IARPA

BROAD AGENCY ANNOUNCEMENT

IARPA-BAA-17-07

I A R P A

BE THE FUTURE

Finding Engineering-Linked Indicators (FELIX)
IARPA-BAA-17-07

Release Date: August 31, 2017

IARPA

BROAD AGENCY ANNOUNCEMENT: IARPA-BAA-17-07

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GENERAL INFORMATION

This publication constitutes a Broad Agency Announcement (BAA) and sets forth research of interest in the area of biological detection, biological engineering, systems biology, evolutionary biology, synthetic biology, bioinformatics and biosurveillance. Awards based on responses to this BAA are considered to be the result of full and open competition.

- **Federal Agency Name** – Intelligence Advanced Research Projects Activity (IARPA)
- **Funding Opportunity Title – Finding Engineering-Linked Indicators (FELIX)**
- **Announcement Type –** Initial
- **Funding Opportunity Number –** IARPA-BAA-17-07
- **Catalog of Federal Domestic Assistance Numbers (CFDA)** – Not applicable
- **Dates**
  - Posting Date: August 31, 2017
  - Proposal Due Date for Initial Round of Selections: **5:00 pm Eastern Time October 16, 2017**
  - BAA Closing Date: January 15, 2018
- **Anticipated individual awards** – Multiple awards anticipated
- **Types of instruments that may be awarded** – Procurement contracts, grants, cooperative agreements and other transactions
- **Agency Points of contact**
  ATTN: IARPA-BAA-17-07
  Office of the Director of National Intelligence
  Intelligence Advanced Research Projects Activity
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- **Program Manager** – Amanda Dion-Schultz, IARPA
- **Program website** – http://www.iarpa.gov/index.php/research-programs/felix
- **BAA Summary** – The Finding Engineering-Linked Indicators (FELIX) program seeks to develop new experimental and computational tools to detect engineered biological systems. The development of new biotechnologies is enabling the ability to engineer a diversity of biological systems, with potential benefits ranging from new vaccines and therapeutics to novel materials and improved agriculture. Of particular note are genome editing tools that are commonly used worldwide for a range of significant research and development efforts. These technologies have made biological engineering more accessible, more convenient, and less expensive. At the same time, these beneficial biotechnologies could result in the accidental or deliberate misuse of biological systems with unforeseen or uncontrolled consequences that may have adverse health, economic, or national security implications. The FELIX program aims to develop new tools and approaches to improve and augment detection capabilities to expedite appropriate responses to the presence of engineered organisms.
- **Questions**
  Submit questions on administrative, technical, or contractual issues by email to dni-iarpa-baa-17-07@iarpa.gov. All requests must include the full name and affiliation of a point

of contact. Do not send questions with proprietary content. A consolidated Question and Answer response will be posted on the Federal Business Opportunities website (http://www.fbo.gov) and linked from the IARPA website (http://www.iarpa.gov/index.php/research-programs/FELIX/questions.html). No answer will go directly to the submitter. IARPA will accept questions until **September 18, 2017**.

SECTION 1: FUNDING OPPORTUNITY DESCRIPTION

The Intelligence Advanced Research Projects Activity (IARPA) often selects its research efforts through the Broad Agency Announcement (BAA) process. The use of a BAA solicitation allows a wide range of innovative ideas and concepts. The BAA shall appear first on the FedBizOpps website, http://www.fedbizopps.gov/, then the IARPA website at http://www.iarpa.gov/. The following information is for those wishing to respond to this Program BAA.

This BAA (IARPA-BAA-17-07) is for the Finding Engineering-Linked Indicators (FELIX) program. IARPA is seeking innovative solutions for the FELIX program in this BAA. The FELIX program is envisioned to begin in February 2018 and end by August 2021.

1.A. Program Overview

1.A.1. Background

The emergence and commercialization of sophisticated biological engineering tools is enabling the ability to alter a diverse range of biological systems, with potential benefits ranging from new vaccines and therapeutics to novel materials and improved agriculture. These technologies have made biological engineering more accessible, more convenient, and less expensive, and are used by scientists worldwide to assist with efforts extending from basic research to new and improved commercial products. These new tools are allowing for a more diverse variety of modifications to be made across many biological systems. The types of changes that can be engineered include insertion of episomal DNA and RNA fragments, genomic insertions and deletions of DNA, and changing or chemically modifying a single nucleotide within the genome, all of which can ultimately alter the function, regulation, and structure of a cell and/or organism.

Current technologies for detecting engineered biological systems include high-throughput DNA and RNA sequencing (HTS), traditional molecular biology and biochemistry, and analysis of phenotypic traits. These approaches often require prior knowledge of the type of modification and well-annotated sequence information but are generally capable in cases where the change is large or less sophisticated in nature, thus leaving behind signs of engineering such as insertions, deletions, and cloning scars. HTS is a powerful technology and can be used to produce billions of sequencing reads in a single day; however, the ability to analyze this abundance of data in a timely and comprehensive manner remains a significant challenge. In situations in which more sophisticated engineering tools are utilized to modify organisms (that may or may not be well characterized), detection of engineering may be costly and slow, if not impossible.

An additional complication in detecting signatures of biological engineering results from the types of samples typically obtained from environmental collection and the frequency with which the engineered change may occur. Unlike most samples generated in laboratory settings, samples

obtained from the environment tend to be highly complex, containing variable amounts of the species of interest in a background of many other organisms. While metagenomics approaches have increased the efficiency with which these samples can be analyzed, significant challenges still exist in improving the limits of detection from computational and experimental perspectives. Additionally, these approaches likely cannot definitively distinguish naturally occurring genetic sequence variants from biological engineering.

While there are expected to be many beneficial impacts from the use of biological engineering tools, the accidental or deliberate release of biological organisms may have unforeseen or uncontrolled consequences that could have adverse health, economic or national security implications. Experimental and computational tools are needed to improve the detection of engineered biological systems harboring a diverse variety of modifications in a range of biological organisms in complex backgrounds. The FELIX program will improve and augment detection capabilities to expedite appropriate responses to the presence of engineered organisms.

1.A.2. Program Summary

The fundamental aim of the FELIX program is to determine whether a given biological system has been engineered. FELIX seeks to accomplish this by developing a suite of tools and methods for the detection of engineered biological organisms, ranging from viruses and microbes to insects, animals, and plants. Proposed solutions may include the development of new experimental platform tools and computational approaches, as well as significant improvements to existing platform technologies that provide a greatly enhanced ability to detect signatures of biological engineering. Technologies are sought to improve both the quantity and quality of information available from sample and computational analyses, thus improving the confidence in determining whether a system has been engineered. Examples include, but are not limited to, identifying signatures that were previously not readily readable, using data from multiple analysis points, increasing sensitivity, and leveraging technologies that can increase throughput and reduce the complexity of sample analysis. Innovative solutions are sought under this BAA and are anticipated to range across a diversity of experimental approaches, types of signatures detected, and organisms.

For the FELIX program, the desired enhanced capabilities are described by two separate Focus Areas (see Table 1 and Table 2):

Focus Area 1: Develop platform tools and methods for analyzing biological samples to detect signatures of engineering in complex samples. Multiple, diverse approaches are anticipated and may range from methods to deeply and exhaustively examine individual samples to platforms for rapid, high-throughput detection of a defined set of signatures of interest (e.g., CRISPR/Cas9, plasmid elements, or cloning scars).

Focus Area 2: Develop new computational capabilities for modeling and analysis of large, diverse data sets to detect signatures of biological engineering. Approaches may support cutting-edge technologies being jointly developed in Focus Area 1 or may support current, widely-utilized data sources, including evolutionary modeling. Approaches must be capable of identifying engineered changes, and may include, but are not limited to, detection of sequence-based, systems-level, and population-level signatures of engineering.

