

f. At the discretion of the Contracting Officer (or Grants/Agreements Officer), the Government reserves the right to conduct its own independent research on any information submitted by the Applicant, e.g., applicability of biographical sketch information to proposed technical information.

g. Army Research Risk Assessment. Each proposal with a recommendation to "select" in accordance with II.E.2.c above, whose costs have been determined to be reasonable and realistic in accordance with II.E.2.d above, for which funds are available, and where a grant or cooperative agreement will be the award instrument type, will be subject to an Army Research Risk Assessment prior to award.

i. The Army Research Risk Assessment Program. The Army Research Risk Assessment Program (ARRP) is an adaptive risk management security program applied to Army-funded research designed to help protect Army Science and Technology (S&T) by identifying possible vectors of undue foreign influence.

In order to identify and mitigate undue foreign influence as required by federal law and policy, the Army will perform a research risk assessment of each proposal selected based on the criteria above for consideration of a fundamental research grant or cooperative agreement award. ARRP risk assessments for these subject proposals will be developed for all proposed Covered Individuals, (also referred to as "Senior/Key personnel"). These risk assessments will be based on information disclosed in the Standard Form (SF) 424, any of its accompanying or referenced documents, publicly available information, and information contained in internal Army databases. Nationality or citizenship is not a factor in the risk assessment.
ARRP has a risk matrix which identifies risk factors and resulting risk ratings. The matrix generally looks at four factors, or risk areas: participation in foreign talent programs; denied entity list affiliation or association (see https://www.bis.doc.gov/index.php/the-denied-persons-list and https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/entity-list); funding sources to include conflict of interest or conflict of commitment, or funding from a strategic competitor; and foreign influence showing a pattern or history of affiliation, association, or collaboration with a foreign institution, person or entity from a U.S. strategic competitor. The matrix can be found at the following location:

- **Affiliation** is academic, professional, or institutional appointments or positions with a foreign government-connected entity, whether full-time, part-time, or voluntary (including adjunct, visiting, honorary, or lectures/visits) where direct monetary or non-monetary reward is involved.

- **Association** is academic, professional, or institutional appointments or positions with a foreign government-connected entity, whether full-time, part-time, or voluntary (including adjunct, visiting, honorary, or lectures/visits) where no direct monetary or non-monetary reward is involved.

- **Collaboration** is academic, professional, or institutional agreement to jointly work together with a foreign government- connected entity, whether full-time, part-time, or voluntarily, in an official or unofficial capacity. Co-authorship in research endeavors is an example of collaboration.

- **Strategic competitors** are those adversaries identified in the current Annual Threat Assessment report from Director of National Intelligence. The 2023 assessment was published on February 6, 2023 and can be found at https://www.dni.gov.

- **Conflict of Interest and Conflict of Commitment** are defined in NSPM-33 and in the CONOP as well as the AFC ARRP Policy memorandum.

- **Covered Individual** are the principal investigators (PIs) and other senior/key personnel seeking or receiving Federal R&D funding. Individuals participating in the process of allocating Federal funding: program officers, peer/merit reviewers, and members of advisory panels and committees; Researchers at Federal agency laboratories and facilities (i.e., intramural researchers, whether or not Federally employed), including government owned, contractor-operated laboratories and facilities; Any other individual who: contributes in a substantive, meaningful way to the scientific development or execution of a research and development project proposed to be carried out with a research and development award from a Federal research agency; is designated as a covered individual by the Federal research agency concerned.

ARRP risk ratings range from LOW to HIGH depending on the amount, type, and timing of foreign associations or affiliations that could constitute a foreign-influenced "Conflict of Interest" or "Conflict of Commitment," as defined by National Security Presidential Memorandum 33 (NSPM-33).

Once the research risk assessments are performed, the Army risk acceptance authority has several courses of action available for consideration. These courses of action are as follows:

Course of Action 1 - The Army risk acceptance authority may accept the risk rating that results from the risk assessment process and proceed with the award.

This typically happens with proposals with risk ratings of "LOW" but could also happen with the other risk ratings. In Course of Action 1, the applicant will not be required to do anything related to the risk assessment process or the assigned risk rating.

Course of Action 2 - The Army risk acceptance authority may accept the risk rating with some research protection requirements added to the grant or cooperative agreement award. This typically happens with proposals with risk ratings of "MODERATE" but could also happen with the other risk ratings. Also, typically, these added research protection requirements could include, but be limited to the following in the grant or cooperative agreement award:

- The University's Security Office shall provide the Principal Investigator and covered individual related to this award training on foreign talent recruitment programs and threat awareness and reporting requirements.

- The University shall disclose to the Army Research Laboratory Security Office and Grants Officer all international travel, i.e., all international travel completed as part of any university business, by the Principal Investigator and covered individual related to this award instrument prior to travel.

- The University shall report to the Army Research Laboratory Security Office and Grants Officer all inquiries by foreign operatives or suspected foreign operatives into research associated with the award.

- The University is encouraged to utilize students without potential conflicts of interest or conflicts of commitment as identified in U.S. National Security Presidential Memorandum (NSPM-33).

Under Course of Action 2, the applicant will be asked to sign the grant or cooperative agreement prior to award, confirming agreement to these added requirements. Should the applicant not agree to these added research protection requirements, the Army risk assessment authority may decide not to award.

Course of Action 3 - The Army risk acceptance authority is not willing to accept the risk assigned because of the assessment process. In this case, the applicant will be provided an opportunity to provide a risk mitigation plan. This typically happens with proposals with risk ratings of "HIGH" but could also happen with the other risk ratings. In Course of Action 3, the applicant will be informed of the risk rating assigned during the risk assessment process as well as the block(s) on the matrix where the review resulted in some type of finding that contributed to the assigned risk rating. Should the applicant choose to not submit a risk mitigation plan, the Army risk assessment authority may decide not to award. Should the applicant choose to submit a risk mitigation plan, the Army will review such plan. As a result of this review, the Army risk acceptance authority may then be willing to accept the risk assigned with the mitigation plan and

proceed with the award or the Army risk acceptance authority may not be willing to accept the risk and may decide not to award. Further, should the risk mitigation plan include proposal revisions that affect those aspects of the proposal included in the review or selection process under SECTION II.E.2.c, the original proposal evaluation will be reviewed and revised as appropriate based on the proposal revisions.

ii. Actions Required by Applicants.

(1) By submission of this application and authorized signature on the SF 424 (R&R) Form, the Applicant agrees to comply with the following requirements:

- To certify that each covered individual who is listed on the application has been made aware: (1) of all relevant disclosure requirements, including the requirements of 42 U.S.C. § 6605; and (2) that false representations may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802. See National Science and Technology Council Guidance for Implementing National Security Presidential Memorandum 33 (NSPM-33) on National Security Strategy for United States Government-Supported Research and Development (January 2022), at p. 7 (available at https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf).

