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**Naval Information
Warfare Center**



PACIFIC

In collaboration with the
Intelligence Advanced Research Projects Activity



Broad Agency Announcement (BAA)

Biointelligence and Biosecurity for the Intelligence Community (B24IC) Seedling Research Topic

N66001-22-S-4704 Amendment 01

Release Date: **7** July 2022

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1 Overview Information

This notice constitutes a Broad Agency Announcement (BAA) and sets forth research of interest in the area described in detail below. The solicitation process will follow Federal Acquisition Regulation (FAR) Part 35, Research and Development Contracting, as supplemented with additional information included in this notice. Awards based on responses to this BAA will be considered the result of full and open competition.

- **Federal Agency Name:** Naval Information Warfare Center, Pacific (NIWC Pacific) on behalf of the Office of the Director of National Intelligence/Intelligence Advanced Research Projects Activity (IARPA)
- **Funding:** RDT&E (2 year)
- **Funding Opportunity Title:** Biointelligence and Biosecurity for the Intelligence Community Seedling Research Topics
- **Announcement Type:** Initial Announcement
- **Funding Opportunity Number:** N66001-22-S-4704
- **Catalog of Federal Domestic Assistance (CFDA) Number:** Not applicable
- **Dates:**
 - **White papers (abstracts) Due Date:** **5:00PM ET, 25 July, 2022** (Offerors are required to submit white papers before submitting a proposal. White papers may be submitted any time between release of the BAA until 5:00PM ET, 19 July, 2022.
 - **Proposal Due Date:** **5:00PM ET, 13 September, 2022.** (A BAA amendment will be issued to announce subsequent rounds of selections, if any)
- **Anticipated individual awards:** Multiple awards are anticipated; the Government reserves the right to select for award all, some, one, or none of the proposals received in response to this announcement.
- **Types of instruments that may be awarded:** Procurement contracts¹
- **Amendments:** Any amendments to this BAA will be posted via NAVWAR e-Commerce Central at <https://e-commerce.sscno.nmci.navy.mil> (Note that this does not include a "www" prefix).
- **Agency Contact:**
IARPA Program Email: dni-iarpa-B24IC-BAASubmission-2022@iarpa.gov

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- **Program Manager (PM):**

¹ **Procurement Contract:** This is a standard government contract that follows the processes, format and terms and conditions as outlined in the Federal Acquisition Regulations (FAR) and supplementing Agency specific regulations.

Michael Patterson, Ph.D.

- **Program Website:**
<https://www.iarpa.gov/index.php/research-programs>

BAA Summary – IARPA seeks to develop and incorporate novel technologies and knowledge, leveraging the wider synthetic biology and biotechnology fields, to meet biosecurity threats of the 21st century. This includes developing new methods to collect, detect, analyze, and prevent traditional biothreats, while also addressing the latest opportunities and vulnerabilities associated with the advancing fields of biotechnology and synthetic biology.

The **Intelligence Advanced Research Projects Activity (IARPA)** invests in high-risk/high-payoff research programs that have the potential to provide our nation with an overwhelming intelligence advantage. IARPA seeks to develop new capabilities, matching the wider synthetic biology and biotechnology fields, ensuring the Intelligence Community's (IC's) capability to meet the biointelligence and biosecurity threats of the 21st century. This includes developing new ways to collect, detect, analyze, and prevent traditional biothreats while also addressing the promise and perils associated with the growing fields of biotechnology and synthetic biology. To address these challenges, the IC seeks to advance research across multiple sub-disciplines of biology.

In recent decades, the rise of synthetic biology has corresponded with critical advances in biology research. From polymerase chain reaction (PCR) in the 1980s to next generation sequencing (NGS) in the late 90s to numerous mechanisms for genetic engineering enabling a variety of engineered organisms in the past decade, the branches of synthetic biology and enabling biotechnologies have advanced at a prodigious rate. The IC, and IARPA specifically, has pursued numerous research programs to advance security interests, but the needs of the IC require rapid advancement of numerous research topics to meet and leverage the advances the many biological disciplines have brought into reality in the past decades. These needs align with developing new methods for countering traditional biothreats of concern while also looking towards the future where bio-focused capabilities may enable or support IC relevant capabilities.

In particular, IARPA seeks novel research ideas from multidisciplinary teams pursuing advanced research topics capable of supporting the below interests:

- **Biointelligence** – Instruments, knowledge, and/or methods enhancing the IC's capability to counter inappropriate use of biological sciences or leverage advancements derived from the biological sciences capable of advancing the IC's ability to collect, analyze, characterize, secure, and utilize information related to threats to our nation; and
- **Biosecurity** - Methods for ensuring the security of instruments, knowledge, environments, or capabilities aligned with biological research or advancements which have the potential to cause harm or detrimentally impact other organisms, materials, or infrastructure.

These technologies align well with needs of the intelligence and national security communities and are, therefore, under the purview of IARPA's research mission. Successful technologiesolutions will require creative, multidisciplinary methods, paradigm changing thinking, and transformative approaches. Preference will be given to research with the ability to revolutionize capabilities and instruments or demonstrate that revolutionary change is possible in the coming decade. Critical interests align with technologies to improve targeting, collections, analysis, characterization, and mission specific capabilities. Multidisciplinary or convergent approaches derived from other technical fields and disciplines are welcome and encouraged.

This BAA solicits short-term, limited scope research in topic areas that are not addressed by emerging or ongoing IARPA programs or other published IARPA solicitations. It is primarily, but not solely, intended for early-stage research that may lead to larger, focused programs through a separate BAA in the future.

Seedlings are structured as a Phase A base with a Phase B option. Phase A represents an initial proof of concept of the proposed approach. Phase B, if exercised, will build upon the proof-of-concept research in Phase A to deliver a demonstration. Phase A shall be of a duration of 9 months to demonstrate prototype proof-of-concept, with preliminary reports due at month 4 and month 8. The reports shall be used in evaluation of projects for continuation to Phase B. Phase B shall be no longer than 15 months in duration. Shorter duration projects, if appropriate for the subject matter, may be considered. See Figure 1 for a proposed project timeline.

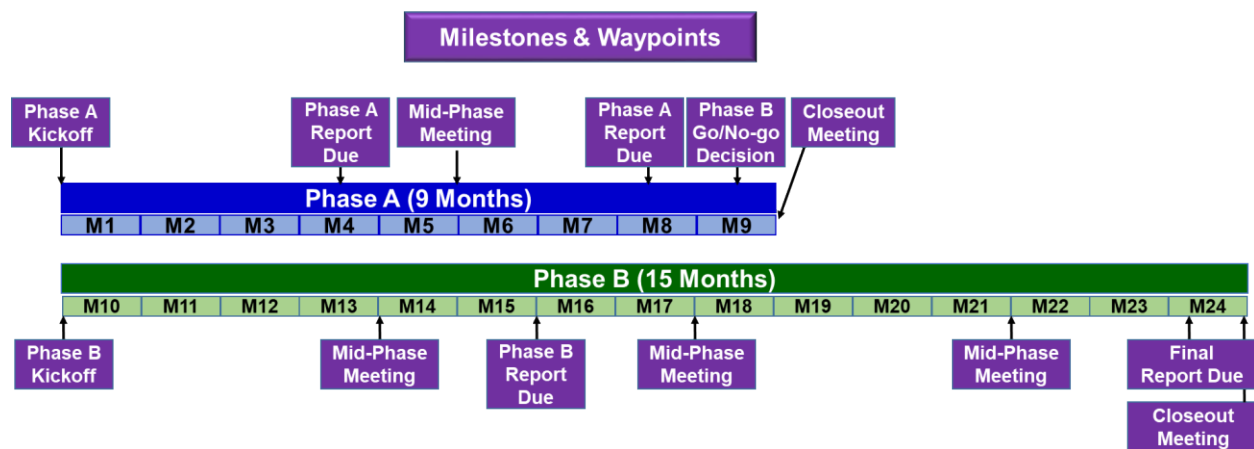


Figure 1: Proposed Phase A + B timeline with key activities.

Proposals must explicitly address relevance of the technical approach to the future potential of biointelligence and biosecurity in the United States. Proposals shall demonstrate that the proposed effort has the potential to make revolutionary, rather than incremental, improvements to current capabilities. Research that primarily results in evolutionary improvement to the existing state of practice is specifically excluded.

Proposals must include offeror-defined objectives, as well as milestones and performance metrics as task-driven intermediate steps towards the objectives.

1.1 Description of Topics and Areas of Interest

A. Biointelligence

- Methods and approaches for enabling attribution and/or origination of biological material, including organisms, that are not based purely upon individual databases, plasmid-focused analytics, isotopic ratios, or bioinformatics data;
- Platform-based, highly sensitive, target agnostic or multiplexable plug-and-play target-specific instrumentation for detection of biomolecules from complex samples or environments;
- Approaches for building biological systems capable of autonomous and consistent/repeatable responses and reporting outputs following non-Boolean logic based upon external stimuli to

include advances in biocomputing, bioelectronics, and biological/biomolecule neural networks;

- Advanced approaches for loss-less, shelf-stable collection, separation, and/or sterilization of diverse biomolecules from complex environments (soil, water, and/or air);
- Approaches for integrating structured and unstructured, multi-modal data types, beyond bioinformatically derived, to identify poorly or under reported health incidents or changes in health status.