Offerors may propose to Focus Area 1, Focus Area 2, or to both Focus Areas. Offerors should select biological model systems for initial and subsequent capability demonstrations and provide a rationale for the chosen systems, including suitability for testing the proposed approach and level of existing characterization. The desired goal is to be able to extend the platform and computational tools to other species and, as appropriate, across higher levels of biological classification. In addition, options and approaches for detecting signatures that occur with low frequency or in complex backgrounds should be considered.

Collaborative efforts and teaming among potential performers is highly encouraged. It is anticipated that teams will be multidisciplinary, including expertise in fields such as bioinformatics, population genetics, genomics, proteomics, metabolomics, computer science, microfluidics, disease surveillance, biochemistry, biophysics, statistics, and environmental isolations/screening.

IARPA will employ a Government Test and Evaluation (T&E) team to assist in evaluating progress and success of the FELIX program. The T&E team will measure each performer's developed platform performance against a set of Metrics and Milestones specific to each focus area (see Table 3).

1.A.3. Out of Scope

Dual Use Research of Concern (DURC)[1] is out of scope for this program.

1.B. Program Structure, Goals, and Approach

1.B.1. Program Structure

The FELIX Program is anticipated to have a duration of 3.5 years composed of two phases in each Focus Area. Phase One (1) will be 18 months in duration, and Phase Two (2) is anticipated to be 24 months in duration. A top-level overview of the FELIX program is shown in Table 1.

Table 1: Overview of the FELIX Program Structure

	Focus Area 1	Focus Area 2
Goal	Transition-ready experimental platform tools and methods for detecting signatures of biological engineering	Transition-ready computational tools and approaches for detecting signatures of biological engineering
Phase 1	• Develop experimental platform tools and methods • Provide an initial demonstration of capabilities and performance	• Develop computational tools and methods • Provide an initial demonstration of capabilities and performance

[1] (U.S. Department of Health and Human Services, United States Government Policy for Oversight of Life Sciences Dual Use Research of Concern. March 2012. http://www.phe.gov/s3/dualuse/Documents/us-policy-durc-032812.pdf)

Phase 2	• Further development and improvement to optimize sensitivity, specificity, extensibility, throughput, and scalability requirements • Deliver transition-ready tools	• Further development and improvement to optimize sensitivity, specificity, extensibility, and computational resource requirements • Deliver transition-ready tools

1.B.2. Program Goals and Approach

Focus Area 1

The goal of this Focus Area is to leverage cutting-edge experimental technologies to develop platform tools and methods for detecting signatures of engineering in biological samples. In Phase 1, performers are expected to develop the proposed platform and provide an initial demonstration of platform capabilities and performance. If selected for continuation into Phase 2, platform capabilities should be further improved, refined, and optimized such that an advanced, transition-ready platform for detecting signatures of biological engineering is developed by the completion of the program. Transition-ready technologies are those that have been stringently validated such that accurate, repeatable, and precise results can be readily replicated but are not required to be fieldable or commercialized as part of this program.

Offerors may propose approaches that focus on any type of signature in any biological system and may propose approaches that range from assaying single samples to high-throughput methods to screen for specific signatures of interest, noting that approaches that are extensible to detecting a broad range of signatures of engineering will be viewed favorably. Offerors may consider how to approach samples that arise as part of an environmental screening effort or a limited volume unknown sample type and may consider approaches that flag samples of interest for further analysis. Selected biological systems for platform development should be well suited to demonstrate the utility of the approach, with the expectation that the platform will also be able to detect changes in additional species and/or clades. Offerors may propose data analysis as part of Focus Area 1 if it is necessary for the experimental platform being developed; however, the highly innovative aspects of the proposed approach should emphasize experimental technologies under this Focus Area.

The most important considerations for development are sensitivity and specificity in complex samples (see definitions in Table 3); however, approaches that are extensible across a greater number of species and/or clades will be viewed favorably. The scope of engineering signatures to be detected includes, but is not limited to, non-native genetic elements, single nucleotide polymorphisms (SNPs), insertions/deletions (INDELs), synthetic genetic sequences, non-natural genetic junctions, cloning scars, altered codon usage, unnatural nucleotides, epigenetic markers, systems-level changes (e.g., transcriptomic, proteomic, and metabolomic), and population-level markers. These signatures are intended to provide illustrative examples of the types of signatures that are within scope of the FELIX program and should not be construed to be an exhaustive list of possibilities. Samples will be provided to Phase 1 performers for evaluation at months 7 and 15. Performers that are selected to continue into Phase 2 will further refine their systems and will be provided additional evaluation samples at months 27 and 39. Evaluation samples will represent a full spectrum of complexity regardless of the proposed platform, but samples

provided may be tailored to each performer based on expected platform extensibility (see Section 1.C.1.).

Focus Area 2

The goal of this Focus Area is to develop computational tools for analysis of large and highly complex data types to detect signatures of engineering. In Phase 1, performers are expected to develop their data analysis methods and provide an initial demonstration of capabilities and performance. If selected for continuation in Phase 2, these capabilities should be further improved, refined, and optimized such that an advanced, transition-ready tool or suite of tools is developed by the end of the program. Transition-ready technologies are those that have been stringently validated such that accurate, repeatable, and precise results can be readily replicated but are not required to be fieldable or commercialized as part of this program. The main challenges that offerors should seek to address in the development of computational approaches are detection of signatures that are within a background of large and/or complex data and, if applicable, data integration for multiple data types and approaches that are scalable.

Proposed computational tools should integrate data in an efficient, organized, and tractable manner. Data sources may include those from current state-of-the-art technologies and resources, for example, metagenomics, transcriptomics, and proteomics. Improved tools for evolutionary modeling capable of determining whether a given signature is naturally arising may also be considered under this Focus Area. Offerors should choose biological systems for tool development that are well-suited to demonstrate the utility of their approach. The proposed tools should be extensible to additional species and/or clades, with higher taxonomic diversity being viewed favorably. Approaches that are not dependent on well-characterized data sets such as large population or ecological sequencing efforts or are rapidly able to incorporate new data will be viewed favorably. Other considerations include generalization of file formats, flexibility to handle varying data sources (e.g., from FA1 performers), frameworks for optimizing data analysis, computational resources, integration potential, and processing time. Offerors may propose data collection as part of Focus Area 2 if it is necessary for the computational tools being developed; however, the highly innovative aspects of the proposed approach should emphasize data analysis for detecting signatures of engineering under this Focus Area.

Proposed methods should be capable of detecting a variety of signatures of biological engineering having varying complexity. Potential signatures of interest include, but are not limited to, those that are sequence-based (e.g., non-native genetic elements/junctions, INDELs, cloning scars, structural alterations, and promoter optimization), systems-level (e.g., off-target editing effects or global expression shifts), and population level (e.g., changes in evolutionary fitness). Data sets will be provided for Phase 1 performer evaluation at months 7 and 15, and may include raw sequence data or other performer-specific data as appropriate. Performers that are selected to continue into Phase 2 will further refine their systems and will be provided with additional evaluation data sets at months 27 and 39. Data sets provided will represent a full spectrum of complexity (see Section 1.C.1.) regardless of the proposed platform but may be tailored to each performer for efficient and thorough evaluation.

Table 2: FELIX Program Goals across Focus Areas and Phases

	Focus Area 1	Focus Area 2
Phase 1 Goals 18 Months	• Develop experimental signature detection approaches capable of increasing data quantity and/or improving data quality • Detect a variety of engineered biological changes of varying type and frequency, weighted toward changes and samples with low overall complexity	• Integrate data source(s) into an efficient and tractable system • Develop signature detection approaches capable of resolving signatures of biological engineering in complex and/or large data sets • Detect a variety of engineered biological changes of varying type and frequency, weighted toward changes and data sets with low overall complexity
Phase 2 Goals 24 Months	• Improve, refine, and optimize platform tool(s) and/or methods • Improve the breadth and sophistication of engineered biological changes capable of being detected, weighted toward changes and samples with high complexity and low frequency of engineered signature • Deliver transition-ready tool(s)	• Improve, refine, and optimize computational and/or modeling tool(s) • Improve the breadth and sophistication of engineered biological changes capable of being detected, weighted toward changes and data sets with high complexity and low frequency of engineered signature • Deliver transition-ready tool(s)

1.C. Test and Evaluation, Milestones, Metrics, and Waypoints

1.C.1. Testing & Evaluation

IARPA will use Program Milestones and Metrics (see Table 3) to assess the effectiveness of proposed solutions in achieving the stated program objectives and to determine whether satisfactory progress is being made to warrant continued funding of the program. These milestones are only one aspect of how project and program success will be monitored and assessed, and are intended to focus the FELIX program, while allowing flexibility, creativity, and innovation in proposing solutions to meet the FELIX program goals. Proposals with a plan to surpass the listed milestone(s) in one or more categories are desirable and offerors will need to provide clear justification as to why their proposed approach will be able to meet the enhanced milestone(s). In addition to IARPA-specified metrics and milestones, offerors are also encouraged to provide any additional metrics and associated milestones relevant to their particular technical approach and the basis for their relevance.