- To establish and maintain an internal process or procedure to address foreign talent programs, conflicts of commitment, conflicts of interest, and research integrity.

- To exercise due diligence to identify Foreign Components or participation by Covered individual in Foreign Government Talent Recruitment Programs and agree to share such information with the Government upon request.

(2) With the application, the Applicant must provide a completed "Privacy Act Statement" consent form for each Covered Individual that is also signed by the Applicant as that Individual's Sponsor. The "Privacy Act Statement" form is included at SECTION II.D.2.d.xii (3) of this BAA.

(3) During the award period of performance:

- If, at any time, during performance of this award, the Recipient learns that its Covered Individual (including any sub-awardee personnel who receive this designation) are or are believed to be participants in a Foreign Government Talent Program or have Foreign Components with a strategic competitor or country with a history of targeting U.S. technology for unauthorized transfer, the recipient will notify the Government or Grants Officer within 5 business days of awareness.

- This disclosure must include specific information as to the personnel

involved and the nature of the situation and relationship. The Government will review this information and conduct any necessary fact-finding or discussion with the Recipient. The Government's determination on disclosure may include acceptance, mitigation, or termination of the award.

- Failure of the Recipient to reasonably exercise due diligence to discover or ensure that neither it nor any of its Covered Individuals involved in the subject award are participating in a Foreign Government Talent Program or have a Foreign Component with a strategic competitor or country with a history of targeting U.S. technology for unauthorized transfer may result in the Government exercising remedies in accordance with federal law and regulation.

- The provisions concerning this disclosure will be included in each award.

- The Recipient will be required to flow down this provision to all sub awardees who have personnel designated as Covered Individuals as a result of their involvement in the performance of the research.

iii. Actions Required by Covered Individuals.

Federal law requires that all current and pending research support, as defined by 42 U.S.C. §6605, must be disclosed at the time of proposal submission, for all covered individuals. The Government may require an updated disclosure during the performance of any research project selected for funding. The Government will require an updated disclosure whenever covered individuals are added or identified as performing under the funded project. See definition of "Covered Individuals" below.

Covered Individuals are also required to sign the "Privacy Act Statement" and provide such signed statement to the applicant for submission with the proposal.

Any decision to accept a proposal for funding under this announcement will include full reliance on the individual's statements. Failure to report fully and completely all sources of project support and outside positions and affiliations may be considered a material statement within the meaning of the False Claims Act, 31 U.S.C. 3729, and constitute a violation of Federal law.

iv. Privacy Act Compliance. All information collected and developed for the purpose of conducting ARRP risk assessments will be maintained in accordance with the following authorities:

- Office of Personnel Management (OPM) System of Records Notice (SORN) GOVT-1. This SORN governs information collected from federal grantees for the purpose of conducting a national security investigation or carrying out other lawful statutory, administrative, or investigative purposes of the agency, to the extent the information is

relevant and necessary to the requesting agency's decision.

- Department of the Army (DA) SORN A0381-20b-DAMI (Feb. 10, 2009, 74 F.R. 6596). This SORN applies to information contained in systems used by the Department of the Army to develop ARRP risk assessments.

- 32 C.F.R. Appendix A to Part 310, Paragraph N: DoD Blanket Routine Uses. Pursuant to this provision, a record from a system of records maintained by a Component may be disclosed as a routine use outside the DoD or the U.S. Government for the purpose of counterintelligence activities authorized by U.S. law or Executive order or for the purpose of enforcing laws that protect the national security of the United States.

v. Definitions

- Covered Individual. An individual who contributes in a substantive, meaningful way to the scientific development or execution of a research and development project proposed to be carried out with a research and development award from a Federal research agency; and is designated as a covered individual by the Federal research agency concerned. See 42 U.S.C. § 6605, Definitions. (For purposes of this BAA, "covered individuals" are all Covered individual.)

- Foreign Associations and Affiliations. Association is defined as collaboration, coordination or interrelation, professionally or personally, with a foreign government-connected entity where no direct monetary or non-monetary reward is involved. Affiliation is defined as collaboration, coordination, or interrelation, professionally or personally, with a foreign government-connected entity where direct monetary or non-monetary reward is involved.

- Foreign Government Talent Recruitment Programs. In general, these programs include any foreign-state-sponsored attempt to acquire U.S. scientific-funded research or technology through foreign government-run or funded recruitment programs that target scientists, engineers, academics, researchers, and entrepreneurs of all nationalities working and educated in the U.S. Distinguishing features of a Foreign Government Talent Recruitment Program may include:

    - Compensation, either monetary or in-kind, provided by the foreign state to the targeted individual in exchange for the individual transferring their knowledge and expertise to the foreign country. In-kind compensation may include honorific titles, career advancement opportunities, promised future compensation or other types of remuneration or compensation.

    - Recruitment, in this context, refers to the foreign-state-sponsor's active engagement in attracting the targeted individual to join the foreign-sponsored program and transfer their knowledge and expertise to the foreign state. The targeted individual may be employed and located in the U.S. or in the foreign state.

    - Contracts for participation in some programs that create conflicts of commitment

and/or conflicts of interest for researchers. These contracts include, but are not limited to, requirements to attribute awards, patents, and projects to the foreign institution, even if conducted under U.S. funding, to recruit or train other talent recruitment plan members, circumventing merit-based processes, and to replicate or transfer U.S.-funded work in another country.

- Many, but not all, of these programs aim to incentivize the targeted individual to physically relocate to the foreign state. Of particular concern are those programs that allow for continued employment at U.S. research facilities or receipt of U.S. Government research funding while concurrently receiving compensation from the foreign state.

- Foreign Government Talent Recruitment Programs do **not** include research agreements between the University and a foreign entity, unless that agreement includes provisions that create situations of concern addressed elsewhere in this section; agreements for the provision of goods or services by commercial vendors; or invitations to attend or present at conferences.

- Conflict of Interest. A situation in which an individual, or the individual's spouse or dependent children, has a financial interest or financial relationship that could directly and significantly affect the design, conduct, reporting, or funding of research.

- Conflict of Commitment. A situation in which an individual accepts or incurs conflicting obligations between or among multiple employers or other entities. Common conflicts of commitment involve conflicting commitments of time and effort, including obligations to dedicate time in excess of institutional or funding agency policies or commitments. Other types of conflicting obligations, including obligations to improperly share information with, or withhold information from, an employer or funding agency, can also threaten research security and integrity and are an element of a broader concept of conflicts of commitment.