B. Biosecurity

- Methods for assuring digital and physical security associated with infrastructure, instrumentation, databases, and data associated with synthetic biology, biological samples, and biotechnologies from direct, indirect, remote, and stand-off analysis or intrusion;
- Methods for detecting and/or characterizing biological targets of interest to include venoms, toxins, community/environmental metabolomics, antibody paratopes (linear and conformational), non-canonical/synthetic biomolecules, and properties/effects of encapsulation;
- Methods and instruments for near and remote, >1 meter, passive detection or evaluation of health-status or health anomalies;
- Methods for reducing storage requirements, enabling improved security and analysis of large or mixed 'omics datatypes, and improving transfer of pre-processed 'omics data at scale from the point of generation;
- Methods for integrating and analyzing multi-modal data or materials, informing towards improved understanding and prediction, in near real-time, of research activities, timelines, objectives.

The following topics are out of scope for this seedling effort: research focused purely on improving biosafety in the laboratory or the field; research focused on systems integration of existing approaches or instruments; research focused entirely on improving size, weight, or power requirements associated with existing instrumentation; research focused entirely on COVID-19 or SARS-CoV-2; research focused on developing or improving medical countermeasures or therapeutics; research focused on topics at a technology readiness level of 4 or above; and/or research which are resubmissions of work already awarded by the National Science Foundation, National Institutes of Health, Department of Defense, Intelligence Community, or other federal agencies.

1.2 Proposal Information and Structure

The Government anticipates that proposals submitted in response to this BAA will be UNCLASSIFIED.

Proposals must address two independent and sequential project phases: Phase A - Initial Proof of Concept (base) and Phase B - Demonstration (option). The periods of performance for these phases shall not exceed 9 months for Phase A and 15 months for Phase B. Combined Phase A and Phase B shall not exceed 24 months. Specific technical objectives to be achieved within the topic areas listed above, task descriptions, intellectual property rights, milestone schedule, and deliverables shall be addressed in the proposal. Detailed proposal preparation instructions are provided in Section 4. The

total award value for the combined Phase A base and Phase B option shall be less than \$4,000,000.

2 Award Information

2.1 General Award Information

The BAA shall result in awards for both Phases of the seedling. Exercise of the Phase B option shall depend upon performance during Phase A - base as well as program goals, the availability of funding, and IARPA priorities. Exercising of the Phase B option is at the sole discretion of the Government.

Multiple awards are anticipated. The amount of resources made available under this BAA shall depend on the quality of the proposals received and the availability of funds.

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation and to make awards without discussions with Offerors. The Government also reserves the right to conduct discussions if determined to be necessary. Evaluation and award of proposals will follow FAR Part 35 processes as described herein.

Proposals selected for negotiation may result in a procurement contract.

Awards under this BAA shall be made to Offerors on the basis of the Evaluation Factors listed herein, as well as successful completion of negotiations.

This announcement constitutes the full solicitation package. This solicitation will be conducted in two steps:

STEP ONE – Submission of white papers. **This submission is required to continue to step two.**

STEP TWO – A reasonable number of Offerors apparently qualified to respond to the intent of this BAA who submit whitepapers in step one will be approved and notified to submit a technical and cost proposal. Offerors not approved to submit a proposal from step one or that do not submit a whitepaper will not have their proposals reviewed by the government. All proposals must be submitted by the due date listed in Section 1 of this BAA.

See Section 4.0 of this announcement for further details regarding the proposal requirements.

Upon evaluation, the Government will contact Offerors whose proposals are selected for negotiations and may request additional information required for award. The Government may establish a deadline for the close of fact-finding and negotiations that allows a reasonable time for the award of a contract. Offerors that are not responsive to Government deadlines established and communicated with the request may be removed from award consideration. Offerors may also be removed from award consideration should the parties fail to reach agreement within a reasonable time on contract terms, conditions, and cost/price.

2.2 Multiple Submissions to the BAA

Organizations may participate as a prime or subcontractor in more than one submission to the BAA. However, if multiple submissions to the BAA which include a common team member are selected, such common team members shall not receive duplicative funding (i.e., no one entity can be paid

twice to perform the same task).

3 Eligibility Information

3.1 Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal. Historically Black Colleges and Universities, Small Businesses, Small Disadvantaged Businesses and Minority Institutions are encouraged to submit proposals and team with others to submit proposals; however, no portion of this announcement shall be set aside for these organizations' participation due to the impracticality of reserving discrete or severable areas for exclusive competition among these entities. Other Government Agencies, Federally Funded Research and Development Centers, University Affiliated Research Centers, Government-Owned, Contractor-Operated facilities, Government Military Academies, and any other similar type of organization that has a special relationship with the Government, that gives them access to privileged and/or proprietary information or access to Government equipment or real property, are not eligible to submit proposals under this BAA or participate as team members under proposals submitted by eligible entities. An entity of which only a portion has been designated as a UARC may be eligible to submit a proposal or participate as a team member subject to an organizational conflict of interest review.

3.1.1 U.S. Academic Institutions

According to Executive Order 12333, as amended, paragraph 2.7, "Elements of the Intelligence Community are authorized to enter into contracts or arrangements for the provision of goods or services with private companies or institutions in the United States and need not reveal the sponsorship of such contracts or arrangements for authorized intelligence purposes. Contracts or arrangements with academic institutions may be undertaken only with the consent of appropriate officials of the institution."

Offerors shall submit a completed and signed Academic Institution Acknowledgment Letter for each U.S. academic institution that is a part of their team, whether the academic institution is serving in the role of a prime, or a subcontractor or a consultant at any tier of their team with their proposal. Each Letter must be signed by a senior official from the institution (e.g., President, Chancellor, Provost, or other appropriately designated official). A template of the Academic Institution Acknowledgment Letter is enclosed in Appendix A of this BAA. Note: It is highly recommended that this letter(s) be submitted with the Offeror's proposal. In any case, IARPA shall not enter into negotiations with an Offeror whose team includes a U.S. academic institution until all required Academic Institution Acknowledgment Letters are received.

3.1.2 Foreign Entities

Foreign entities and/or individuals may participate only as a prime if they are registered with SAM.gov and have a United States bank account or as part of a U.S. based team. The prime contractor must be a U.S. company in the case the entities or individuals do not have an account or are not registered with SAM.gov. All foreign participation must comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws and other governing statutes applicable under the circumstances. Offerors are expected to ensure that the efforts of foreign participants do not either directly or indirectly compromise the laws of the United States, nor its security interests. As such, all Offerors should carefully consider the roles and responsibilities of foreign participants as they pursue teaming arrangements.

3.2 Organizational Conflicts of Interest

According to FAR 2.101 “Organizational Conflict of Interest” (OCI) means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person’s objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.

In accordance with FAR 9.5, Offerors are required to identify and disclose all facts relevant to potential OCIs involving the Offeror’s organization and any proposed team member (subawardee, consultant). Under this Section, the Offeror is responsible for providing this disclosure with each proposal submitted pursuant to the BAA. The disclosure must include the Offeror’s, and as applicable, proposed team member’s OCI mitigation plan. The OCI mitigation plan must include a description of the actions the Offeror has taken, or intends to take, to prevent the existence of conflicting roles that might bias the Offeror’s judgment and to prevent the Offeror from having an unfair competitive advantage. The OCI mitigation plan will specifically discuss the disclosed OCI in the context of each of the OCI limitations outlined in FAR 9.505-1 through FAR 9.505-4.

IARPA generally prohibits Contractors from concurrently providing Scientific Engineering Technical Assistance (SETA), Advisory and Assistance Services (A&AS), or similar support services and being a technical Contractor. Therefore, as part of the FAR 9.5 disclosure requirement above, address whether an Offeror or an Offeror’s team member (e.g. sub-awardee, consultant) is providing SETA, A&AS, or similar support (e.g., T&E services) to IARPA under: (a) a current award or subaward; or (b) a past award or subaward.

- If SETA, A&AS, or similar support is or was being provided to IARPA, the proposal must include: The name of the IARPA program or office receiving the support;
- The prime contract number; and
- Identification of proposed team member (sub-awardee, consultant) providing the support.

As part of their proposal, Offerors shall include either (a) a copy of their OCI notification including mitigation plan or (b) a written certification that neither they nor their subcontractor teammates have any potential conflicts of interest, real or perceived. A sample certification is provided in Appendix A.

The Government will evaluate OCIs and potential OCIs to determine whether they can be avoided, neutralized or mitigated and/or whether it is in the Government’s interest to grant a waiver. The Government will make OCI determinations, as applicable, for proposals that are otherwise selectable under the BAA Evaluation Factors.

The Government may require Offerors to provide additional information to assist the Government in evaluating OCIs and OCI mitigation plans.

If the Government determines that an Offeror failed to fully disclose an OCI; or failed to provide the affirmation of IARPA support as described above; or failed to reasonably provide additional information requested by Government to assist in evaluating the Offeror’s OCI and proposed OCI mitigation plan, the Government may reject the proposal and withdraw it from consideration for award.

4 Application and Submission Information

STEP ONE – White Paper Submission: Interested Offerors are required to submit white papers prior to proposal submissions. White papers will be accepted until 5:00 PM ET, 25 July, 2022.