Focus Area 1
Approaches fo**r** detecting signatures of biological engineering will be evaluated based on several criteria, to include specificity, type(s) of engineered change detectable, sensitivity, platform extensibility across species, sample complexity, throughput, and scalability. To assess performance, T&E partners will provide at least 25 and up to 100 samples to each performer per evaluation point (two per phase), though not all samples provided will necessarily harbor an engineered change. For the purpose of determining cost, offerors should assume that 50 samples will be provided at each evaluation point. Samples may be tailored to each approach based on expected platform capability and extensibility, and will represent a range of complexity defined by the population ratio of wild type or natural variants to engineered changes, the diversity of unmodified organisms represented in the sample, and the type of the engineered change.

In Phase 1, samples provided to performers for evaluation will be weighted toward low complexity. In Phase 2, samples will be weighted toward high complexity. For example, in Phase 1, if performers choose an insect model to demonstrate the capability, they could be provided with insects or insect genomic DNA containing a sequence that codes for a protein of interest at a 3:1 ratio of wild type to engineered gene in a wild-type background from the same tissue or organism. In Phase 2, performers could be provided with a sample containing insects or insect genomic DNA with an engineered epigenetic change, present at a ratio of 1000:1 wild type to engineered genes, in a background that contains multiple species of insects. These examples are intended to be representative of the sample complexity combinations that may be explored; however, performers will be provided with a selection of samples across the entire complexity space for both phases, with an increase in the relative number of difficult samples occurring in Phase 2.

Performers in Focus Area 1 will be given 45 days to analyze all samples provided at each evaluation point and will be evaluated on their ability to determine if the sample has been engineered. In addition to determining if the sample has been engineered, performers will be expected to strive for stringent evaluation criteria for platform sensitivity and specificity, and will also be evaluated on platform extensibility (see Table 3). Tools capable of detecting a range of biological engineering modifications, including those that are relatively more sophisticated, will be viewed favorably.

Focus Area 2
The development of new computational tools will be evaluated on several criteria, to include specificity, type(s) of engineered change detectable, sensitivity, platform extensibility across species and/or clades, sample complexity, scalability, and computational resources. To assess performance, T&E partners will provide at least 25 and a maximum of 100 data sets to each performer per evaluation point (two per phase), though not all data sets provided will necessarily harbor an engineered change. For the purpose of determining cost, offerors should assume that 50 data sets will be provided at each evaluation point. Similar to Focus Area 1, performers in Focus Area 2 will be provided with data sets that represent a variety of samples from low to high complexity with regard to sophistication of the engineered change, frequency, and amount and type of background data present and may be tailored to each performer based on the expected capability and extensibility of each computational approach.

In Phase 1, data provided to performers will be weighted toward low complexity. In Phase 2, data provided to performers will be weighted toward higher complexity. For example, in Phase 1, performers could be provided with a file representing insect-derived data containing a large insertion at a frequency of 3:1 wild-type to engineered signature. In Phase 2, performers could be provided with a file representing insect-derived data with targeted epigenetic alterations at a ratio of 1000:1 wild-type to engineered signature in a complex background that contains other species of insects. These examples are intended to be representative of the range of data complexity and additional complexity combinations may be explored. As in Focus Area 1, performers will be provided with a variety of data sets across the entire complexity space for both phases, with a weighting toward higher complexity data sets occurring in Phase 2.

Performers in Focus Area 2 will be given 45 days to analyze all data sets provided at each evaluation point and will be evaluated on their ability to detect signatures of biological engineering within complex data sets. In addition to correctly identifying engineered changes, performers will be expected to strive for stringent evaluation criteria for platform sensitivity and specificity and will also be evaluated on platform extensibility, scalability, and computational resources (see Table 3). Proposed solutions capable of detecting signatures in relatively complex data sets and more sophisticated engineered changes will be viewed favorably.

Offerors can create a platform that can be run on a compute cluster operating a Unix version with maximum memory of 1 TB, maximum processing of 6,000 CPU at 2.3-2.8 GHz and/or 15,000 GPU, and a maximum storage of 20 TB; however, these requirements represent a maximum, and it is anticipated that many approaches will require far fewer resources. Programs operable on commodity hardware equivalent to that available on public cloud infrastructures will be viewed favorably. Additionally, software and any dependencies must be installable by the T&E team in under 12 CPU hours and should not require any licensing. Source code should also be delivered if providing pre-compiled packages. Installations utilizing a single make/install command and those relying on containers will be viewed favorably. Proposed tools must meet all computational resource requirements in both Phase 1 and Phase 2.

1.C.2. Program Milestones & Metrics

All performers will be required to develop and meet program milestones specific to the individual technical approach being proposed. Metrics to be addressed as part of the proposal should include, but are not limited to:

1. Type(s) of engineered change to be detected
2. Specificity of the platform for detecting engineered changes
3. Sensitivity of the platform, considering both the frequency of engineered change within the sample as well as the background complexity of the sample
4. Platform extensibility
5. Throughput and/or scalability
6. Computational Resource Required (Focus Area 2 only)
7. Any additional relevant performance parameters

Performers should include in their proposal plans to perform an initial baseline determination of platform performance for all relevant program metrics, as well as intermediate and final performance milestones that would be considered success for each phase. The FELIX program has defined minimum target milestones for sensitivity, specificity, platform extensibility and

computational resources, which are provided in Table 3. It is anticipated that performance will be measured by performers utilizing the model system(s) proposed, but performance metrics may also be assessed based on analysis of samples and data sets provided as part of T&E. Proposals for which the above metrics may not be optimal to assess performance should propose and define alternate metrics as needed, clearly articulate why the provided metric(s) are inappropriate, and convey the value of any associated milestones.

Table 3: FELIX Milestones and Metrics

Focus Area (FA)	Metric Definition	Milestones
FA 1 and 2	Type of engineered change detected	To be defined by offeror as appropriate to the proposed approach.
FA 1 and 2	Sensitivity: Ratio of true positives over condition positives (condition positives defined as the sum of true positives and false negatives)	Phase 1: Across all samples/data sets, performers should achieve 80% sensitivity. Phase 2: Across all samples/data sets, performers should achieve 90% sensitivity.
FA 1 and 2	Specificity: Ratio of true negatives over condition negatives (condition negatives defined as the sum of true negatives and false positives)	Phase 1: Across all samples/data sets, performers should achieve 95% specificity. Phase 2: Across all samples/data sets, performers should achieve 99% specificity, with specificities ≥99.9% viewed favorably
FA 1 and 2	Platform Extensibility: Total number of sample types (FA1) or data set types (FA2) (cell lines, strains, species, etc.) for which the platform meets the sensitivity/specificity metrics	Phase 1: Extensible across ≥2 sample types or data set types, with greater extensibility viewed favorably. Phase 2: Extensible across >3 sample types or data set types, with greater extensibility viewed favorably.
FA 1 and 2	Throughput and/or scalability	To be defined by offerors as appropriate to the proposed approach. Offerors are expected to determine baseline capabilities and propose milestones that demonstrate improvements.
FA 2 only	Computational Resources	To be defined by offerors as appropriate to the proposed approach. Computational resources may not exceed the parameters outlined in Section 1.C.1. Offerors are expected to determine baseline capabilities and propose milestones that demonstrate improvements.