- Foreign Component. Performance of any significant scientific element or segment of a program or project outside of the U.S., either by the University or by a researcher employed by a foreign organization, whether or not U.S. government funds are expended. Activities that would meet this definition include, but are not limited to: involvement of human subjects or animals; extensive foreign travel by University research program or project staff for the purpose of data collection, surveying, sampling, and similar activities; collaborations with investigators at a foreign site anticipated to result in co-authorship; use of facilities or instrumentation at a foreign site; receipt of financial support or resources from a foreign entity; or any activity of the University that may have an impact on U.S. foreign policy through involvement in the affairs or environment of a foreign country.

Strategic Competitor. A nation, or nation-state, that engages in diplomatic, economic or technological rivalry with the United States where the fundamental strategic interests of threat.

3. Recipient Qualification

B. Grant, Cooperative Agreement and OT Proposals

The Grants Officer is responsible for determining a recipient's qualification prior to award. In general, a Grants Officer will award grants or cooperative agreements only to qualified recipients that meet the standards at 32 CFR 22.415. To be qualified, a potential recipient must:

a. Have the management capability and adequate financial and technical resources, given those that would be made available through the grant or cooperative agreement, to execute the program of activities envisioned under the grant or cooperative agreement;
b. Have a satisfactory record of executing such programs or activities (if a prior recipient of an award);
c. Have a satisfactory record of integrity and business ethics; and
d. Be otherwise qualified and eligible to receive a grant or cooperative agreement under applicable laws and regulations.

Applicants are requested to provide information with proposal submissions to assist the Grants Officer's evaluation of recipient qualification.

Applicants are requested to provide information with proposal submissions to assist the Grants Officer's evaluation of recipient qualification.

ii. In accordance with Office of Management and Budget (OMB) guidance in parts 180 and 200 of Title 2, CFR, it is DoD policy that DoD Components must report and use integrity and performance information in the Federal Awardee Performance and Integrity Information System (FAPIIS), or any successor system designated by OMB, concerning grants, cooperative agreements, and OTs for research as follows:

If the total Federal share will be greater than the simplified acquisition threshold on any Federal award under a notice of funding opportunity (see 2 CFR 200.88 Simplified Acquisition Threshold):

> The Federal awarding agency, prior to making a federal award with a total amount of Federal share greater than the simplified acquisition threshold, will review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (formerly FAPIIS) (see 41 U.S.C. 2313);

An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM;

The Federal awarding agency will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR 200.205 Federal awarding agency review of risk posed by applicants.

C. Contract Proposals

Awards shall be to responsible prospective contractors only. See FAR 9.104-1 for a listing of the general standards against which an applicant will be assessed to determine responsibility. Applicants are requested to provide information with proposal submission to assist the Contracting Officer, Agreements Officer, or Grants Officer's evaluation of responsibility.

FAPIIS will be checked prior to making an award. The web address is: https://cpars.gov. The applicant representing the entity may comment in this system on any information about the entity that a federal government official entered. The information in FAPIIS will be used in making a judgment about the entity's integrity, business ethics, and record of performance under Federal awards that may affect the official's determination that the applicant is qualified to receive an award.

(End of Section)

V. Award Administration Information

A. Award Notices

Applicants whose proposals are recommended for award may be contacted by a Contract/Grant Specialist to discuss additional information required for award. This may include representations and certifications, revised budgets or budget explanations, certificate of current cost or pricing data, subcontracting plan for small businesses, and/or other information as applicable to the proposed award. The anticipated start date will be determined at that time.

The notification email must not be regarded as an authorization to commit or expend funds. The Government is not obligated to provide any funding until a Government Contracting

Officer, Agreements Officer, or Grants Officer signs an award document.

The award document signed by the Government Contracting/Agreements/Grants Officer is the official and authorizing award instrument. The authorizing award instrument, signed by the Contracting/Agreements/Grants Officer, will be emailed to the PI and Authorized Organization Representative (AOR).

1. Administrative and National Policy Requirements

Required Representations and Certifications

i. Contract Proposals:

(1) Representations and certifications shall be completed by successful applicants prior to award. FAR Online Representations and Certifications are to be completed through SAM at https://www.SAM.gov. As appropriate, DFARS and contract-specific certification packages will be provided to the contractor for completion prior to award.

(2) FAR 52.203-18, PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRE CERTAIN CONFIDENTIALITY AGREEMENTS OR STATEMENTS—REPRESENTATION (JAN 2017)

(a) Definition. As used in this provision--

"Internal confidentiality agreement or statement", "subcontract", and "subcontractor", are defined in the clause at 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.

(b) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions), Government agencies are not permitted to use funds appropriated (or otherwise made available) for contracts with an entity that requires employees or subcontractors of such entity seeking to report waste, fraud, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(c) The prohibition in paragraph (b) of this provision does not contravene requirements applicable to SF 312, (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a federal department or agency governing the nondisclosure of classified information.

(d) Representation. By submission of its offer, the applicant represents that it will not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(3) FAR 52.209-11, REPRESENTATION BY CORPORATIONS REGARDING DELINQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER FEDERAL LAW (FEB 2016)

a. Definitions. As used in this provision, "covered telecommunications equipment or services" and "reasonable inquiry" have the meaning provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.
b. Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered telecommunications equipment or services".
c. (1) Representation. The Offeror represents that it [] does, [] does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.
d. (2) After conducting a reasonable inquiry for purposes of this representation, the offeror represents that it [] does, [] does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services.

(4) FAR 52.209-11, REPRESENTATION BY CORPORATIONS REGARDING DELINQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER FEDERAL LAW (FEB 2016)

As required by sections 744 and 745 of Division E of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L 113-235), and similar provisions, if contained in subsequent appropriations acts, the Government will not enter into a contract with any corporation that--

Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless an agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or

Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

The applicant represents that—

It is [] is not [] a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

It is [] is not [] a corporation that was convicted of a felony criminal violation under a federal law within the preceding 24 months.

(5) FAR 52.204-2, SECURITY REQUIREMENTS (MAR 2021)

(6) DFARS 252.235-7004, PROTECTION OF HUMAN SUBJECTS (JUL 2009)

(7) DFARS 252.7002, ANIMAL WELFARE (DEC 2014)

(8) FAR 52.209-14, RESERVE OFFICER TRAINING CORPS AND MILITARY RECRUITING ON CAMPUS (NOV 2021)

(9) FAR 52.209-5, CERTIFICATION REGARDING RESPONSIBILITY MATTERS (AUG 2020)

ii. Grant and Cooperative Agreement Proposals:

(1) Grant awards greater than $100,000.00 require a certification of compliance with a national policy mandate concerning lobbying. Statutes and Government-wide regulations require the certification to be submitted prior to award. When submitting your grant through Grants.gov, by completing blocks 18 and 19 of the SF 424 (R&R) Form, the grant applicant is providing the certification on lobbying required by 32 CFR Part 28; otherwise, a copy signed by the AOR must be provided. Below is the required certification:

CERTIFICATION AT APPENDIX A TO 32 CFR PART 28 REGARDING LOBBYING: Certification for Contracts, Grants, Loans, and Cooperative Agreements the undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress

in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit SF-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000.00 and not more than $100,000.00 for each such failure.