The Government anticipates that Offerors will receive a response to their white paper within 30 days

of submission stating whether the Government approves the offeror to step two of this BAA, submission of a proposal. The purpose of the white paper is to ensure proposals are submitted from a reasonable number of apparently qualified sources with technical approaches/solutions of interest to the Government.

STEP TWO – Proposal submission: Upon review of the white papers from step one, the Government anticipates approving a reasonable number of apparently qualified offerors, whose research ideas are of interest to the Government, to submit full proposals (Volume I, Technical and Management Proposal, Volume 2 Cost/Price Proposal). In order to receive consideration for award, Offerors must have received approval for submission in step one from the Government associated with their white paper and compliant proposals should be received by the proposal due date in Section 1 of the BAA. Proposals received after this date will be considered late and may not be reviewed. If there are any subsequent rounds of selection, the BAA will be amended to notify Offerors and to provide the proposal due date for the next round of selections. Selection for award remains contingent on the technical and funding availability evaluation factors. Offerors not approved to submit a proposal from step one or that do not submit a whitepaper will not have their proposals reviewed by the government.

The Government intends to use Booz Allen Hamilton, Serco, Patriot Solutions Group, Airlin Technologies, Bluemont Technology and Research, Navstar, Crimson Phoenix, Northwood Global Solutions, and Onts & Quants, Inc., along with SMEs from other Government laboratories, federally funded research and development centers (FFRDCs), and University-affiliated research centers (UARCs) or to provide expert advice, regarding portions of the white papers and proposals submitted to the Government and to provide logistical support in carrying out the evaluation process. All Government and Contractor personnel shall have signed and be subject to the terms and conditions of non-disclosure agreements. By submission of its white paper and/or proposal, an Offeror agrees that its white paper and/or proposal information may be disclosed to employees of these organizations for the limited purposes stated above. Offerors who object to this arrangement shall provide clear notice of their objection as part of their submittal as indicated in the white paper/proposal preparation instructions. If Offerors do not include a notice of objection to this arrangement, the Government shall assume consent to the use of contractor support personnel in assisting the review of submittal(s) under this BAA. Only Government personnel will make evaluation and award determinations under this BAA.

All administrative correspondence and questions regarding this solicitation shall be directed by email to dni-iarpa-B241C-BAASubmission-2022@iarpa.gov. White paper and proposals shall be submitted in accordance with the procedures stated in the BAA.

4.1 White paper Preparation Instructions

The white papers shall not exceed 3-pages summarizing Offeror qualifications and the Offeror's intended technical approach/solution to the BAA Topics and Areas of Interest, see Section 1.1. White papers must concisely answer all the following questions:

Qualifications:

1. Summarize your organization's qualifications to perform research and development in the specific field of science and technology.
2. Provide a short description of present and past performance of similar work.

Heilmeyer questions (Address in relation to the technical approach/solution for your intended proposal):

1. What are you trying to do?
2. How is it done at present? Who does it? What are the limitations of present approaches?
3. What is new about your approach? Why do you think that you can be successful at this time?
4. If you succeed, what difference will it make?
5. How will you evaluate progress during and at the conclusion of the effort? (i.e., what are your proposed milestones and metrics?)

The white paper shall not describe management nor detailed cost/price information. All white papers shall be written in English. Additionally, text should be black and paper size 8-1/2 by 11-inch, white in color with 1" margins from paper edge to text or graphic on all sides. Submissions should also use Times New Roman font with font size not smaller than 12-point. Additionally, the font size for figures, tables and charts should not be smaller than 10-point. All contents shall be clearly legible with the unaided eye or the white paper may not be considered. White papers shall be submitted in a PDF format.

The Government anticipates white papers submitted under this BAA will be UNCLASSIFIED.

All white papers shall be in the format given below. The Government reserves the right to reject a white paper without review if the information requested below is not adequately addressed.

4.1.1 White paper structure

- Cover Sheet - Offerors will be prompted by IARPA's electronic proposal submittal system, IDEAS (see BAA Section 4.3), to complete a white paper cover sheet. It will also prompt Offerors to insert a cost/price. In this case, please include the proposal limit stated in BAA paragraph 1.2, \$3,999,999, as a placeholder as cost/price will not be assessed as part of the white paper review. Offeror's will also be prompted to indicate whether they have any objections to non-Government personnel reviewing their white paper (see BAA Section 4). This system generated cover sheet is not included in the white paper page count. Note: In addition to the system generated cover sheets, proposals require additional cover sheets for the Technical/Management and Cost Volumes, which are included in BAA Appendix A. These additional cover sheets are not required for the white paper.

- Qualifications

- Heilmeier questions

White paper not to exceed 3 pages.

4.2 Proposal Preparation Instructions

All proposals shall be in the format given below:

Proposals shall consist of Volume 1 - Technical and Management Proposal and Volume 2 - Cost/Price Proposal. All proposals shall be written in English. Additionally, text should be black and paper size 8-1/2 by 11-inch, white in color with 1" margins from paper edge to text or graphic on all sides. Submissions should also use Times New Roman font with font size not smaller than 12 point. Additionally, the font size for figures, tables and charts should not be smaller than 10 point. All contents shall be clearly legible with the unaided eye or the proposal may not be considered. Proposals shall be submitted in PDF version.

The Government anticipates proposals submitted under this BAA will be UNCLASSIFIED.

Proposals shall be valid for 120 days unless the Offeror proposes a shorter validity period.

The Government reserves the right to reject a proposal without review if the information requested below is not adequately addressed.

Each proposal submitted in response to this BAA shall consist of the following:

4.2.1 Volume 1 – Technical & Management Proposal

- Cover Sheet (not included in page count)
- Transmittal Letter (limited to 1 page, not included in page count)
- Technical Proposal to include the Statement of Work (not to exceed **15 pages**)
 - **Attachments (not included in page count)**
 - 1 – Academic Institution Acknowledgment Letter, if required
 - 2 – Intellectual Property Rights
 - 3 – OCI Notification or Certification
 - 4 – Bibliography

The Cover Sheet template is included in Appendix A. Complete all sections and include as the proposal cover. The Cover Sheet is not included in the page count.

The Transmittal Letter shall include the following (not to exceed one page):

Introduction of Offeror and team (subcontractors and consultants), the BAA number, Offeror's Program name, the proposal validity period, the type of contract vehicle being requested (Cost/Cost-Plus-Fixed-Fee/FFP/Cost-Sharing procurement contract) with a short rationale, any non-negotiable conditions on which the offer is based (such as contract type, Intellectual Property(IP) restrictions, etc.), any restrictions from review (e.g., Government Eyes Only or restricted from certain entities, see paragraph 4.0) and the Offeror's points of contact information including: name, email and phone number for both technical and administrative issues.

The Proposal shall include the mandatory elements specified in sections A. through C. below.

A. Technical Proposal Overview

- A technical overview of the proposed research and plan. Effectively and succinctly convey the main objective, key innovations, expected impact, and other unique aspects of the proposed research project. The overview must include a paragraph on the relevance of the proposed research to the Intelligence Community mission, as well as a realistic timeframe for implementation of results. This shall include a description of the key technical challenges, a concise review of the technologies proposed to overcome these challenges and achieve the project's goal, and a clear statement of the novelty and uniqueness of the proposed work are required. This section shall address in detail the following questions: What is the proposed work attempting to accomplish or do? How is it done today, and what are the limitations? Who or what will be affected and what will be the impact if the work is successful?
- Summary of the products, transferable technology and deliverables associated with the proposed research results. Describe measurable deliverables that show progress toward achieving proposed milestones and goals. (All proprietary claims to the results, prototypes, IP, or systems supporting and/or necessary for the use of the research, results, and/or demonstration shall be detailed in proposal Attachment 2, Should no proprietary claims be identified in Attachment 2, the Government shall receive Unlimited Rights, as defined in

FAR 52.227-14, to all technology and deliverables resulting from or delivered under this BAA.)

- Schedule and milestones for the proposed research. Summarize, in table form the schedule and milestones for the proposed research. Do not include proprietary information with the milestone chart. **(The milestone chart may become part of the resultant contract.)**
- Related research. Include a brief summary of other research in this area, comparing the significance and plausibility of the proposed innovations against competitive approaches to achieve proposed objectives.
- Project contributors. Include a clearly defined organizational chart of all anticipated project participants and affiliations (e.g. subcontractor, consultant), organized under functional roles for the effort, along with the associated task number responsibilities for each. Provide a summary of expertise of the proposed team, including any sub-awardees/consultants and key personnel who will be executing the work. Identify a principal investigator (PI) for the project.
- Facilities. Describe the facilities and resources that will be used for the proposed effort, including computational and experimental resources.
- Resource Share. Include the type of support, if any, the Offeror might request from the Government, such as facilities, equipment, materials, or any such resources the Offeror is willing to provide at no additional cost to the Government to support the research effort. (Cost-sharing is not required from Offerors and is not an evaluation criterion but is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort). The names of other federal, state or local agencies or other parties receiving the proposal and/or funding the proposed effort. If none, so state. Concurrent submission of the proposal to other organizations will not prejudice its review but may impact IARPA's decision to fund the effort.
- Quad Chat. A single slide capturing the seedling concept, impact, expected outcomes and an overarching figure (refer to Appendix A.5).