1.C.3. Waypoints

Waypoints are task-driven intermediate steps toward achieving each program milestone. Offerors are not required to propose waypoints in response to the FELIX program BAA; however, the development of program waypoints should be proposed as an initial Deliverable to be completed in month 1 of the program. Waypoints should be quantitative accomplishments reflected in the work plan and depicted on the schedule that indicate progress towards achieving each milestone and reduction of program risk. Waypoints are how the performer clearly explains the quantitative and timely progress that must be made for their overall concept to meet end-of-program milestones. Performance against these waypoints will be reviewed throughout the program, and the FELIX Program Manager and advisors will use performance against the waypoints to assess whether course corrections are needed to ensure program success.

1.D. Program Timeline and Deliverables

IARPA will use the following timeline in Table 4 to monitor, evaluate, and maintain overall program progress. It also includes a schedule for the key deliverables the offerors shall provide. In addition to technical oversight of progress, technical reviews will assess programmatic progress against proposed work plans. Offerors may add additional deliverables as needed to the minimum set listed in Table 4.

Table 4: Program Review and Deliverables

Month	Deliverable
1	Program kickoff meeting (2-days) in Washington DC Metropolitan Area (WMA). Corrected slides provided within 15 days following meeting date.
1	Development of program waypoints
4, 9, 14	Performer-site technical review. Slides from presentation due 15 days after visit.
7	T&E team delivers 25-100 samples/data sets to Performer; Performer analysis due within 45 days.
9	Report detailing platform T&E performance data and results due to Government 30 days following completion of sample analysis.
12	Technical program review meeting (2-days) in WMA. Slides due 15 days following meeting date.
15	T&E team delivers 25-100 samples/data sets to Performer; Performer analysis due within 45 days.
17	Report detailing platform T&E performance data and results due to Government 30 days following completion of sample analysis.

18	Final Report for Phase 1. Format provided upon contract award.
18	WMA workshop (3-days). Slides from workshop due 15 days after the meeting.
22, 27, 32, 37	Performer-site technical review. Slides from presentation due 15 days after visit.
27	T&E team delivers 25-100 samples/data sets to Performer; Performer analysis due within 45 days.
29	Report detailing platform T&E performance data and results due to Government 30 days following completion of sample analysis.
30	WMA workshop (3-days). Slides from workshop due 15 days after the meeting.
36	Technical program review meeting (2-days) in WMA. Slides due 15 days following meeting date.
39	T&E team delivers 25-100 samples/data sets to Performer; Performer analysis due within 45 days.
41	Report detailing platform T&E performance data and results due to Government 30 days following completion of sample analysis.
42	Final Report for Phase 2. Format provided upon contract award.
42	WMA workshop (3-days). Slides from workshop due 15 days after the meeting.
Monthly, by the 10^{th} day of the following month	Monthly technical and financial report due to Government.
TBD	System delivery to the Government upon completion of each performer's period of performance.

1.E. Meeting and Travel Requirements

Performers are expected to assume responsibility for administration of their projects and to comply with contractual and FELIX program requirements for reporting, attendance at program workshops, and availability for site visits. For the purposes of determining costs, plan on estimating travel to the WMA as outlined in Table 4. The trip should include the Principal Investigator (PI) and Project Manager at a minimum.

1.E.1. Workshops and Program Reviews

The FELIX program intends to hold a program-level Kickoff meeting in the first month of the program and then similar Workshops at month 18, 30 and 42. Workshops will focus on technical

aspects of the program and on facilitating open technical exchanges, interaction, and sharing among the various program participants to facilitate test and evaluation, and receive input from transition partners. FELIX program participants will be expected to present the technical status and progress of their projects to other participants and invited guests. Technical program review meetings are status update meetings with performers and the Government team where each performer will present progress to date on the technical and financial aspects of the program.

1.E.2. Site Visits

Site visits by the Contracting Officer Technical Representative and the FELIX Program Manager will take place 2 times annually during the life of the program. These visits will occur at the performer's facility. Reports on technical progress, details of successes and issues, contributions to the program goals, and technology demonstrations will be expected at such visits.

1.F. Place of Performance

Performance will be conducted at the performer's site(s) as described in the performer's response to the BAA.

1.G. Period of Performance

The FELIX program is envisioned as a 3.5 year effort that is intended to begin in February 2018. Phase 1 of the program (the Base Period) will last 18 months, and Phase 2 (Option 1) will last 24 months.

SECTION 2: AWARD INFORMATION

The BAA shall result in awards for all phases of the program. Funding for the Option Period shall depend upon performance during the Base Period, as well as program goals, the availability of funding, and IARPA priorities. Funding of Option Periods 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 the Source Selection Authority determines them to be necessary. Additionally, IARPA reserves the right to accept proposals in their entirety or to select only portions of proposals for negotiations for award. In the event that IARPA desires to award only portions of a proposal, negotiations may be opened with that offeror.

Awards under this BAA shall be made to offerors on the basis of the Evaluation Criteria listed in Section 5 of the BAA, as well as program balance, and availability of funds. Proposals selected for negotiation may result in a procurement contract. However, the Government reserves the right to negotiate the type of award instrument it determines appropriate under the circumstances.

The Government shall contact offerors whose proposals are selected for negotiations to obtain 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.

SECTION 3: ELIGIBILITY INFORMATION

3.A. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal. Historically Black Colleges and Universities (HBCUs), Small Businesses, Small Disadvantaged Businesses and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting 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 (FFRDCs), University Affiliated Research Centers (UARCs), Government-Owned, Contractor-Operated (GOCO) 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.

Foreign entities and/or individuals may participate to the extent that such participants comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws and other governing statutes applicable under the circumstances. Proposers 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, offerors should carefully consider the roles and responsibilities of foreign participants as they pursue teaming arrangements.

3.A.1. Organizational Conflicts of Interest (OCI)

"Organizational conflict of interest" 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.

If a prospective offeror, or any of its proposed subcontractor teammates, believes that a potential conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with IARPA and submit a notification by e-mail to the mailbox address for this BAA at dni-iarpa-baa-17-07@iarpa.gov. All notifications shall be submitted through the prime offeror, regardless of whether the notification addresses a potential OCI for the offeror or one of its subcontractor teammates. A potential conflict of interest includes, but is not limited to,

any instance where an offeror, or any of its proposed subcontractor teammates, is providing either scientific, engineering and technical assistance (SETA) or technical consultation to IARPA. In all cases, the offeror shall identify the contract under which the SETA or consultant support is being provided. Without a waiver from the IARPA Director, neither an offeror, nor its proposed subcontractor teammates, can simultaneously provide SETA support or technical consultation to IARPA and compete or perform as a Performer under this solicitation.

All facts relevant to the existence of the potential conflict of interest, real or perceived, should be disclosed in the notification. The request should also include a proposed plan to avoid, neutralize or mitigate such conflict. The offeror, or subcontractor teammate as appropriate, shall certify that all information provided is accurate and complete, and that all potential conflicts, real or perceived, have been disclosed. Offerors may submit this notification after release of the BAA, however, the Government may not respond prior to the proposal due date. Submission of a proposal is not dependent on a Government response. If, in the sole opinion of the Government, after full consideration of the circumstances, the conflict situation cannot be resolved or waived, any proposal submitted by the offeror that includes the conflicted entity shall be excluded from consideration for award.

As part of their proposal, offerors who have identified any potential conflicts of interest shall include either an approved waiver signed by the IARPA Director, an IARPA Determination letter stating that no conflict of interest exists, or a copy of their notification. Otherwise, offerors shall include in their proposal 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.

If, at any time during the solicitation or award process, IARPA discovers that an offeror has a potential conflict of interest and no notification has been submitted by the offeror, IARPA reserves the right to immediately withdraw the proposal from further consideration for award.