(2) In accordance with Continuing Appropriations Act, 2017 (Pub. L. 114-223), or any other Act that extends to fiscal year (FY) 2023 funds the same prohibitions as contained in section 743, division E, title VII, of the Consolidated Appropriations Act, 2016 (Pub. L. 114-113), none of the funds appropriated or otherwise made available by that or any other Act may be made available for a grant or cooperative agreement with an entity that requires its employees or contractors seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting those employees or contractors from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive the information.

PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRED CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS – REPRESENTATION

Agreement with the representation below will be affirmed by checking the “I agree” box in block 17 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation reads as follows:

By submission of its proposal or application, the applicant represents that it does not require any of its employees, contractors, or subrecipients seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting those employees, contractors, subrecipients from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

NOTE that: Section 743 states that it does not contravene requirements applicable to SF 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(3) Recipients are required to submit the following representation with the application package IAW the instructions at Section D of this BAA:

REPRESENTATIONS UNDER DOD ASSISTANCE AGREEMENTS: APPROPRIATIONS PROVISIONS ON TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant is () is not () a "Corporation" meaning any entity, including any institution of higher education, other nonprofit organization, or for-profit entity that has filed articles of incorporation.

If the applicant is a "Corporation" please complete the following representations:

(a) The applicant represents that it is ( ) is not ( ) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(b) The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

NOTE: If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the agency suspension and debarment official (SDO) has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore should provide information about its tax liability or conviction to the agency's SDO as soon as it can do so, to facilitate completion of the required considerations before award decisions are made.

PROHIBITION ON CONTRACTING WITH ENTITIES USING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or 105 renew a contract) to procure or obtain the equipment, services, or systems prohibited systems as identified in section 889 of the NDAA for FY 2019. For more information on how this applies to all grant recipients and sub-recipients after August 13, 2020, please see DoD Research General Terms and Conditions (SEP 2021) NP Article IV. Other national policy requirements, paragraph 18.

2. Policy Requirements

The following list provides notable national policy requirements that may be applicable to an award.
NOTE: The following is not an all-inclusive list of policy requirements. For assistance awards, refer to the DoD Research and Development General Terms and Conditions at http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-termsconditions.aspx for additional national policy requirements that may apply. For contract awards, appropriate Federal Acquisition Regulation (FAR) and/or Defense Federal Acquisition Regulation Supplement (DFARS) clauses will be added to award documents.

PROTECTION OF HUMAN SUBJECTS

For Assistance Instruments:

(a) The recipient must protect the rights and welfare of individuals who participate as human subjects in research under this award and comply fully with the requirements at 32 CFR part 219, Department of Defense Instruction (DoDI) 3216.02, 10 U.S.C. 980, the National Policy Requirements Concerning Live Organisms Terms and Conditions (Section A.1., Human Subjects, at 81 Federal Register 78380, Appendix C to Part 1122), and when applicable, Food and Drug Administration (FDA) policies and regulations.

(b) The recipient must not begin performance of research involving human subjects, also known as human subjects research (HSR), that is covered under 32 CFR part 219, or that meets exemption criteria under 32 CFR 219.104(d), or expend funding on such effort, until the recipient receives a formal notification of approval from the cognizant DoD Human Research Protection Official (HRPO). Approval to perform HSR under this award is received after the HRPO has performed a review of the recipient's documentation of planned HSR activities and has officially furnished a concurrence

with the recipient's determination as presented in the documentation.

(c) In order for the HRPO to accomplish this concurrence review, the recipient must provide sufficient documentation to enable his or her assessment as follows:

(i) If the HSR meets one or more exemption criteria under 32 CFR 219.104(d), the documentation must include a citation of the exemption category/ies under 32 CFR 219.104(d) and a rationale statement.

(ii) If the recipient's activity is determined as "non-exempt research involving human subjects," the documentation must include:

Documentation of Assurance of Compliance (a written assurance that an institution will comply with requirements of 32 CFR Part 219, as well as the terms of the assurance) appropriate for the scope of work or program plan; and

Institutional Review Board (IRB) approval, as well as all documentation reviewed by the IRB to make their determination.

(d) The HRPO retains final judgment on what activities constitute HSR, whether an exempt category applies, whether the risk determination is appropriate, and whether the planned HSR activities comply with the requirements in paragraph (a) of this section.

(e) The recipient must notify the Grants Officer/Agreements Officer immediately of any suspensions or terminations of the Assurance of Compliance.

(f) DoD staff, consultants, and advisory groups may independently review and inspect the recipient's research and research procedures involving human subjects and based on such findings, DoD may prohibit research that presents unacceptable hazards or otherwise fails to comply with DoD requirements.

(g) Definitions for terms used in this section are found in DoDI 3216.02.

(1) For Contracts: DFARS clause 252.235-7004 is applicable to this solicitation and will be included in its entirety in any resultant contract award that supports research that includes or may include HSR.

ANIMAL USE

Assistance Instruments:

(a) Prior to initiating any animal work under the award, the recipient must:

Register the recipient's research, development, test, and evaluation or training facility with the Secretary of Agriculture in accordance with 7 U.S.C. 2136 and 9 CFR section 2.30, unless otherwise exempt from this requirement by meeting the conditions in 7 U.S.C. 2136 and 9 CFR parts 1-4 for the duration of the activity.

Have the recipient's proposed animal use approved in accordance with DoDI 3216.01, Use of Animals in DoD Programs by a DoD Component Headquarters Oversight Office.

Furnish evidence of such registration and approval to the grants officer.

(b) The recipient must make the animals on which the research is being conducted, and all premises, facilities, vehicles, equipment, and records that support animal care and use available during business hours and at other times mutually agreeable to the recipient, the United States Department of Agriculture Office of Animal and Plant Health Inspection Service (USDA/APHIS) representative, personnel representing the DoD component oversight offices, as well as the grants officer, to ascertain that the recipient is compliant with 7 U.S.C. 2131 et seq., 9 CFR parts 1-4, and DoDI 3216.01.

(c) The recipient's care and use of animals must conform with the pertinent laws of the United States, regulations of the Department of Agriculture, and regulations, policies, and procedures of the DoD (see 7 U.S.C. 2131 et seq., 9 CFR parts 1-4, and DoDI 3216.01).