B. Statement of Work (SOW)

This section shall provide a detailed, clearly defined plan for the technical tasks/subtasks to be performed, by phase, their durations and the dependencies among them. For each task/subtask, provide:

- A general description of the objective;
- A detailed description of the approach to be taken, developed in an orderly progression and in enough detail to establish the feasibility of accomplishing the goals of the task;
- Identification of the primary organization responsible for task execution (prime, subcontractor, team member, etc.) by name;
- Quantifiable metrics, and reasoning for including, which the performers and Government can use to evaluate research progress throughout the project;
- The exit criteria for each task/activity (i.e., a product, event or milestone that defines its completion); and
- Identification of all deliverables (e.g. reports, software) to be provided to the Government.

Note: Do not include any proprietary information in the SOW (The SOW will be incorporated into the resultant contract).

C. Technical Proposal Attachments (Not included in page count):

- Attachment 1: Academic Institution Acknowledgment Letter (see BAA Section 3.1.1. and sample letter in Appendix A).
- Attachment 2: Intellectual Property and Data Rights Assertion (estimated not to exceed 2 pages, see template in Appendix A).
- Attachment 3: OCI notification including mitigation plan or Certification stating no OCI (see BAA Section 3.2 and sample certification letter in Appendix A.)
- Attachment 4: Bibliography. A brief bibliography of relevant technical papers and research notes (published and unpublished) which document the technical ideas on which the proposal is based.

4.2.2 Volume 2: Cost/Price Proposal (No page Limit)

IARPA anticipates awarding Cost type procurement contracts. However, Offerors may request other than a Cost type procurement contract (e.g. FFP, cost-share).

Regardless of the type of contract, the Offeror's cost/price proposal shall contain sufficient supporting information to establish the Offeror's understanding of the project, the perception of project risks, the ability to organize and perform the work and to support the realism and reasonableness of the proposed cost/price, to the extent appropriate.

Offerors shall provide the detailed cost supporting information addressed below and in the Volume 2 Cost Element Spreadsheet, Appendix A. Offerors may submit alternative cost/price supporting information or information in a different format; however, this will be subject to a CO determination of acceptability. If alternative information and formatting are not found acceptable, the CO will request the Offeror provide appropriate cost supporting information during negotiations. Examples where alternative cost/price supporting information and formatting may be found acceptable are when submitted by non-traditional contractors such as commercial entities that do not typically accept FAR-based contracts, small businesses, start-up companies or foreign companies.

The Cost/Price Volume shall include the following:

A. Cost Element Breakdown and Total Cost Summary

Offerors shall submit an Excel document, in the format provided in Appendix A. It shall include intact formulas and shall not be hard numbered. The base and option period cost data should rollup into a total cost summary. The Excel files may be write-protected but shall not be password protected.

- Completed cost element breakdown for the base period, option period and the total project summary in the format provided in Appendix A.
- Total costs broken down by major task.

B. Narrative Supporting Information

In addition to the above, supporting cost and pricing information shall be provided in sufficient detail to substantiate the Offeror's cost estimates. Include a description of the basis of estimate (BOE) in a narrative for each cost element and provide supporting documentation, as applicable:

Direct Labor – Describe the basis of the proposed labor categories and rates and provide a copy of the most recent Forward Pricing Rate Agreement (FPRA) with the Government. If Offerors do not have a current FPRA with the Government, provide payroll records or contingency hire letters with salary data to support each proposed labor category, including those for key individuals, and the most recent Forward Pricing Rate Proposal Submission, if applicable. Offeror should also address whether any portion of their labor rates is attributable to uncompensated overtime.

Labor Escalation Factor – State the proposed escalation rate and the basis for that rate (e.g., based upon Global Insight indices, Cost Index or historical data). If the escalation rate is based upon historical data, provide data to demonstrate the labor escalation trend. Provide a sample calculation demonstrating application of the factor to direct labor.

Subcontracts (to include consultants and Inter-organizational Transfers (IOTs)) – The Offeror is responsible for compiling and providing full subcontractor proposals with the Cost Volume. Subcontractor cost element sheets shall be completed for the base period, option period and the total summary using the same format required for the prime contractor (See Appendix A). Consultant letter(s) of commitment shall also be attached.

Information shall be presented in Excel with intact formulas using the format provided in Appendix A. The Offeror shall also provide justification for why the subcontractor was selected and its determination that the cost/price is fair and reasonable (Reference FAR Part 44 and FAR clause 52.244-2). If subcontractors have concerns about proprietary cost information, subcontractors can submit their detailed cost proposal information directly to the CO during negotiations.

Materials and Equipment – Provide copies of quotes, bill of materials, historical data or any other information including Offeror's analysis to support proposed costs.

Travel - The proposed travel supporting detail shall include destination and purpose of the trip, number of trips, number of travelers and days per trip and price per traveler in sufficient detail to verify the BOE. Limited travel is anticipated. Offerors may require travel to meet with team members. Offerors will not be required to travel to meet with IARPA. Proposed travel costs shall comply with the limitations set forth in FAR Part 31.

Conference travel will not be authorized under this contract.

Other Direct Costs (ODCs) – ODCs shall be listed separately and supported by quotes, historical data or any other information including the Offeror's analysis.

Indirect Costs – The Offeror shall show indirect cost calculations, identify the proposed indirect rate by fiscal year and period (base, option) and provide information on indirect cost pools and allocation bases for each year and program period involved. If a Government agency recently audited the Offeror's indirect rates, the Offeror shall identify the agency that conducted the audit, when the rates were approved and the period for which they are effective. Include a copy of this rate agreement. Absent current Government rate recommendations, it is incumbent on the Offeror to provide some other means of demonstrating indirect rate realism (e.g., 3 years of historical actual costs with applicable pools and bases). If proposed rates vary significantly from historical experience, the Offeror shall explain of the variance.

Cost sharing – Describe the source, nature and amount of cost-sharing, if any. (Acceptable forms of cost share include (but may not be limited to): Cash contributions (application of discretionary resources) from prime Offeror and/or subcontractor(s); unreimbursed labor; materials and equipment; use of materials or equipment for program duration (lease value equivalent); and IP with established market value. Non- acceptable forms of cost share include (but may not be limited to): foregone fee; foregone G&A and COM if using independent research and development (IR&D) as

cost share; valuation of IP with no established market value; facilities or other assets accounted for in overhead rates applied to labor; and capital assets without clear and direct contribution to the program.)

Other Pricing Assumptions – Identify all pricing assumptions, that should be incorporated into the resulting award instrument (e.g., use of Government Furnished Property/Facilities/Information, access to Government Subject Matter Experts, etc.).

Facilities Capital Cost of Money (FCCM) – If proposing FCCM, the Offeror shall show FCCM cost calculations, identify the proposed FCCM factors by contractor fiscal year and program year and provide a copy of the Forward Price Rate Agreement (FPRA), Forward Price Rate System (FPRS) or Forward Pricing Rate Recommendation (FPRR), if available.

Profit/Fee - Identify the proposed profit or fee percentage and the proposed profit/fee base. Provide justification for your proposed profit or fee.

Systems - For the systems listed below, provide a brief description of the cognizant federal agency and audit results. If the system has been determined inadequate, provide a short narrative describing the steps your organization has taken to address the inadequacies and the current status. If a formal audit has been performed by a Government Agency, please provide a complete copy of the audit report or adequacy determination letter. If the system has never received a formal Government review and approval include a statement to that effect. Address whether your organization has contracts that are Cost Accounting Standards (CAS) covered and if so, whether they are subject to full or modified CAS coverage.

- Accounting system (if proposing a cost reimbursement contract)

4.3 White Paper and Proposal Submission Information

White papers and proposals shall be submitted electronically through the IARPA Distribution and Evaluation System (IDEAS). Offerors interested in providing a submission in response to this BAA shall first register by electronic means in accordance with the instructions provided on the following web site: <https://iarpa-ideas.gov>. Offerors are strongly encouraged to register a few days prior to the due date. Offerors who do not register in advance do so at their own risk, and IARPA shall not extend the due date to accommodate such Offerors. Failure to register as stated shall prevent the Offeror's submittal of documents.

After registration has been approved, Offerors should upload a white paper or proposal, in 'pdf' format, or as otherwise directed (Excel, PowerPoint, etc.). Offerors are responsible for ensuring compliant and timely submissions. Time management to upload and submit is wholly the responsibility of the Offeror. The submittal due date and time for white papers is **5:00pm ET 25 July, 2022**. The submittal due date and time for proposals is **5:00pm ET, 13 September, 2022**.

Upon completing the white paper or proposal submission, the Offeror shall receive an automated confirmation email from IDEAS. The Government strongly suggests that the Offeror document the submission of their white paper or proposal package by printing the electronic receipt (time and date stamped) that appears on the final screen following compliant submission of a white paper or proposal to the IDEAS website.

Should an Offeror be unable to complete the electronic submittal, the Offeror shall employ the following procedure. The Offeror shall send an e-mail dni-iarpa-B24IC-BAASubmission-2022@iarpa.gov, prior to the due date and time specified in the BAA and indicate that an attempt was made to submit electronically and that the submittal was unsuccessful. This e-mail shall include contact information for the Offeror. Upon receipt of such notification, the Government will provide

additional guidance regarding submission. White papers or proposals submitted by any means other than IDEAS shall not be considered unless the Offeror notified the Government of its unsuccessful attempted electronic submittal and complied with the Government's subsequent guidance regarding submission.

It is at the Government's sole discretion whether to call for a second round of proposals. Selection of any subsequent rounds remains contingent on the technical and funding availability evaluation factors.