Offerors are strongly encouraged to read "Intelligence Advanced Research Projects Activity's (IARPA) Approach to Managing Organizational Conflicts of Interest (OCI)", found on IARPA's website at: http://www.iarpa.gov/index.php/working-with-iarpa/iarpas-approach-to-oci.

3.A.2. Multiple Submissions to the BAA

Organizations may participate in more than one submission to the BAA. However, if multiple submissions to the BAA which include a common team member are selected, IARPA shall, at contract negotiation, ensure that there is no duplicative funding (i.e., no one entity can be paid twice to perform the exact same task).

3.B. U.S. Academic Organizations

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."

It is ***highly*** recommended that offerors submit with their proposal a completed and signed Academic Institution Acknowledgement 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. A template of the Academic Institution Acknowledgement Letter is enclosed in APPENDIX A of this BAA. It should be noted that an appropriate senior official from the institution (i.e., typically the President, Chancellor, Provost, or other appropriately designated official) shall sign the completed form. Note that this paperwork **shall** be received before IARPA can enter into any negotiations with any offeror when a U.S. academic organization is a part of its team.

3.C. Other Eligibility Criteria

3.C.1. Collaboration Efforts

Collaborative efforts and teaming arrangements among potential performers are strongly encouraged. Specific content, communications, networking and team formations are the sole responsibility of the participants.

SECTION 4: PROPOSAL AND SUBMISSION INFORMATION

This notice constitutes the total BAA and contains all information required to submit a proposal. No additional forms, kits, or other materials are required.

4.A. Proposal Information

Interested offerors are required to submit full proposals in order to receive consideration for award. All proposals submitted under the terms and conditions cited in this BAA shall be reviewed. Proposals shall be received by the time and date specified in the General Information section in order to be assured of consideration during the initial round of selections. IARPA may evaluate proposals received after this date, but prior to the BAA Closing Date. Selection remains contingent on the evaluation criteria, program balance and availability of funds. The typical proposal should express a consolidated effort in support of one or more related technical concepts or ideas. Disjointed efforts should not be included in a single proposal.

The Government intends to use employees of Booz Allen Hamilton, SCITOR/SAIC, TASC/Engility, Welkin Associates/Mantec, and BRTC Federal Solutions to provide expert advice regarding portions of the proposals submitted to the Government and to provide logistical support in carrying out the evaluation process. These personnel shall have signed and be subject to the terms and conditions of non-disclosure agreements. By submission of its proposal, an offeror agrees that its proposal information may be disclosed to employees of these organizations for the limited purpose stated above. Offerors who object to this arrangement shall provide clear notice of their objection as part of their transmittal letter. If offerors do not send notice of objection to this arrangement in their transmittal letter, 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 shall make evaluation and award determinations under this BAA.

All administrative correspondence and questions regarding this solicitation should be directed by email to dni-iarpa-baa-17-07@iarpa.gov. Proposals shall be submitted in accordance with the procedures stated in the BAA.

4.B. Proposal Format and Content

All proposals shall be in the format given below. Non-compliant proposals may be rejected without review. Proposals shall consist of two volumes: "Volume 1 - Technical and Management Proposal" and "Volume 2 - Cost Proposal." All pages shall be printed on 8-1/2 by 11 inch paper and IARPA desires that the font size not be smaller than 12 point. IARPA desires that the font size for figures, tables and charts not be smaller than 10 point. All contents shall be clearly legible with the unaided eye. Excessive use of small font, for other than figures, tables, and charts, or unnecessary use of figures, tables, and charts to present information may render the proposal non-compliant. Foldout pages shall not be used. The page limitation for full proposals includes all figures, tables, and charts. All pages should be numbered. Unnecessarily elaborate brochures or presentations beyond what is sufficient to present a complete and effective proposal are not acceptable and shall be discarded without review.

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

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

Volume 1 – Technical & Management Proposal (Limit to 30 pages if responding to either Focus Area 1 or Focus Area 2, and 50 pages if responding to both Focus Area 1 and Focus Area 2)
Section 1 - Cover Sheet & Transmittal Letter
Section 2 – Summary of Proposal (Estimated not to exceed 10 pages)
Section 3 – Detailed Proposal
Section 4 – Attachments (Not included in page count, but number appropriately for elements included. Templates are in the Appendices of this BAA)

1 – Academic Institution Acknowledgment Letter, if required
2 – Restrictions on Intellectual Property Rights
3 – OCI Waiver, Determination, Notification or Certification
4 – Bibliography
5 – Relevant Papers (up to three)
6 – Consultant Letters of Commitment
7 – Human Use Documentation, if applicable (see Section 6)
8 – Animal Use Documentation, if applicable (see Section 6)
9 – A Three Chart Summary of the Proposal
10 – Data Management Plan, estimated to be 2 to 3 pages (see Section 4 and Template under Appendix A)

Volume 2 – Cost Proposal
Section 1 – Cover Sheet
Section 2 – Estimated Cost Breakdown
Section 3 – Supporting Information

4.B.1. Volume 1: Technical and Management Proposal
(Limit to 30 pages if responding to either Focus Area 1 or Focus Area 2, and 50 pages if responding to both Focus Area 1 and Focus Area 2)

Volume 1, Technical and Management Proposal, may include an attached bibliography of relevant technical papers or research notes (published and unpublished) which document the technical ideas and approach on which the proposal is based. Copies of not more than three relevant papers can be included with the submission. The submission of other supporting materials along with the proposal is strongly discouraged and shall not be considered for review. Except for the cover sheet, transmittal letter, table of contents (optional), and the required attachments stated in the BAA, Volume 1 shall not exceed 30 pages if responding to either Focus Area 1 or Focus Area 2, and 50 pages if responding to both Focus Area 1 and Focus Area 2. Any pages exceeding this limit shall be removed and not considered during the evaluation process. Full proposals should be accompanied by an official transmittal letter, using contractor format. All full proposals shall be written in English.

4.B.1.a. Section 1: Cover Sheet & Transmittal Letter

A. Cover sheet: (*See Appendix C for template*)
B. Official Transmittal Letter

4.B.1.b. Section 2: Summary of Proposal (Estimated not to exceed 10 pages)

Section 2 shall provide an overview of the proposed work as well as introduce associated technical and management issues. This section shall contain a technical description of technical approach to the research as well as a succinct portrayal of the uniqueness and benefits of the proposed work. It shall make the technical objectives clear and quantifiable and shall provide a project schedule with definite decision points and endpoints. Offerors shall address:

A. A technical overview of the proposed research and plan. This section is the centerpiece of the proposal and shall succinctly describe the proposed approach and research. The overview shall provide an intuitive understanding of the approach and design, technical rationale, and constructive plan for accomplishment of technical objectives and deliverable production. The approach shall be supported by basic, clear calculations. Additionally, proposals shall clearly explain the innovative claims and technical approaches that shall be employed to meet or exceed each program metric and provide ample justification as to why approaches are feasible. The use of non-standard terms and acronyms should be avoided. This section shall be supplemented with a more detailed plan in Volume 1, Section 3 of the proposal.

B. Summary of the products, transferable technology and deliverables associated with the proposed research results. Define measurable deliverables that show progress toward achieving the stated Program Milestones. All proprietary claims to the results, prototypes, intellectual property, or systems supporting and/or necessary for the use of the research, results, and/or prototype shall be detailed in Attachment 2. If there are no proprietary claims, this should be stated. Should no proprietary claims be made, Government rights shall be unlimited.

C. Schedule and milestones for the proposed research. Summarize, in table form and clearly legible for all activity, the schedule and milestones for the proposed research. Do not include proprietary information with the milestones.

D. Related research. General discussion of other research in this area, comparing the significance and plausibility of the proposed innovations against competitive approaches to achieve Program objectives.

E. Project contributors. Include a clearly defined and clearly legible organizational chart of all anticipated project participants, organized under functional roles for the effort, and also indicating associated task number responsibilities with individuals.