(d) The recipient must acquire animals in accordance with DoDI 3216.01.

Contracts: The appropriate clauses shall be added to the award.

BIOLOGICAL SAFETY PROGRAM REQUIREMENTS

Assistance Instruments and Contracts:

Awards may be subject to biological safety Program requirements IAW:

(a) Army Regulation (AR) 385-10, Chapter 20
(b) Department of Army (DA) PAM 385-69
(c) DoD Manual 6055.18-M, Enclosure 4, Section 13
(d) DoD Executive Agent List (see item 3)
(e)

MILITARY RECRUITING

Assistance Instruments: This is to notify potential applicants that each grant or cooperative

agreement awarded under this announcement to an institution of higher education must include the following term and condition:

(a) As a condition for receiving funds available to the DoD under this award, you agree that you are not an institution of higher education (as defined in 32 CFR part 216) that has a policy or practice that either prohibits, or in effect prevents:

(i) The Secretary of a Military Department from maintaining, establishing, or operating a unit of the Senior Reserve Officers Training Corps (ROTC)—-in accordance with 10 U.S.C. 654 and other applicable Federal laws—-at that institution (or any sub-element of that institution);

(ii) Any student at that institution (or any sub-element of that institution) from enrolling in a unit of the Senior ROTC at another institution of higher education.

(iii) The Secretary of a Military Department or Secretary of Homeland Security from gaining access to campuses, or access to students (who are 17 years of age or older) on campuses, for purposes of military recruiting in a manner that is at least equal in quality and scope to the access to campuses and to students that is provided to any other employer; or

(iv) Access by military recruiters for purposes of military recruiting to the names of students (who are 17 years of age or older and enrolled at that institution or any sub-element of that institution); their addresses, telephone listings, dates and places of birth, levels of education, academic majors, and degrees received; and the most recent educational institutions in which they were enrolled.

If you are determined, using the procedures in 32 CFR part 216, to be such an institution of higher education during the period of performance of this award, we:

Will cease all payments to you of DoD funds under this award and all other DoD grants and cooperative agreements; and May suspend or terminate those awards unilaterally for material failure to comply with the award terms and conditions.

SUBCONTRACTING

Assistance Instruments: N/A

a. Contracts: 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 (SDB) concerns to be considered fairly as subcontractors. All other than U.S. small businesses proposing contracts expected to exceed $750,000.00 and that have subcontracting possibilities are required to submit a subcontracting plan IAW FAR 19.702(a) and shall do so with their proposal.

Subcontracting plans are determined to be acceptable or unacceptable based on the criteria established at FAR 19.705-4, DFARS 219.705-4, and AFARS 5119.705-4. Goals are established on an individual contract basis and should result in realistic, challenging and attainable goals that, to the greatest extent possible, maximize small business participation in subcontracting for Small Business, SDB, Woman-Owned Small Business (WOSB), Economically-Disadvantaged Women-Owned Small Business (EDWOSB), Service-Disabled Veteran-Owned Small Business (SDVOSB), Veteran-Owned Small Business (VOSB), and Historically Underutilized Business Zone (HUBZone) Small Business consistent with applicants' make-or-buy policy, the pool of and availability of qualified and capable small business subcontractors, their performance on subcontracts, and existing relationships with suppliers.

Subcontracting goals should result in efficient contract performance in terms of cost, schedule, and performance and should not result in increased costs to the Government or undue administrative burden to the prime contractor. For reference, DoD Small Business Subcontracting Goals may be found at: http://www.acq.osd.mil/osbp/statistics/sbProgramGoals.shtml.

EXPORT CONTROL LAWS

Assistance Instruments: N/A

a. Contracts: Applicants should be aware of current export control laws and are responsible for ensuring compliance with all International Traffic in Arms Regulation (ITAR) (22 CFR 120 et. Seq.) requirements, as applicable. In some cases, developmental items funded by the Department of Defense are now included on the United States Munition List (USML) and are therefore subject to ITAR jurisdiction. Applicants should address in their proposals whether ITAR restrictions apply or do not apply, such as in the case when research products would have both civil and military application, to the work they are proposing to perform for the Department of Defense. The USML is available online at http://www.ecfr.gov/cgi-bin/textidx?node=pt22.1.121. Additional information regarding the President's Export Control Reform Initiative can be found at http://export.gov/ecr/index.asp.

DRUG-FREE WORKPLACE

Assistance Instruments: The recipient must comply with drug-free workplace requirements in Subpart B of 2 CFR part 26, which is the DoD implementation of 41 U.S.C. chapter 81, "Drug-Free Workplace."

a. Contracts: The appropriate FAR/DFARS clause(s) shall be added to the award.

DEBARMENT AND SUSPENSION

a. Assistance Instruments: The recipient must comply with requirements regarding

debarment and suspension in Subpart C of 2 CFR part 180, as adopted by DoD at 2 CFR part 1125. This includes requirements concerning the recipient's principals under an award, as well as requirements concerning the recipient's procurement transactions and subawards that are implemented in DoD Research and Development General Terms and Conditions PROC Articles I through III and SUB Article II.

b. Contracts: The appropriate FAR/DFARS clause(s) shall be added to the award.

SUBAWARDS AND EXECUTIVE COMPENSATION

a. Assistance Instruments: The recipient must report information about subawards, and executive compensation as specified in the award term in Appendix A to 2 CFR part 170, "Reporting subaward and executive compensation information," modified as follows:

   i. To accommodate any future designation of a different Government wide Web site for reporting subaward information, the Web site "http://www.fsrs.gov" cited in paragraphs a.2.i. and a.3 of the award provision is replaced by the phrase "http://www.fsrs.gov or successor OMB-designated Web site for reporting subaward information";

   ii. To accommodate any future designation of a different Government wide Web site for reporting executive compensation information, the Web site "http://www.sam.gov" cited in paragraph b.2.i. of the award provision is replaced by the phrase "https://www.sam.gov or successor OMB-designated Web site for reporting information on total compensation"; and

   iii. The reference to "Sec. .210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations" in paragraph e.3.ii of the award term is replaced by "2 CFR 200.330, as implemented in DoD Research and Development General Terms and Conditions SUB Article I of this award."

b. Contracts: The appropriate FAR/DFARS clause(s) shall be added to the award.

CONFLICT OF INTEREST/CONFLICT OF COMMITMENT REVIEW

This announcement requires all current and pending research support, as defined by Section 223 of the FY21 National Defense Authorization Act, must be disclosed at the time of proposal submission, for all covered individuals. Such disclosure will be updated annually during the performance of any research project selected for funding, and whenever covered individuals are added or identified as performing under the funded project. Covered Individuals are those who are listed as key personnel on proposals, including but not restricted to, the principal investigator or co-principal investigator.