Submissions received after the due date and time are deemed to be late and may not be reviewed. Failure to comply with the submission procedures may result in the submittal not being evaluated.

Although classified proposals are not anticipated for this program, if an Offeror chooses to submit a classified white paper or proposal, the Offeror must first contact the Government via dni-iarpa-B24IC-BAASubmission-2022@iarpa.gov and request consideration. The Government reserves the right not to accept classified proposals or supporting information. In no case shall classified information be uploaded into IDEAS.

Regarding proprietary markings, Offerors are responsible for clearly identifying proprietary information. Submissions containing proprietary information must have the cover page and each page containing such information clearly marked with a label such as "Proprietary." NOTE: "Confidential" is a classification marking used to control the dissemination of U.S. Government National Security Information and should not be used to identify proprietary business information. See BAA Section 6.2.1 for additional information on Proprietary Data.

5 Evaluation of White Papers/Proposals

White papers:

White papers will be reviewed by Government Technical expert(s) to determine a reasonable number of Offerors apparently qualified to meet the intent of the BAA. This determination will be based on the Offeror presenting technical qualifications specific to the field of science and technology needed for the technical approach/solution presented, and the Government's interest in the Offeror's intended technical approach/solution. Program balance across Topics and Areas of Interest and program budget constraints may also be considerations in determining a reasonable number of Offerors permitted to submit Proposals.

The Government will conduct rolling reviews of white papers. Submittal time may impact when an Offeror receives the Government's notice of whether their proposal is approved, however all efforts will be made to provide a response within two weeks days of submission.

Based on the above determination, Offerors will either be approved to submit a proposal or not approved to submit a proposal. Proposals will be reviewed as set forth in this BAA. Offerors not approved to submit a proposal from step one or that do not submit a whitepaper will not have their proposals reviewed by the government.

Offerors are cautioned that failure to follow submittal instructions may negatively impact their proposal evaluation or may result in rejection of the proposal for non-compliance.

Proposals:

Proposals will be evaluated in line with FAR Part 35 and as described below.

The factors used to evaluate and select proposals for negotiation for this BAA are described in the following paragraphs. Because there is no common SOW, each proposal shall be evaluated on its

own merits and its relevance to the BAA goals rather than against other proposals submitted in response to this BAA.

The proposals shall be evaluated on the basis of technical evaluation and funding availability factors. The technical evaluation and funding availability factors are of equal importance. Within the technical evaluation factor, the specific technical criteria are in descending order of importance, as follows: Overall Scientific and Technical Merit and Potential Contribution and Relevance to the IARPA Mission. Within the funding availability factor, the sub criteria are of equal importance. Specifics about the evaluation criteria are provided below.

Awards will be made on the basis of the technical evaluation and funding availability factors, and subject to successful negotiations with the Government. Award shall not be made to Offeror(s) whose proposal(s) are determined not to be selectable.

Offerors are cautioned that failure to follow submittal instructions may negatively impact their proposal evaluation or may result in rejection of the proposal for non-compliance.

5.1 Technical Evaluation Factor (sub criteria are in descending order of importance)

Proposals will be evaluated using the following technical criteria, listed in descending order of importance, to determine whether proposals submitted are consistent with the intent of this BAA and of interest to the Government:

A. Overall Scientific and Technical Merit

Evaluators will assess the extent to which:

- The proposed technical approach is novel, innovative, feasible, achievable, and complete.
- The proposed technical team has the expertise and experience to accomplish the proposed tasks.
- Task descriptions and associated technical elements provided are complete and in a logical sequence with all proposed deliverables clearly defined such that a final outcome that achieves the goal can be expected as a result of award.
- The proposal identifies major technical risks and planned mitigation efforts are clearly defined and feasible.

B. Potential Contribution and Relevance to the IARPA Mission

Evaluators will also assess the potential contributions of the proposed effort to bolster the national security technology base, and support IARPA's mission to make pivotal early technology investments that create or prevent technological surprise. Additionally, evaluators will assess the extent to which the proposed intellectual property restrictions (if any) will impact the Government's ability to utilize and transition the technology to partners.

5.2 Funding Availability Factor (sub criteria are of equal importance)

A. Budget Constraints

The Government will seek to maximize the likelihood of meeting the BAA objectives within budget constraints. This may involve awarding one or more contracts. Note: If the Offeror has submitted the proposal to other federal, state or local agencies or other parties that may fund the proposed effort, this may impact the Government's decision to fund the effort.

B. Program Balance

The Government will take into account IARPA's overall mission and the BAA objectives to ensure a balanced approach to achieving program goals. This may include, but is not limited to, broadening the variety of technical approaches and developing capabilities aligned with IC priorities.

5.3 Review and Selection Process

It is the policy of the Government to ensure impartial, equitable and comprehensive proposal evaluations. The Government anticipates more than one award. Given the Government's limited resources and desire to issue awards rapidly for this requirement, proposals may be evaluated and awarded on a rolling basis. Topic and Area of Interest may also be factors in determining the order in which proposals are evaluated in order to ensure program balance. Additionally, the Government may discontinue evaluating proposals when available funding is exhausted. If new funds become available, prior to proposal expiration, the Government may restart proposal evaluations and issue additional awards.

Selection for negotiation will be conducted through a peer or scientific review process. A qualified Government Reviewer(s) will assess each proposal's strengths, weaknesses, and risks² against the technical criteria. If necessary, non-Government technical experts with specialized expertise may advise the Reviewer(s). However, only Government personnel will make recommendations and selection determinations under this BAA. When the Government has completed its proposal review, the Reviewer(s) will provide its findings and technical recommendations to the IARPA Scientific Review Official (SRO).

The SRO will make the final decision as to selectability for negotiations based on the technical recommendation and all stated factors (technical evaluation factor and funding availability factor). At this point, Offerors will be notified in writing as to whether they have been determined selectable or not selectable. For the purposes of this proposal evaluation process, these terms are defined as follows:

Selectable: A selectable proposal is a proposal that has been evaluated by the Government against the evaluation factors listed in the BAA, and determined to be technically competent, aligned to IARPA's overall mission and the BAA objectives, and funding is available. The technical strengths of the proposal outweigh any technical weaknesses and risks. Additionally, there are no technical weaknesses that would require other than minor negotiation. The proposal can now move to the negotiation and award process.

Non-Selectable: A proposal is considered non-selectable when the proposal has been evaluated by the Government against the evaluation factors listed in the BAA and determined to be technically weak, not aligned with IARPA's overall mission and the BAA objectives, or funding is not available.

Contract award is contingent on CO determination of a fair and reasonable cost/price and contract agreement on terms and conditions.

5.4 Negotiation and Award

² Strength- An aspect of an Offeror's proposal that has appreciable merit or appreciably exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance.

Weakness - A flaw in the proposal that increases the risk of unsuccessful contract performance.

Risk - The potential for unsuccessful contract performance. The consideration of risk assesses the degree to which an Offeror's proposed approach to achieving the technical factor or subfactor may involve risk of disruption of schedule, increased cost or degradation of performance, the need for increased Government oversight, or the likelihood of unsuccessful contract performance.

After selection and before award, the CO will contact Offerors whose proposals were determined selectable to engage in negotiations. The CO will review the cost/price proposal using the proposal analysis techniques described in FAR 15.404-1, as appropriate, to determine a fair and reasonable cost/price. The CO's evaluation will include review of proposed anticipated costs/prices of the Offeror and proposed subcontractors, to ensure the Offeror has fully analyzed the budget requirements, provided sufficient supporting information, has adequate systems for managing the contract (i.e., accounting, purchasing as applicable), and that data is traceable and reconcilable. The CO's evaluation will also determine whether the prospective contractor understands the project and its risks and has the ability to organize and perform the work and that, the Offeror meets the responsibility standards of FAR 9.104. Additional information and supporting data may be requested.

Procurement contracts, as determined by the contracting officer, shall be awarded to those Offerors whose proposals are deemed most advantageous to the Government, all stated evaluation factors considered, and pending the successful conclusion of negotiations.

5.5 Proposal Retention

Proposals shall not be returned upon completion of the source selection process. The original of each proposal received shall be retained at IARPA and all other non-required copies shall be destroyed. A certification of destruction may be requested, provided that the formal request is sent to IARPA via e-mail to dni-iarpa-B24IC-BAASubmission-2022@iarpa.gov within 5 days after notification of proposal results.

6 Award Administration Information

6.1 Communications and Award Notices

All questions or discussions regarding this solicitation must be directed to the Contracting Specialist and/or Officer. All communication throughout this process must be handled formally and through the proper channels, which means all parties must ensure a Government Contract Specialist or Contracting Officer is present and/or engaged during any and all communication exchanges. Any informal communications or outside communication will delay and may also jeopardize a potential award.

As soon as practicable after the evaluation of a proposal is complete, the Offeror will be notified that: (1) its proposal has been selected for negotiations, or (2) its proposal has not been selected for negotiations.

6.1.2 Types of Awards

Procurement contracts will be made under this announcement. There are no limits on award amounts.

6.1.3 Obligating of the Government

Prospective Offerors are advised that only Contracting Officers are legally authorized to commit the Government. Only Contracting Officers may obligate the Government to an agreement involving the expenditure of Government funds. Any resultant procurement contract award would include all clauses required by the FAR and appropriate supplements.