F. Technical Resource Summary:

- Summarize total level of effort by labor category and technical discipline (i.e., research scientist/chemist/physicist/engineer/administrative, etc.) and affiliation (prime/ subcontractor/consultant). Key Personnel shall be identified by name. Provide a brief description of the qualifications for each labor category (i.e., education, certifications, years of experience, etc.)
- Summarize level of effort by labor category and technical discipline for each major task.
- Identify software and intellectual property required to perform, by affiliation (List each item separately)
- Identify materials and equipment (such as IT) required to perform, by affiliation (List each item separately)
- Identify any other resources required to perform (i.e., services, data sets, data set repository, facilities, government furnished property, etc.), by affiliation (List each item separately)
- Summarize level of effort required to prepare research data for public access.
- Estimated travel, including purpose of travel and number of personnel per trip, by affiliation

The above information shall cross reference to the tasks set forth in the offerors statement of work, and shall be supported by the detailed cost and pricing information provided in the offeror's Volume 2 Cost Proposal.

4.B.1.c. Section 3: Detailed Proposal Information

This section of the proposal shall provide the detailed, in-depth discussion of the proposed research as well as supporting information about the offeror's capabilities and resources. Specific attention shall be given to addressing both the risks and payoffs of the proposed research and why the proposed research is desirable for IARPA to pursue. This part shall provide:

A. Statement of Work (SOW) - In plain English, clearly define the technical tasks and sub-tasks to be performed, their durations and the dependencies among them. For each task and sub-task, 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, sub-contractor, team member, etc.) by name;
   - The exit criteria for each task/activity (i.e., a product, event or milestone that defines its completion); and
   - Definition of all deliverables (e.g., data (including public access), reports, software, etc.) to be provided to the Government in support of the proposed research tasks/activities.

   Note: Do not include any proprietary information in the SOW.

   At the end of this section of the proposal, provide a Gantt chart, showing all the tasks and sub-tasks on the left with the performance period (in years/quarters) on the right. All milestones shall be clearly labeled on the chart. If necessary, use multiple pages to ensure legibility of all information.

B. A detailed description of the objectives, scientific relevance, technical approach and expected significance of the work. The key elements of the proposed work should be clearly identified and related to each other. Proposals should clearly detail the technical methods and/or approaches that shall be used to meet or exceed each program milestone, and should provide ample justification as to why the proposed methods/approaches are feasible. Any anticipated risks should be described and possible mitigations proposed. General discussion of the problem without detailed description of approaches, plausibility of implementation, and critical metrics shall result in an unacceptable rating.

C. State-of-the-art. Comparison with other on-going research, highlighting the uniqueness of the proposed effort/approach and differences between the proposed effort and the current state-of-the-art. Identify advantages and disadvantages of the proposed work with respect to potential alternative approaches.

D. Data sources. Identification and description of data sources to be utilized in pursuit of the project research goals.

Offerors proposing to use existing data sets shall provide written verification that all data were obtained in accordance with U.S. laws and, where applicable, are in compliance with End User License Agreements, Copyright Laws, Terms of Service, and laws and policies regarding privacy protection of U.S. Persons. Offerors shall identify any restrictions on the use or transfer of data sets being used, and, if there are any restrictions, the potential cost to the Government to obtain at least Government Purpose Rights in such data sets.[2]

Offerors proposing to obtain new data sets shall ensure that their plan for obtaining the data complies with U.S. Laws and, where applicable, with End User License Agreement, Copyright Laws, Terms of Service, and laws and policies regarding privacy protection of U.S. Persons.

Offerors should include the documentation required in 6.B.3 (Human Use). Documentation must be well written and logical; claims for exemptions from Federal regulations for human subject protection must be accompanied by a strong defense of the claims. The Human Use documentation and the written verification are not included in the total page count.

Offerors should include the documentation required in 6.B.4 (Animal Use). Documentation must be well written and logical; claims for exemptions from Federal regulations for animal subject protection must be accompanied by a strong defense of the claims. The Animal Use documentation and the written verification are not included in the total page count. Use of non-human primates is not permitted under this BAA.

The Government reserves the right to reject a proposal if it does not appropriately address all data issues.

E. Deliverables. Deliverables are identified in Section 1 of the BAA.

The Government requires, at a minimum, Government Purpose Rights for all deliverables developed with mixed funding or that incorporate technical data or computer software developed at private expense; anything less shall be considered a weakness in the proposal. However, if limited or restricted rights are asserted by the offeror in any deliverable or component of a deliverable, the proposal shall identify the potential cost associated with the Government obtaining Government Purpose Rights in such deliverables developed at private expense or with mixed funding. Proposals that do not

[2] "Government Purpose Rights" (or "GPR") means the rights to use, modify, reproduce, release, perform, display, or disclose data, including technical data and computer software within the Government without restriction; and to release or disclose data, including technical data and computer software outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data or software for any United States Government purpose. United States Government purposes include any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data or computer software for commercial purposes or authorize others to do so.

include this information shall be considered non-compliant and may not be reviewed by the Government. All other deliverables shall be delivered with unlimited rights in accordance with FAR clause 52.227-14.

In the "Restrictions on Intellectual Property Rights" attachment of the proposal, offerors shall describe the proposed approach to intellectual property for all deliverables, together with a supporting rationale of why this approach is in the Government's best interest. This shall include all proprietary claims to the results, prototypes, intellectual property or systems supporting and/or necessary for the use of the research, results and/or prototype, and a brief explanation of how the offerors may use these materials in their program. To the greatest extent feasible, offerors should not include background proprietary technical data and computer software as the basis of their proposed technical approach.

If offerors (including their proposed teammates) desire to use in their proposed approach, in whole or in part, technical data or computer software or both that is proprietary to the offeror, any of its teammates, or any third party, in the "Restrictions on Intellectual Property Rights" attachment they should: (1) clearly identify such data/software and its proposed particular use(s); (2) identify and explain any and all restrictions on the Government's ability to use, modify, reproduce, release, perform, display, or disclose technical data, computer software, and deliverables incorporating such technical data and computer software; (3) identify the potential cost to the Government to acquire GPR in all deliverables that use the proprietary technical data or computer software the offeror intends to use; (4) explain how the Government shall be able to reach its program goals (including transition) within the proprietary model offered; and (5) provide possible nonproprietary alternatives in any area in which a Government entity would have insufficient rights to transfer, within the Government or to Government contractors in support of a Government purpose, deliverables incorporating proprietary technical data or computer software, or that might cause increased risk or cost to the Government under the proposed proprietary solutions.

Offerors also shall identify all commercial technical data and/or computer software that may be embedded in any noncommercial deliverables contemplated under the research effort, along with any applicable restrictions on the Government's use of such commercial technical data and/or computer software. If offerors do not identify any restrictions, the Government shall assume that there are no restrictions on the Government's use of such deliverables. Offerors shall also identify all noncommercial technical data and/or computer software that it plans to generate, develop and/or deliver under any proposed award instrument in which the Government shall acquire less than unlimited rights. If the offeror does not submit such information, the Government shall assume that it has unlimited rights to all such noncommercial technical data and/or computer software. Offerors shall provide a short summary for each item (commercial and noncommercial) asserted with less than unlimited rights that describes the nature of the restriction and the intended use of the intellectual property in the conduct of the proposed research.

Additionally, if offerors propose the use of any open source or freeware, any conditions, restrictions or other requirements imposed by that software shall also be addressed in the

"Restrictions on Intellectual Property Rights" attachment. Offerors should leverage the format in Appendix A for their response. (See also the "Intellectual Property" details stated in Section 6 of the BAA). The technical content of the "Restrictions on Intellectual Property Rights" attachment shall include only the information necessary to address the proposed approach to intellectual property; any other technical discussion in the attachment shall not be considered during the evaluation process. The attachment is estimated not to exceed **4** pages.