Any decision to accept a proposal for funding under this announcement will include full reliance on the applicant's statements. Failure to report fully and completely all sources of project support and outside positions and affiliations may be considered a materials statement within the meaning of the False Claims Act, 31 U.S.C. 3729, and constitute a violation of Federal law.

AI2C may conduct a pre-award conflict of interest/conflict of commitment review, as defined in the National Security Presidential Memorandum- 33, of any proposal selected for funding.

Applicants are advised that any significant conflict of interest/conflict of commitment identified may be a basis for the rejection of an otherwise awardable proposal.

3. Reporting

a. Additional reports including number and types will be specified in the award document but will include as a minimum monthly financial status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed upon before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. A final report that summarizes the project and tasks will be required at the conclusion of the performance period for the award.

b. Army Manpower Contractor Reporting: For Contracts Only. The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor will report ALL contractor manpower (including subcontractor manpower) required for performance of this contract. The contractor is required to completely fill in all the information in the format using the following web address: https://cmra.army.mil/. The required information includes:

(1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative;
(2) Contract number, including task and delivery order number;
(3) Beginning and ending dates covered by reporting period; Contractor name, address, phone number, email address, identity of contractor employee entering data;
(4) Estimated direct labor hours (including sub-contractors);
(5) Estimated direct labor dollars paid this reporting period (including sub-contractors);
(6) Total payments (including sub-contractors);
(7) Predominate Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different);
(8) Estimated data collection cost;
(9) Organizational title associated with the Unit Identification Code (UIC)

for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information);
(10) Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website);
(11) Presence of deployment or contingency contract language; and
(12) Number of contractor and sub-contractor employees deployed in theater this reporting period (by country).

As part of its submission, the contractor will also provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending 30 September of each government FY and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's systems to the secure web site without the need for separate data entries for each required data element at the web site.
The specific formats for the XML direct transfer may be downloaded from the web site.

c. If the total Federal share exceeds $500,000 on any Federal award under a notice of funding opportunity, the post-award reporting requirements reflected in Appendix XII to 2 CFR 200 will be included in the award document. This requirement also applies to modifications of awards that: 1) increase the scope of the award, 2) are issued on or after January 1, 2016, and 3) increase the federal share of the award's total value to an amount that exceeds $500,000.

(End of Section)

VI. Other Information

Below are two (2) samples of the cost proposal informational requirements for a procurement contract or Grants, cooperative agreements, and TIAs.

A. CONTRACT PROPOSALS SAMPLES:

Cover sheet to include:
(1) BAA number;
(2) Technical area;
(3) Lead Organization submitting proposal;
(4) Type of business, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", OR "OTHER NON-PROFIT";

(5) Contractor's reference number (if any);
(6) Other team members (if applicable) and type of business for each;
(7) Proposal title;
(8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
(9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available);
(10) Award instrument requested: cost-plus-fixed-free (CPFF), cost-contract—no fee, cost sharing contract – no fee, or other type of procurement contract (specify).
(11) Place(s) and period(s) of performance;
(12) Total proposed cost separated by basic award and option(s) (if any);
(13) Name, address, and telephone number of the proposer's cognizant Defense Contract Management Agency (DCMA) administration office (if known);
(14) Name, address, and telephone number of the proposer's cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
(15) Date proposal was prepared;
(16) DUNS number;
(17) TIN number; and
(18) CAGE Code;
(19) Subcontractor information; and
(20) Proposal validity period
(21) Any Forward Pricing Rate Agreement, other such approved rate information, or such other documentation that may assist in expediting negotiations (if available)

Reasoning for Submitting a Strong Cost Proposal

The ultimate responsibility of the Contracting Officer is to ensure that all prices/costs offered in a proposal are fair and reasonable before contract award [FAR 15.4]. To establish the reasonableness of the offered prices/costs, the Contracting Officer may ask an Applicant to provide various supporting documentation that assists in this determination. The Applicant's ability to be responsive to the Contracting Officer's requests can expedite the award process. As specified in Section 808 of Public Law 105-261, an Applicant who does not comply with a requirement to submit information for a contract or subcontract in accordance with paragraph (a)(1) of FAR 15.403-3 may be ineligible for award.

DCAA-Accepted Accounting System:

a. Before a contract can be awarded, the Contracting Officer must confirm that the Applicant has a Defense Contract Audit Agency (DCAA)-accepted accounting system in place for accumulating and billing costs under Government contracts [FAR 53.209-1(f)]. If the Applicant has DCAA correspondence which documents the acceptance of their accounting system, this should be provided to the Contracting Officer (i.e., attached or referenced in the proposal). Otherwise, the Contracting Officer will submit an inquiry directly to the appropriate DCAA office and request a review of the Applicant's accounting system.

b. If an Applicant does not have a DCAA-accepted accounting system in place, the DCAA review process can take several months depending upon the availability of the DCAA auditors and the Applicant's internal processes. This will cause a delay in contract award.

c. For more information about cost proposals and accounting standards, view the link titled "Information for Contractors" on the main menu on their website.

Field Pricing Assistance:

During the pre-award cost audit process, the Contracting Officer will solicit support from DCAA to determine commerciality and price reasonableness of the proposal [FAR 15.404-2]. Any proprietary information or reports obtained from DCAA field audits will be appropriately identified and protected within the Government.

1. Sample Cost Proposal – "Piece by Piece":

   a. To help guide Applicant through the pre-award cost audit process, a sample cost volume is detailed below. This sample also allows the Applicant to see exactly what the Government is looking for; therefore, all cost and pricing back-up data can be provided to the Government in the first cost proposal submission. Review each cost element within the proposal and take note of the types of documentation that the Contracting Officer will require from the Applicant.

   b. Direct Labor: The first cost element included in the cost proposal is Direct Labor. The Department of Defense (DoD) requires each proposed employee to be listed by name and labor category.