6.1.4 Security Guidance

Security classification guidance via a DD Form 254, "DoD Contract Security Classification Specification," will not be provided at this time since the Government is soliciting ideas only. After

reviewing the incoming proposals, if a determination is made that the award instrument may result in access to classified information a DD Form 254 will be issued and attached as part of the award. Depending on the work to be performed, the Offeror may require a SECRET facility clearance and safeguarding capability; therefore, personnel identified for assignment to a classified effort must be cleared for access to SECRET information at the time of award. In addition, the Offeror may be required to have, or have access to, a certified and Government-approved facility to support work under this BAA.

6.1.5 Proposal Handling

The Government has contracted for various business and staff support services, some of which require contractors to obtain access to proprietary information submitted by Offerors. Any objection to access must be in writing to the Contracting Officer and shall include a detailed statement of the basis for the objection.

6.1.6 Offer Markings

All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. If only portions of the page contain proprietary information, those portions should be clearly marked. It is the Proposer's responsibility to clearly define to the Government what is considered proprietary data. No proposals containing classified information should be submitted under this announcement.

6.2 Other Administrative Information

6.2.1 Intellectual Property

General. The Government may request additional information from the Offeror, as may be necessary, to evaluate the Offeror's IP rights assertions. If Offerors do not identify any restrictions with respect to the proposed deliverables, the Government shall assume in its review of the proposal that the Government will receive Unlimited Rights in accordance with FAR 52.227-11. Further, failure to provide complete information may result in a determination that the proposal is not compliant with the solicitation, and the Government reserves the right to reject a proposal if the Offeror does not appropriately address all required IP rights issues.

IP Ownership. The Government's rights will be in accordance with the resulting contract which will include but may not be limited to FAR 52.227-11, 52.227-14, 52.227-16 and IA52.227-702. Regardless of the scope of the Government's rights, Offerors receiving contracts under this BAA may freely use IP generated under the contract for their own commercial purposes unless restricted by U.S. export control laws or security classification. Therefore, technical data and computer software developed under any contract resulting from this solicitation will remain the property of the Contractor, subject to IARPA's rights as set forth in the contract. For inventions first conceived or actually reduced to practice under this effort, Contractor shall grant the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, such invention throughout the world; Contractor may elect to retain title as described in the award instrument.

Indemnification. Offerors/Contractors expecting to use, but not to deliver, data or patentable inventions, including commercial open-source tools in implementing their approach shall be required to indemnify the Government against legal liability arising from such use.

Technical Data--Withholding of Payment. If technical data specified to be delivered under a contract awarded under this solicitation are not delivered within the time specified by the contractor are deficient upon delivery (including having restrictive markings not specifically authorized by the

contract), the CO is permitted, until such data are accepted by the Government, to withhold payment to the contractor of ten percent (10%) of the total contract price or amount unless a lesser withholding is specified in the contract. Payments may not be withheld, nor any other action taken pursuant to this paragraph when the contractor's failure to make timely delivery or to deliver such data without deficiencies arises out of causes beyond its control and without fault or negligence of the contractor. The withholding of any amount or subsequent payment to the contractor shall not be construed as a waiver of any rights accruing to the Government under the contract.

6.2.2 Public Release

It is the policy of the Department of Defense that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. Research to be performed as a result of this BAA may be Fundamental. The Government does not anticipate applying publication restrictions of any kind but reserves the right to require prior review before publication in appropriate or required circumstances.

Offerors should note that pre-publication approval of certain information may be required if it is determined that its release may result in the disclosure of sensitive intelligence information.

A courtesy soft copy of any work submitted for publication shall be provided to the IARPA PM and the Contracting Officer Representative (COR) a minimum of 5 business days prior to release in any forum.

6.2.3 Export Control

Offerors are warned that compliance with International Traffic in Arms Regulations (ITAR) may be required and will be included in all procurement contracts. The ITAR, issued by the Dept. of State, controls the export of defense-related articles and services, including technical data, ensuring compliance with the Arms Export Control Act (22 U.S.C. 2751 et seq.) If a Proposer has questions regarding how to comply with the ITAR, they are directed to look at DFARS 252.225-7048(c).

Offerors are also warned that compliance with the Export Administration Regulations (EAR) may be required and will be included in all procurement contracts. The EAR, issued by the Dept. of Commerce, controls the export of dual-use items, (items that have both commercial and military or proliferation applications) and purely commercial items. These items include commodities, software, and technology. Refer to the Commerce Control List, which is part of the EAR, to identify items subject to EAR, at <http://www.gpoaccess.gov/cfr/index.html> and http://www.access.gpo.gov/bis/ear/ear_data.html.

The following clause, DFARS 252.225-7048 - Export-Controlled Items, will be included in awards as deemed appropriate:

(a) Definition. "Export-controlled items," as used in this clause, means items subject to the Export Administration Regulations (EAR) (15 CFR Parts 730-774) or the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130). The term includes:

(1) "Defense items," defined in the Arms Export Control Act, 22 U.S.C. 2778(j)(4)(A), as defense articles, defense services, and related technical data, and further defined in the ITAR, 22 CFR Part 120.

(2) "Items," defined in the EAR as "commodities", "software", and "technology," terms that are also defined in the EAR, 15 CFR 772.1.

(b) The Contractor shall comply with all applicable laws and regulations regarding export-controlled items, including, but not limited to, the requirement for contractors to register with the Department of State in accordance with the ITAR. The Contractor shall consult with the Department of State regarding any questions relating to compliance with the ITAR and shall consult with the Department of Commerce regarding any questions relating to compliance with the EAR.

(c) The Contractor's responsibility to comply with all applicable laws and regulations regarding export-controlled items exists independent of, and is not established or limited by, the information provided by this clause.

(d) Nothing in the terms of this contract adds, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive orders, and regulations, including but not limited to—

- (1) The Export Administration Act of 1979, as amended (50 U.S.C. App. 2401, et seq.);
- (2) The Arms Export Control Act (22 U.S.C. 2751, et seq.);
- (3) The International Emergency Economic Powers Act (50 U.S.C. 1701, et seq.);
- (4) The Export Administration Regulations (15 CFR Parts 730-774);
- (5) The International Traffic in Arms Regulations (22 CFR Parts 120-130); and
- (6) Executive Order 13222, as extended.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts.

6.2.4 Subcontracting

It is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as sub-contractors to contractors performing work or rendering services as prime contractors or sub-contractors under Government contracts and to assure that prime contractors and sub-contractors carry out this policy. Each Offeror that is selected for negotiation for award and is expected to be awarded a contract which exceeds the simplified acquisition threshold may be asked to submit a sub-contracting plan before award in accordance with FAR 19.702(a) (1). The plan format is outlined in FAR 19.704.

Offerors shall declare teaming relationships in their Technical and Cost proposals and shall specify the type of teaming arrangement in place, including any exclusive teaming arrangements. IARPA neither promotes nor discourages the establishment of exclusive teaming agreements within Proposer teams. Individuals or organizations associated with multiple teams shall take care not to over-commit those resources being applied.

6.2.5 Reporting

Fiscal and management responsibility are important to the Government. Although the number and types of reports shall be specified in the award document, all Offerors shall, at a minimum, provide the CO, Contracting Officer's Technical Representative (COTR) and PM with monthly technical status reports, monthly financial status reports and final reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed upon before award. Technical reports shall describe technical highlights and accomplishments, priorities and plans, issues and concerns, evaluation results, and future plans. Financial reports shall present an on-going financial profile of the project, including total project funding, funds invoiced, funds received, funds expended during the preceding month, and planned expenditures over the remaining period (financial report format may be modified for FFP contracts). Additional

reports and briefing material may also be required, as appropriate, to document progress in accomplishing program metrics.

Reports shall be delivered to the CO, COTR and the PM.

6.2.6 System for Award Management (SAM)

In accordance with FAR 52.204-7 and DFARS 252.204-7004, an Offeror must be actively registered in the System for Award Management. Selected Offerors not already registered in SAM will be required to register prior to any award under this BAA. FAR 52.204-7 System for Award Management and FAR 52.204-13 System for Award Management Maintenance are incorporated into this BAA, and FAR 52.204-13 will be incorporated in all awards. Information on SAM registration is available at <https://www.sam.gov/portal/public/SAM/>.

6.2.7 Representations and Certifications

In accordance with FAR 4.1201, prospective Proposers shall complete electronic annual representations and certifications at <https://www.sam.gov/portal/public/SAM/>.

6.2.8 Lawful Use and Privacy Protection Measures

All data gathered by the Offeror shall be obtained in accordance with U.S. laws and in compliance with the End User License Agreement, Copyright Laws, Terms of Service, and laws and policies regarding privacy protection of U.S. Persons. Before using such data, the Offeror shall provide proof that the data was acquired in accordance with U.S. laws and regulations.

6.2.9 Invoicing, Receipt, Acceptance, and Property Transfer (iRAPT) (formerly Wide Area Work Flow (WAWF))

Unless using another approved electronic invoicing system, Performers will be required to submit invoices for payment directly via the Internet/WAWF at <https://wawf.eb.mil>. Registration to iRAPT/WAWF will be required prior to any award under this BAA.