For this solicitation, IARPA recognizes only the definitions of intellectual property rights in accordance with the terms as set forth in the Federal Acquisition Regulation (FAR) part 27, or as defined herein. If offerors propose intellectual property rights that are not defined in FAR part 27 or herein, offerors shall clearly define such rights in the "Restrictions on Intellectual Property Rights" attachment of their proposal. Offerors are reminded of the requirement for prime contractors to acquire sufficient rights from subcontractors to accomplish the program goals.

"Research data" is defined herein as "the digital recorded factual material commonly accepted in the scientific community as necessary to validate research findings including data sets used to support scholarly publications, but does not include laboratory notebooks, preliminary analyses, drafts of scientific papers, plans for future research, peer review reports, communications with colleagues, or physical objects, such as laboratory specimens."

F. Cost, schedule, milestones. Cost, schedule, and milestones for the proposed research, including estimates of cost by task, total cost, and company cost share, if any. The milestones shall not include proprietary information.

G. Offeror's previous accomplishments. Discuss previous accomplishments and work in this or closely related research areas and how these shall contribute to and influence the current work.

H. Facilities. Describe the facilities that shall be used for the proposed effort, including computational and experimental resources.

I. Detailed Management Plan. The Management Plan should identify both organizations and individuals within organizations that make up the team, and delineate the expected duties, relevant capabilities, and task responsibilities of team members and expected relationships among team members. Expected levels of effort (percentage time, or fraction of an FTE) for all key personnel and significant contributors should be clearly noted. A description of the technical, administrative and business structure of the team and the internal communications plan should be included. Project/function/sub-contractor relationships (including formal teaming agreements), Government research interfaces, and planning, scheduling, and control practices should be described. The team leadership structure should be clearly defined. Provide a brief biography of the key personnel (including alternates, if desired) who shall be involved in the research along with the amount of effort to be expended by each person during the year. Participation by key personnel and

significant contributors is expected to exceed **(20%)** of their time. A compelling explanation is required for any variation from this figure.

If the team intends to use consultants, they shall also be included in the organizational chart. Indicate if the person shall be an "individual" or "organizational" consultant (i.e., representing themselves or their organization), and organizational affiliation.

A table such as the following (see **Table 5**) is recommended.

Table 5: Team Organization

Participants	Org	Role	Unique, Relevant Capabilities	Role: Tasks	Clearance Level	Time Commitment
Jane Wake	LMN Univ.	PI/Key Personnel	Electrical Engineering	Program Mgr & Electronics: 10	N/A	100%
John Weck, Jr.	OPQ Univ.	Key Personnel	Mathematical Physics	Programming: 1-5	N/A	50%
Dan Wind	RST Univ.	Key Personnel	Physics	Design, Fab, and Integration: 6-8	N/A	90%
Katie Wool	UVW Univ.	Contributor	Quantum Physics	Enhancement witness design: 4	N/A	25%
Rachel Wade	XYZ Corp.	Co-PI/Key Personnel	Graph theory	Architecture design: 6	N/A	55%
Chris West	XYZ Corp.	Significant Contributor	EE & Signal Processing	Implementation & Testing: 8-9	N/A	60%
Julie Will	JW Cons.	Consultant (Individual)	Computer science	Interface design: 10	N/A	200 hours
David Word	A Corp.	Consultant (A. Corp.)	Operations Research	Applications Programming: 2-3	N/A	200 hours

It is anticipated that some proposals may involve Human Subjects experiments. As the amount of time required to complete the IRB review/approval process may vary, the management plan should identify any past experience with obtaining Institutional Review Board (IRB) approvals for human subject experimentation, and outline how IRB approval will be obtained for this proposal. An IRB submission or approval is not required prior to submission of a proposal, provided your timeline can meet the needs of the program. Some example items to cover in your IRB management plan include the following:

- What IRB will you be using and what is your relationship to that IRB (e.g., internal, external, commercial, etc.).
- Have you worked with this IRB before? How regularly?
- When do you anticipate submitting for and receiving IRB approval in your project timeline and how does that fit within your research plan?
- If time is tight, what is your contingency plan for a delay?

If you intend to utilize animals as a part of your testing, the management plan should address how Institutional Animal Care and Use Committee (IACUC) approval will be obtained for this proposal. An IACUC submission or approval is not required prior to submission of a proposal, provided your timeline can meet the needs of the program. Some example items to cover in your IACUC management plan include the following:

- What IACUC will you be using and what is your relationship to that IACUC (e.g., internal, external, commercial, etc.)?
- Have you worked with this IACUC before? How regularly?
- When do you anticipate submitting for and receiving IACUC approval in your project timeline and how does that fit within your research plan?
- If time is tight, do you have a contingency plan for a delay?

J. Resource Share. Include the type of support, if any, the offeror might request from the Government, such as facilities, equipment or 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.

K. 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.

L. Data Management Plan. Offerors must submit a Data Management Plan (DMP) which outlines how they will manage and preserve the research data collected or produced in their work, using the DMP Template attached under Appendix A. The Data Management Plan need not require the preservation of all research data: offerors should consider the cost and benefits of managing and preserving the research data in determining whether to preserve it. At a minimum, all research data associated with a peer-reviewed manuscript or final published article (hereinafter "Publications") must be made publicly accessible by the award recipient before, on or at a reasonable time after the publication date. The Publications whose data must be covered by the Data Management Plan are deliverables as described in Section 1. Privacy, confidentiality, and security concerns must be protected, and intellectual property rights and commercial interests must be taken into account and protected accordingly.

The DMP must address the following:

- Describe the types of research data collected or produced in the course of the project. Include standards to be used for research data and metadata content and format.
- A plan for making the research data that underlie Publications digitally accessible to the public before, at the time of publication/conference or within a reasonable time after publication. The requirement could be met by including the data as supplementary information to the Publication or by depositing the data in searchable, machine-readable and digitally accessible form suitable for repositories available to

the public free of charge. Such repositories could be discipline-specific repositories, general purpose research data repositories or institutional repositories. The published article or conference paper should indicate how the public may access research data underlying the paper's results and findings. Offerors should attempt to make the data available for at least three years after published article or conference. (NOTE: Offerors shall make a best effort in identifying research data sets that may be used for Publications that occur after contract end. The offeror must deliver these data sets to the Government and should also make them available in depositories available to the public prior to the end of the period of performance, if not included as supplementary information to Publications.)

- Policies and provisions for sharing and preservation, including a) policies and provisions for appropriate protection of privacy, confidentiality, security, and intellectual property, b) descriptions of tools, including software, which may be needed to access and interpret the data, and c) policies and provisions for re-use, re-distribution, and production of derivatives.
- If, for legitimate reasons (e.g., privacy, confidentiality, security, intellectual property rights considerations; size of data sets, cost; time), the data underlying the results of peer-reviewed publications or conference papers cannot be shared and preserved, the plan must include a justification citing such reasons.

In addressing these elements (e.g., types of data to be shared and preserved, standards to be used for data and metadata, repositories to be used for archiving data, timeframes for sharing and preservation), the Data Management Plan should reflect the best practices of the relevant scientific discipline and research community. At a minimum, research data underlying Publications and associated metadata should include acknowledgement of IARPA support and a link to the associated Publication.

4.B.1.d. Section 4: Attachments

[NOTE: The attachments listed below shall be included with the proposal, if applicable, but do not count against the Volume 1 page limit.]

Attachment 1: Signed Academic Institution Acknowledgement Letter(s) (if applicable). Template provided in Appendix A.

Attachment 2: Restrictions on Intellectual Property Rights (if applicable). Template provided in Appendix A. This attachment is estimated not to exceed 4 pages.

Attachment 3: OCI Waiver/Determination/Notification or Certification. Template provided 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.

Attachment 5: Relevant Papers. Copies of not more than three relevant papers may be included in the submission. The proposers should include a one page technical summary of each paper provided, suitable for individuals who are not experts in the field.

Attachment 6: Consultant Commitment Letters. If needed.

Attachment 7: Human Use Documentation, if applicable.

Attachment 8: Animal Use Documentation, if applicable.