2. Direct Labor as proposed by our sample Applicant:

Direct		Year 1			Year 2		
Labor							
Employee Name	Labor Category	Direct Hourly Rate	Hours	Total Direct Labor	Direct Hourly Rate	Hours	Total Direct Labor
Smith	Program Manger	$55.00	720	$39,600.00	$56.65	720	$40,788.00
Andrew	Senior Engineer	$40.00	672	$26,880.00	$41.20	672	$27,686.40
Thomas	Principal Engineer	$50.00	512	$25,600.00	$51.50	512	$26,368.00
Porter	Entry Level Engineer	$10.00	400	$4,000.00	$10.30	400	$4,120.00

Bean	Project Administrator	$25.00	48	$1,200.00	$25.75	48	$1,236.00
				$97,280.00			**$100,198.40**

a. For this cost element, the Contracting Officer requires the applicant to provide adequate documentation in order to determine that the labor rate for each employee/labor category is fair and reasonable. The documentation must explain how these labor rates were derived. For example, if the rates are DCAA-approved labor rates, provide the Contracting Officer with copies of the DCAA documents stating the approval. This is the most acceptable means of documentation to determine the rates fair and reasonable. Other types of supporting documentation may include General Service Administration (GSA) contract price lists, actual payroll journals, or Salary.com research. If an employee listed in a cost proposal is not a current employee (maybe a new employee, or one contingent upon the award of this contract), a copy of the offer letter stating the hourly rate, signed and accepted by the employee, may be provided as adequate documentation.

b. Sometimes the hourly rates listed in a proposal are derived through subjective processes, i.e., blending of multiple employees in one labor category, or averaged over the course of the year to include scheduled payroll increases, etc. These situations should be cleA-AITFy documented for the Contracting Officer.

c. Another cost element in Direct Labor is labor escalation, or the increase in labor rates from year to year. In the example above, the proposed labor escalation is 3% (ex., Andy Smith's direct labor rate increased by 3% from $55.00/hour in Year 1 to $56.65/hour in Year 2). Often times, an applicant may not propose escalation on labor rates during a 24-month period. Whatever the proposed escalation rate is, please be prepared to explain why it is fair and reasonable. For example, a sufficient explanation for our sample escalation rate would be "The Government's General Schedule Increase and Locality Pay for the same time period (name FY) in the same location (name location) was published as 3.5%; therefore a 3% increase is fair and reasonable". ii. Other Direct Costs (ODCs): This section of the cost proposal includes all other directly related costs required in support of the effort (i.e., materials, subcontractors, consultants, travel, etc.). Any cost element that includes various items must be detailed in a cost breakdown.

3. Direct Material Costs

This subsection of the cost proposal will include any special tooling, test equipment, and material costs necessary to perform the project. Items included in this section must be carefully reviewed relative to need and appropriateness for the work proposed, and must, in the opinion of the Contracting Officer, be advantageous to the Government and directly related to the specific topic.

The Contracting Officer will require adequate documentation from the applicant to determine

the cost reasonableness for each material cost proposed. The following methods are ways in which the Contracting Officer can determine this [FAR 15.403-1]:

a. Adequate Price Competition. A price is based on adequate price competition when the applicant solicits and receives quotes from two or more responsible vendors for the same or similar items or services. Based on these quotes, the applicant selects the vendor who represents the best value to the Government. The applicant will be required to provide to the Contracting Officer copies of all vendor quotes received.

NOTE: Price competition is not required for items at or below the micro-purchase threshold ($3,000) [FAR 15.403-1]. If an item's unit cost is less than or equal to $3,000, price competition is not necessary. However, if an item's total cost over the period of performance (unit cost x quantity) is higher than $3,000, two or more quotes must be obtained by the applicant.

b. Commercial Prices. Commercial prices are those published on current price lists, catalogs, or market prices. This includes vendors who have prices published on a GSA schedule contract. The applicant will be required to provide copies of such price lists to the Contracting Officer.

c. Prices set by law or regulation. If a price is mandated by the Government (i.e., pronouncements in the form of periodic rulings, reviews, or similar actions of a governmental body, or embodied in the laws) that is sufficient to set a price.

4. Direct Material costs included in our sample proposal

DIRECT MATERIAL COSTS	YEAR 1	YEAR 2
Raw Materials	$35,000.00	$12,000.00
Computer for experiments	$4,215.00	$0.00
Cable (item #12-3657, 300 ft.)	$1,275.00	$0.00
Software	$1,825.00	$1,825.00
Subtotal Direct Materials Costs	$42,315.00	$13,825.00

"Raw Materials": This is a generic label used to group many material items into one cost item within the proposal. The Contracting Officer will require a detailed breakout of all the items that make up this cost. For each separate item over $3,000 (total for Year 1 + Year 2), the applicant must be able to provide either competitive quotes received or show that published pricing was used.

"Computer for experiments": This item is most likely a grouping of several components that make up one system. The Contracting Officer will require a detailed breakout of all the items that make up this cost. For each separate item over $3,000 (total for Year 1 + Year 2), the applicant must be able to provide either competitive quotes received or show that published pricing was used.

"Cable": Since this item is under the simplified acquisition threshold of $3,000, competitive quotes or published pricing are not required. Simply provide documentation to show the Contracting Officer where this price came from.

"Software": This cost item could include either one software product, or multiple products. If this includes a price for multiple items, please provide the detailed cost breakdown.
NOTE: The price for Year 1 ($1,825) is below the simplified acquisition threshold; however, in total (Year 1
+ Year 2) the price is over $3,000, so competitive quotes or published pricing documentation must be provided.

Due to the specialized types of products and services necessary to perform these projects, it may not always be possible to obtain competitive quotes from more than one reliable source. Each cost element over the simplified acquisition threshold ($3,000) must be substantiated. There is always an explanation for how the cost of an item was derived; document how you came up with that price.

When it is not possible for an applicant to obtain a vendor price through competitive quotes or published price lists, the Contracting Officer may accept other methods to determine cost reasonableness. Below are some examples of other documentation, which the Contracting Officer may accept to substantiate costs:

(a) Evidence that a vendor/supplier charged another applicant a similar price for similar services. Has the vendor charged someone else for the same product? Two (2) to three (3) invoices from that vendor to different customers may be used as evidence.

(b) Previous contract prices. Has the applicant charged the Government a similar price under another Government contract for similar services? If the Government has already paid a certain price for services, then that price may already be considered fair and reasonable. Provide the contract number, and billing rates for reference.

(c) DCAA approved. Has DCAA already accepted or verified specific cost items included in your proposal? Provide a copy of DCAA correspondence that addressed these costs.

(d) ODCs: Below is the remaining ODC portion of our proposal including equipment, subcontractors, consultants, and travel. Assume in this scenario that competitive quotes or catalog prices were not available for these items:

ODCs	YEAR 1	YEAR 2
Equipment Rental for Analysis	$5,500.00	$5,600.00
Subcontractor – Widget, Inc.	$25,000.00	$0.00
Consultant: John Bowers	$0.00	$12,000.00
Travel	$1,250.00	$1,250.00
Subtotal: ODCs	$31,750.00	$18,850.00

"Equipment Rental for Analysis": The applicant explains that the Year 1 cost of $5,500 is based upon 250 hours of equipment rental at an hourly rate of $22.00/hr. One (1) invoice from the vendor charging another vendor the same price for the same service is provided to the Contracting Officer as evidence. Since this cost is over the simplified acquisition threshold, further documentation to determine cost reasonableness is required. The applicant is able to furnish another invoice charging a second vendor the same price for the same service.