6.2.10 NAVWAR e-Commerce Central

Proposal submissions for contracts will only be accepted via NAVWAR e-Commerce Central at <https://e-commerce.sscno.nmci.navy.mil>. (Note that this does not include a "www" prefix) by selecting NIWC Pacific then Open BAAs from the left-hand menu and selecting the Solicitation number.

6.2.11 Certificate of Current Cost and Pricing Data

Upon completion of negotiations and agreement on contract cost, a Certificate of Current Cost or Pricing Data may be required in accordance with FAR 15.406-2. In addition, any Offeror who is required to submit and certify cost or pricing data shall certify on behalf of subcontractors.

6.2.12 Employment Eligibility Verification (E-verify)

As per FAR 22.1802, recipients of FAR-based procurement contracts must enroll as Federal Contractors in E-verify and use E-verify to verify employment eligibility of all employees assigned to the award. All resultant contracts from this solicitation will include FAR 52.222-54, "Employment Eligibility Verification."

6.2.13 Public Access to Results

The Government is committed to making the results of this research available and maximally useful to the public, industry, government, and the scientific community, in accordance with the policy set forth in the White House Office of Science and Technology Policy's memorandum

“Increasing Access to the Results of Federally Funded Scientific Research,” dated February 22, 2013, consistent with all other applicable law and policy; agency mission; resource constraints; and U.S. national, homeland, and economic security.

(https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/ostp_public_access memo_2013.pdf)

Upon acceptance for publication of any manuscript or paper reporting results of work under a contract awarded pursuant to this BAA, the author’s final peer-reviewed manuscript(s) or conference paper(s) must be submitted to the IARPA-designated repository for public access, in accordance with the instructions on IARPA’s website at <http://www.iarpa.gov>. The Government will make the Publication available to the public through the repository at no charge, following a one-year embargo to preserve the rights of the publisher. The author must inform the publisher of rights that will be retained by the author and IARPA by including in the publishing/transfer of copyright agreement a provision substantially as follows:

“Journal acknowledges that Author retains the right to provide a copy of the final peer-reviewed manuscript (“Work”) to the Federal agency funding the research on which the Work is based upon acceptance for Journal publication, for public archiving as soon as possible but no later than 12 months after publication by Journal. Journal further acknowledges that the Federal Government, having funded the research upon which the Work is based, has certain irrevocable and non-exclusive contractual rights in the Work, which are not affected or altered in any way by this Agreement.”

Additionally, awardee must deposit the data underlying the results and findings in the publication in a suitable public repository, in accordance with the project’s Data Management Plan. If the metadata describing the underlying or supporting research data is not included in the Publication, the awardee must provide the metadata to the IARPA-designated public access repository, in accordance with the instructions on IARPA’s website at <http://www.iarpa.gov>.

The Government will accept a final published article in lieu of a final peer-reviewed manuscript, provided the author has the right to provide the article and authorize IARPA to release the article publicly.

Data produced under the program, reports to the Government, and program-related publications should be consistent with the Transparency and Openness Promotion Guidelines of the Center for Open Science, including preregistration of studies and analysis plans. (<https://cos.io/our-services/top-guidelines/>). To the extent possible, all reports to IARPA and all program-related publications should be consistent with statistical best practices described in (Psychological Science (2014) <http://pss.sagepub.com/content/25/1/3>). For example, wherever appropriate, effect sizes and confidence intervals (or the Bayesian equivalents) should be reported, and the data and methodology must be presented so that it is easily used for meta-analysis and independent re-analysis of the data. All Offerors must describe plans to ensure that the above requirements are satisfied.

6.2.14 Electronic and Information Technology

All electronic and information technology acquired through the BAA must satisfy the accessibility requirements of Section 508 of the Rehabilitation Act (29 U.S.C. § 794d) and FAR Subpart 39.2. Each Proposer who submits a proposal involving the creation or inclusion of electronic and information technology must ensure that Federal employees with disabilities will have access to and use of information that is comparable to the access and use by Federal employees who are not individuals with disabilities. Additionally, each Proposer must ensure that members of the public with disabilities seeking information or services from NIWC Pacific will have access to and use of information and data that is comparable to the access and use of information and data by members

of the public who are not individuals with disabilities.

6.3 FAR / DFARS Provisions & Clauses

6.3.1 Provisions

For purposes of illustration and not limitation, the following provisions may be applicable to NIWC Pacific contracts:

FAR Clause No.	Title
52.204-8	Annual Representations and Certifications
52.204-16	Commercial and Government Entity Code Reporting
52.204-22	Alternative Line Item Proposal
52.204-24	Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment
52.209-7	Information Regarding Responsibility Matters
52.209-13	Violation of Arms Control Treaties or Agreements—Certification
52.215-16	Facilities Capital Cost of Money
52.215-22	Limitations on Pass-Through Charges—Identification of Subcontract Effort
52.216-1	Type of Contract
52.216-27	Single or Multiple Awards
52.217-4	Evaluation of Options Exercised at Time of Contract Award
52.217-5	Evaluation of Options
52.229-11	Tax on Certain Foreign Procurements—Notice and Representation.
52.230-1	Cost Accounting Standards Notices and Certification
52.230-7	Proposal Disclosure—Cost Accounting Practice Changes
52.233-2	Service of Protest
52.252-1	Solicitation Provisions Incorporated by Reference
52.252-5	Authorized Deviations in Provisions
DFARS Clause No.	Title
252.203-7005	Representation Relating to Compensation of Former DoD Officials
252.204-7007	Alternate A, Annual Representations and Certifications
252.204-7008	Compliance with Safeguarding Covered Defense Information Controls
252.204-7016	Covered Defense Telecommunications Equipment or Services--Representation
252.204-7017	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services--Representation
252.204-7019	Notice of NIST SP 800-171 DoD Assessment Requirements.
252.215-7003	Requirement for Submission of Data Other Than Certified Cost or Pricing Data—Canadian Commercial Corporation
252.215-7007	Notice of Intent to Resolicit
252.215-7009	Proposal Adequacy Checklist
252.215-7010	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data--Basic
252.215-7011	Requirements for Submission of Proposals to the Administrative Contracting Officer and Contract Auditor
252.215-7012	Requirements for Submission of Proposals via Electronic Media
252.215-7013	Supplies and Services Provided by Nontraditional Defense Contractors
252.225-7003	Report of Intended Performance Outside the United States and Canada—Submission with Offer
252.225-7032	Waiver of United Kingdom Levies—Evaluation of Offers
252.225-7973	Prohibition on the Procurement of Foreign-Made Unmanned Aircraft Systems—Representation. (DEVIATION 2020-O0015)
252.225-7974	Representation Regarding Persons that have Business Operations with the Maduro Regime (DEVIATION 2020-O0005)
252.227-7017	Identification and Assertion of Use, Release, or Disclosure Restrictions
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government
252.239-7098	Prohibition on Contracting to Maintain or Establish a Computer Network Unless Such Network is Designed to Block Access to Certain Websites--Prepresentation
252.247-7022	Representation of Extent of Transportation by Sea

6.3.2 Clauses

FAR and DFARS clauses apply to any contract awarded under this BAA. Specific clauses depend on a variety of factors (e.g., contract type, contract value, business size, etc.) and will be negotiated at award.

6.3.2.1 Combating Trafficking in Persons

Appropriate language from FAR Clause 52.222-50 will be incorporated in all awards.

6.3.2.2 Ensuring Adequate COVID-19 Safety Protocols for Federal Contractors

DFARS Clause 252.223-7999 Ensuring Adequate COVID-19 Safety Protocols for Federal Contractors (DEVIATION 2021-O0009) will be incorporated in all awards.

6.3.2.3 Certification Regarding Trafficking in Persons Compliance Plan

Prior to award of a contract, for any portion of the contract that is for supplies, other than commercially available off-the-shelf items, to be acquired outside the United States, or services to be performed outside the United States, and which has an estimated value that exceeds \$500,000, the contractor shall submit the certificate as specified in paragraph (c) of 52.222-56, Certification Regarding Trafficking in Persons Compliance Plan.

6.3.2.4 Updates of Information regarding Responsibility Matters

FAR clause 52.209-9, “Updates of Publicly Available Information Regarding Responsibility Matters”, will be included in all contracts that exceed \$600,000 where the contractor has current active Federal contracts and grants with total value greater than \$10,000,000.