"Subcontractor – Widget, Inc.": The applicant provides a copy of the subcontractor quote to the Contracting Officer in support of the $25,000 cost. This subcontractor quote must include sufficient detailed information (equivalent to the data included in the prime's proposal to the Government), so that the Contracting Officer can make a determination of cost reasonableness.

As stated in Section 3.5(c)(6) of the DoD Cost Proposal guidance, "All subcontractor costs and consultant costs must be detailed at the same level as prime contractor costs

in regard to labor, travel, equipment, etc. Provide detailed substantiation of subcontractor costs in your cost proposal."

> In accordance with FAR 15.404-3, "the Contracting Officer is responsible for the determination of price reasonableness for the prime contract, including subcontracting costs". This means that the subcontractor's quote/proposal may be subject to the same scrutiny by the Contracting Officer as the cost proposal submitted by the prime. The Contracting Officer will need to determine whether the subcontractor has an accepted purchasing system in place and/or conduct appropriate cost or price analyses to establish the reasonableness of proposed subcontract prices. Due to the proprietary nature of cost data, the subcontractor may choose to submit their pricing information directly to the Contracting Officer and not through the prime. This is understood and encouraged.

(e) When a subcontractor is selected to provide support under the prime contract due to its specialized experience, the Contracting Officer may request sole source justification from the applicant.

"Consultant – John Bowers": The applicant shall provide a copy of the consultant's quote to the Contracting Officer as evidence. In this example, the consultant will be charging an hourly rate of $125 an hour for 96 hours of support. The applicant indicates to the Contracting Officer that this particular consultant was used on a previous contract with the Government (provide contract number) and will be charging the same rate. A copy of the consultant's invoice to the applicant under the prior contract is available as supporting evidence. Since the Government has paid this price for the same services in the past, determination has already been made that the price is fair. "Travel": The Contracting Officer will require a detailed cost breakdown for travel expenses to determine whether the total cost is reasonable based on Government per diem and mileage rates. This breakdown shall include the number of trips, the destinations, and the number of travelers. It will also need to include the estimated airfare per round trip, estimated car rental, lodging rate per trip, tax on lodging, and per diem rate per trip. The lodging and per diem rates must comply with the Joint Travel Regulations. Please see the following website to determine the appropriate lodging and per diem rates: http://www.defensetravel.dod.mil. Additionally, the applicant must provide why the airfare is fair and reasonable as well. Sufficient back up for both airfare and car rental would include print outs of online research at the various travel search engines (Expedia, Travelocity, etc.), documenting the prices for airfare and car rentals are fair and reasonable.

5. Travel portion Sample:

TRAVEL	Unit	Trips	Travelers	Nights	Days	Unit Cost	Total Travel
Airfare	roundtrip	1	1			$996.00	$996.00
Lodging	day	1	1	1		$75.00	$75.00
Tax on Lodging (12%)	day	1	1	1		$9.00	$9.00
Per Diem	day	1	1		2	$44.00	$88.00
Automobile Rental	day	1	1		2	$41.00	$82.00
Subtotal Travel							$1,250.00

6. Indirect Costs:

Indirect costs include elements such as fringe benefits, general and administrative (G&A), overhead, and material handling costs. The applicant shall indicate in the cost proposal both the indirect rates (as a percentage) as well as how those rates are allocated to the costs in the proposal.

Below is the indirect portion of our sample proposal:

INDIRECTS	YEAR 1	YEAR 2
Subtotal Direct Labor (DL):	$97,280.00	$100,198.40
Fringe Benefits, if not included in Overhead, rate (15.0000 %) X DL =	$14,592.00	$15,029.76
Labor Overhead (rate 45.0000 %) X (DL + Fringe) =	$50,342.40	$51,852.67

Total Direct Labor (TDL):	$162,214.40	$167,080.83

In this example, the applicant includes a fringe benefit rate of 15.00% that it allocated to the direct labor costs. The applicant also proposes a labor overhead rate of 45.00% that is allocated to the direct labor costs plus the fringe benefits.

All indirect rates and the allocation methods of those rates must be verified by the Contracting Officer. In most cases, DCAA documentation supporting the indirect rates and allocation methods can be obtained through a DCAA field audit or proposal review. Many applicants have already completed such reviews and have this documentation readily available. If an applicant is unable to participate in a DCAA review to substantiate indirect rates, the Contracting Officer may request other accounting data from the applicant to make a determination.

iii. FCCM: Cost of money is an imputed cost that is not a form of interest on borrowings (see FAR 31.205-20). FCCM is an "incurred cost" for cost-reimbursement purposes under applicable cost- reimbursement contracts and for progress payment purposes under fixed-price contracts. It refers to
(1) FCCM (48 CFR 9904.414) and (2) cost of money as an element of the cost of capital assets under construction (48 CFR 9904.417). If cost of money is proposed in accordance with FAR 31.205-10, a DD Form 1861 is required to be completed and submitted with the applicant's proposal.

iv. Fee/Profit: The proposed fee percentage will be analyzed in accordance with DFARS 215.404, the Weighted Guidelines Method.

v. Subcontracting Plan: If the total amount of the proposal exceeds $700,000 and the applicant is a large business or an institute of higher education (other than HBCU/MI) and the resultant award is a contract, the applicant shall be prepared to submit a subcontracting plan for small business and SDB concerns. A mutually agreeable plan will be included in and made a part of the contract (see Section II.F.2.b.v).

(End of Section)

Acronyms

ACC (APG) RTP – Army Contracting Command (Aberdeen Proving Ground) Research Triangle Park Division
AOR – Authorized Organization Representative
ARI – Army Research Institute for the Behavioral and Social Sciences ARL – Army Research Laboratory
BAA – Broad Agency Announcement
CAGE – Commercial and Government Entity
CFDA– Catalogue of Federal Domestic Assistance
CFR – Code of Federal Regulations
COM – Cost of Money
CONUS – Continental United States
CPFF – Cost Plus Fixed Fee
D&B – Dun and Bradstreet, Inc.
DCAA – Defense Contract Audit Agency
DCMA – Defense Contract Management Agency
DFARS – Defense Federal Acquisition Regulation Supplement DLSC – Defense Logistics Service Center
DoD – Department of Defense
DoDI– Department of Defense Instruction
DUNS – Data Universal Numbering System
EIN – Employer Identification Number
FAPIIS – Federal Awardee Performance and Integrity Information System FAR – Federal Acquisition Regulation
FCCM – Facilities Capital Cost of Money
FFP – Firm Fixed Price