7 APPENDIX A - BAA Attachments

- 1 - VOLUME I: TECHNICAL AND MANAGEMENT PROPOSAL COVERSHEET
- 2 - ACADEMIC INSTITUTION ACKNOWLEDGMENT LETTER SAMPLE
- 3 - INTELLECTUAL PROPERTY AND DATA RIGHTS ASSERTIONS FORM
- 4 - OCI CERTIFICATION LETTER SAMPLE
- 5 - QUAD CHART SUMMARY
- 6 - VOLUME 2: COST PROPOSAL COVER SHEET
- 7 - VOLUME 2: COST ELEMENT BREAKDOWN SPREADSHEET

A.1 Cover Sheet for Volume 1: Technical and Management Proposal

(1) BAA Number	N66001-22-S-4704
(2) Topic and Area of Interest –(Reference BAA Section 1.1)	
(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 Nonprofit”	
(5) Offeror’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: Title, First Name, Last Name, Street Address, City, State, Zip Code, Telephone, Fax (if available), Electronic Mail (if available)	
(9) Administrative Point of Contact to Include: Title, First Name, Last Name, Street Address, City, State, Zip Code, Telephone, Fax (if available), Electronic Mail (if available)	
(10) Volume 1 no more than the specified page limit	Yes/No
(11) Restrictions on Intellectual property rights details provided in Appendix A format?	Yes/No
(12) Research Data Management Plan included? Not Applicable	Yes/No
(13) OCI Notification	Yes/No
(13a) If No, is written OCI certification included (see Appendix A)?	Yes/No
(14) Are one or more U.S. Academic Institutions part of your team?	Yes/No
(14a) If Yes, are you including an Academic Institution Acknowledgment Statement with your proposal for each U.S. Academic Institution that is part of your team (see Appendix A)?	Yes/No
(15) Total Funds Requested from IARPA and the Amount of Cost Share (if any)	\$
(16) Date of Proposal Submission	

Appendix A.2 Academic Institution Acknowledgment Letter

-- Please Place on Official Letterhead --

<Insert date>

To: Contracting Officer
NIWC Pacific

Office of the Director of National Intelligence Washington,
D.C. 20511

Subject: Academic Institution Acknowledgment Letter Reference: Executive Order 12333, As Amended,
Para 2.7

This letter is to acknowledge that the undersigned is the responsible official of <insert name of the academic institution>, authorized to approve the contractual relationship in support of the Office of the Director of National Intelligence's Intelligence Advanced Research Projects Activity and this academic institution.

The undersigned further acknowledges that he/she is aware of the Intelligence Advanced Research Projects Activity's proposed contractual relationship with <insert name of institution> through N66001-22-S-4704 and is hereby approved by the undersigned official, serving as the president, vice-president, chancellor, vice-chancellor, or provost of the institution.

<Name>

Date

<Position>

Appendix A.3 Intellectual Property and Data Rights Assertion

[Please provide here your good faith representation of ownership or possession of appropriate licensing rights to all IP that shall be utilized under the Program.]

Patents

PATENTS				
Patent number(or application number)	Patent name	Inventor name(s)	Patent owner(s)or assignee	Incorporation into deliverable
(LIST)	(LIST)	(LIST)	(LIST)	(Yes/No; applicable deliverable)

- (1) Intended use of the patented invention(s) listed above in the conduct of the proposed research.
- (2) Description of license rights to make, use, offer to sell, or sell, if applicable, that are being offered to the Government in patented inventions listed above.
- (3) How the offered rights will permit the Government to reach its program goals (including transition) with the rights offered.
- (4) Cost to the Government to acquire additional or alternative rights, if applicable.
- (5) Alternatives, if any, that would permit IARPA to achieve program goals.

Data (Including Technical Data and Computer Software)

NONCOMMERCIAL ITEMS			
Technical Data, Computer Software To be Furnished With Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(LIST)	(LIST)	(LIST)

COMMERCIAL ITEMS			
Technical Data, Computer Software To be Furnished With Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(LIST)	(LIST)	(LIST)

- (1) Intended use of the data, including, technical data and computer software, listed above in the conduct of the proposed research.
- (2) Description of Asserted Rights Categories, specifying restrictions on Government's ability to use, modify, reproduce, release, perform, display, or disclose technical data, computer software, and deliverables incorporating technical data and computer software listed above.
- (3) How the offered rights will permit the Government to reach its program goals (including transition) with the rights offered.
- (4) Cost to the Government to acquire additional or alternative rights, if applicable.
- (5) Alternatives, if any, that would permit IARPA to achieve program goals.

Appendix A.4 Organizational Conflicts of Interest Certification Letter

(Month DD, YYYY)

Office of the Director of National Intelligence
Intelligence Advanced Research Projects Activity (IARPA) Biointelligence and Biosecurity for the
Intelligence Community BAA

ATTN: NIWC Pacific, Contracting Officer

Subject: OCI Certification

Reference: <Insert Program Name>, N66001-22-S-4704, (Insert assigned proposal ID#, if received)Dear,

In accordance with Broad Agency Announcement N66001-22-S-4704, Organizational Conflicts of Interest (OCI), and on behalf of (Offeror name) I certify that neither (Offeror name) nor any of our subcontractor teammates has as a potential conflict of interest, real or perceived, as it pertains to the Biointelligence and Biosecurity for the Intelligence Community BAA. Please note the following subcontractors and their proposed roles:

[Please list all proposed contractors by name with a brief description of their proposed involvement.]

If you have any questions, or need any additional information, please contact (Insert name of contact) at (Insert phone number) or (Insert e-mail address).

Sincerely,

(Insert organization name) (Shall be signed by an official that has the authority to bind the organization)

(Insert signature)

(Insert name of signatory) (Insert title of signatory)

Appendix A.5 Quad Chart Summary of the Proposal

<p style="text-align: center;">Seedling Concept</p> <p>Key Technical Idea</p> <p>Technical Approach</p> <p>What is new about this concept?</p> <ul style="list-style-type: none">• Key Innovation 1• Key Innovation 2• Key Innovation 3	<p style="text-align: center;">Expected Impact</p> <p>Technical Impact</p> <p>IC Impact</p> <p>Unique Aspects of this proposal</p> <p>Improvement(s) over State of the Art</p>
<p style="text-align: center;">Relevant Graphic Illustrating Concept</p>	<p style="text-align: center;">Expected Deliverables</p> <p>Expected Deliverable 1</p> <p>Expected Deliverable 2</p>

Appendix A.6 Cover Sheet for Volume 2 Cost/Price Proposal

(1) BAA Number	N66001-22-S-4704
(2) Topic and Area of Interest: (See BAA Section 1.1)	
(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 Nonprofit”	
(5) Offeror’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: Title, First Name, Last Name, Street Address, City, State, Zip Code, Telephone, Fax (if available), Electronic Mail (if available)	
(9) Administrative Point of Contact to Include: Title, First Name, Last Name, Street Address, City, State, Zip Code, Telephone, Fax (if available), Electronic Mail (if available)	
(10) Contract type/award Instrument Requested: 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, Telephone Number of the Offeror’s Defense Contract Management Agency (DCMA) Administration Office or Equivalent Cognizant Contract Administration Entity, if Known	
(14) Name, Address, Telephone Number of the Offeror’s Defense Contract Audit Agency (DCAA) Audit Office or Equivalent Cognizant Contract Audit Entity, if Known	
(15) Date Proposal was Prepared	
(16) DUNS Number	
(17) TIN Number	
(18) CAGE Code	
(19) Proposal Validity Period	
(20) Cost Summaries Provided	
(21) Size of Business in accordance with NAICS Code 541712	

Appendix A.7 Contractor/Subcontractor Cost Element Sheet for Volume 2 Cost Proposal

Prime Contractor/Subcontractor Cost Element Sheet for Volume 2 Cost Proposal					
Complete a Summary Cost Element Sheet and separate sheets for the Base Period and each Option Period					
COST ELEMENT		BASE	RATE	AMT	
DIRECT LABOR (List each labor category separately. Identify Key Personnel by		# of Hours	\$	\$	
TOTAL DIRECT LABOR				\$	
FRINGE BENEFITS		\$	%	\$	
TOTAL LABOR OVERHEAD		\$	%	\$	
SUBCONTRACTORS, IOTS, CONSULTANTS (List separately. See below table.)				\$	
MATERIALS & EQUIPMENT (List each material and equipment item separately.)		Quantity	\$ unit price	\$	
SOFTWARE & IP (List separately. See table below.)		\$	\$	\$	
TOTAL MATERIALS & EQUIPMENT				\$	
MATERIAL OVERHEAD		\$	%	\$	
TRAVEL (List each trip separately.)		# of travelers	\$ price per traveler	\$	
TOTAL TRAVEL				\$	
OTHER DIRECT COSTS (List each item separately.)		Quantity	\$ unit price	\$	
TOTAL ODCs				\$	
G&A		\$	%	\$	
SUBTOTAL COSTS				\$	
COST OF MONEY		\$	%	\$	
TOTAL COST				\$	
PROFIT/FEE		\$	%	\$	
TOTAL PRICE/COST				\$	
GOVERNMENT SHARE, IF APPLICABLE				\$	
RECIPIENT SHARE, IF APPLICABLE				\$	
SUBCONTRACTORS/IOTs) & CONSULTANTS PRICE SUMMARY					
A	B	C	D	E	F
SUB-CONTRACTOR/IOT & CONSULTANT NAME	SOW TASKS PERFORMED*	TYPE OF AWARD	SUB- CONTRACTOR, IOT & CONSULTANT QUOTED PRICE	COST PROPOSED BY PRIME FOR SUBCONTRACTOR,IOT & CONSULTANT	DIFFERENCE (Column D - Column E) IF APPLICABLE
TOTALS					
*Identify Statement of Work, Milestone or Work Breakdown Structure paragraph, or provide a narrative explanation as an addendum to this Table that describes the effort to be performed.					

Software and IP Costs		
Item	Cost	Date of Expiration
(List)		

NOTE: Educational institutions and non-profit organizations as defined in FAR 31.3 and 31.7, respectively, at the prime and subcontractor level may deviate from the cost template in Appendix B when estimating the direct labor portion of the proposal to allow for OMB guided accounting methods(2 CFR 220) that are used by their institutions. The methodology shall be clear and provide sufficient detail to substantiate proposed labor costs. For example, each labor category shall be listed separately; identify Key Personnel and provide hours/rates or salaries and percentage of time allocated to the project.