Attachment 9: A Three Chart Summary of the Proposal. A PowerPoint summary that quickly and succinctly indicates the concept overview, key innovations, expected impact, and other unique aspects of the proposal. The format for the summary slides is included in APPENDIX A to this BAA and does not count against the page limit. Slide 1 should be a self-contained, intuitive description of the technical approach and performance. These slides may be used during the evaluation process to present a summary of the proposal from the proposer's view.

Attachment 10: Data Management Plan (estimated as two to three pages). Template provided in Appendix A.

4.B.2. Volume 2: Cost Proposal
{No Page Limit}

The Offeror's proposal shall contain sufficient factual 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.

IARPA recognizes that undue emphasis on cost may motivate offerors to offer low-risk ideas with minimum uncertainty and to staff the effort with junior personnel in order to be in a more competitive posture. IARPA discourages such cost strategies. Cost reduction approaches that shall be received favorably include innovative management concepts that maximize direct funding for technology and limit diversion of funds into overhead.

4.B.2.a. Section 1: Cover Sheet.

See Appendix C for the Cover Sheet Template

4.B.2.b. Section 2: Estimated Cost Breakdown.

Offerors shall submit numerical cost and pricing data using Microsoft Excel. The Excel document, in the format provided in Appendix B, shall include intact formulas and shall not be hard numbered. The base and option period cost data should roll up into a total cost summary. The Excel files may be write-protected but shall not be password protected. The Cost/Price Volume shall include the following:

A. Completed Cost/Price Template - Offerors shall submit a cost element breakdown for the base period, each option period and the total program summary in the format provided in Appendix B[3].
B. Subcontractor/Inter-organizational Transfers (IOTs) and Consultants summary in the format provided in Appendix B. (After selection, offerors may be required to submit full cost proposals).
C. Total cost broken down by major task.
D. Major program tasks by fiscal year.
E. A summary of projected funding requirements by month.
F. A summary table listing all labor categories used in the proposal and their associated direct labor rates, along with escalation factors used for each base and option period of the acquisition.
G. A summary table listing all indirect rates used in the proposal for each for each base and option period of the acquisition.

4.B.2.c. Section 3: 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 – Provide a complete cost breakout by labor category, hours and rates (template available in Appendix B). Specify all key personnel by name and clearly state their labor category and proposed rate. Describe the basis of the proposed 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 IOTs) – The offeror is responsible for compiling and providing all subcontractor proposals with the Cost Volume. Subcontractor cost element sheets shall be completed for the base period, each option period and the total summary in the format provided in Appendix B (Excel is not required for initial

[3] **NOTE:** Educational institutions and non-profit organizations as defined in FAR Part 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 Part 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.

submittal, see paragraph below). Consultant letter(s) of commitment shall also be attached.

If a proposal is selected for negotiations, the prime shall be prepared to present full subcontractor proposals (if applicable per subcontract type) for the base period, each option period and total cost summary including all direct and indirect costs immediately upon request by the Contracting Officer. Information shall be presented in Excel with intact formulas using the format provided in Appendix B and addressing the supporting cost information as outlined in Section 4 of the BAA. In addition to the full and complete subcontractor cost proposal, the offeror shall also provide its analysis of the subcontractor's proposal including 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 proposals directly to the Contracting Officer.

Materials and Equipment – Provide copies of quotes, 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. Proposed travel costs shall comply with the limitations set forth in FAR Part 31.

Proposed conference travel must have an immediate, direct, and tangible benefit to the Government such as providing a deliverable at the conference (e.g., gives a presentation, presents a paper or research findings that are sponsored in whole or in part by the ODNI and/or IARPA). Travel for personnel to simply attend a conference may not be approved as a charge to the contract.

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

Government Purpose Rights - If the offeror asserts limited or restricted rights in any deliverable or component of a deliverable, the cost proposal shall separately identify the estimated cost associated with the Government obtaining Government Purpose Rights in such deliverables developed at private expense or with mixed funding (reference Data Sources and Deliverables from Section 4 of the BAA).

Indirect Costs – The offeror shall show indirect cost calculations, identify the proposed indirect rate by contractor fiscal year and program period (base, option period) 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 state by which agency the audit was conducted, 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 provide an explanation of the variance.

Cost sharing – Describe the source, nature and amount of cost-sharing, if any. Reference Resource Share from Section 4 of the BAA.

Other Pricing Assumptions - Identify pricing assumptions which may require incorporation into the resulting award instrument (e.g., use of Government Furnished Property/ Facilities/Information, access to Government Subject Matter Experts, etc.). Reference Resource Share from Section 4 of the BAA.

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 FPRA, FPRS or FPRR, if available.

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

Systems: For the Systems listed below, provide a brief description, the cognizant federal agency and audit results. If the system has been determined inadequate, provide a short narrative of 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/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
- Purchasing system

Certified "cost or pricing data" may be requested after selection for procurement contract awards of $750,000 or greater, unless the Contracting Officer approves an exception from the requirement to submit cost or pricing data. (Reference FAR Part 15.403.)

4.C. Submission Details

4.C.1. Due Dates

See BAA General Information Section for proposal due dates and times.

4.C.2. Proposal Delivery

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 who plan to submit proposals for evaluation in the

first round are strongly encouraged to register at least one week prior to the due date for the first round of proposals. Offerors who do not so register in advance do so at their own risk, and IARPA shall not extend the due date for the first round of proposals to accommodate such offerors. Failure to register as stated shall prevent the offeror's submission of documents.

After registration has been approved, offeror's should upload proposals, (Volume 1and Volume 2), scanned certifications and permitted additional information in 'pdf' format, or as otherwise directed (Excel, PowerPoint, etc.). Offerors are responsible for ensuring compliant and final submission of their proposals to meet the BAA submittal deadlines. Time management to upload and submit is wholly the responsibility of the offeror.

Upon completing the proposal submission the offeror shall receive an automated confirmation email from IDEAS. Please forward that automated message to dni-iarpa-baa-17-07@iarpa.gov**.** IARPA strongly suggests that the offeror document the submission of their proposal package by printing the electronic receipt (time and date stamped) that appears on the final screen following compliant submission of a proposal to the IDEAS website.

Proposals submitted by any means other than IDEAS (e.g., hand-carried, postal service, commercial carrier and email) shall not be considered unless the offeror attempted electronic submission, but was unsuccessful. Should an offeror be unable to complete the electronic submission, the offeror shall employ the following procedure. The offeror shall send an e-mail dni-iarpa-baa-17-07@iarpa.gov, prior to the first round proposal due date and time specified in the BAA, and indicate that an attempt was made to submit electronically but that the submission was unsuccessful. This e-mail shall include contact information for the offeror. Following this email contact, additional guidance shall be provided.

Proposals shall be submitted by the time and date specified in the BAA in order to be assured of consideration during the first round of selections. IARPA may evaluate proposals received after this date until the closing date of the BAA. Selection remains contingent on proposal evaluation, program balance and availability of funds. Failure to comply with the submission procedures may result in the submission not being evaluated

4.D. Funding Restrictions

Facility construction costs are not allowable under this activity. Funding may not be used to pay for commercialization of technology.

SECTION 5: PROPOSAL REVIEW INFORMATION

5.A. Technical and Programmatic Evaluation Criteria

The criteria to be used to evaluate and select proposals for this Program BAA are described in the following paragraphs. Because there is no common statement of work, each proposal shall be evaluated on its own merits and its relevance to the Program goals rather than against other proposals responding to this BAA. The proposals shall be evaluated on the basis of the evaluation criteria listed in this section, as well as program balance, and availability of funds. The evaluation criteria of this section, in descending order of importance, are: Overall Scientific and Technical Merit, Effectiveness of Proposed Work Plan, Contribution and Relevance to the IARPA Mission

and Program Goal, Relevant Expertise and Experience, and Resource Realism. Specifics about the evaluation criteria are provided below, in descending order of importance.

Award(s) shall be made to offerors on the basis of the evaluation criteria listed below, program balance, and availability of funds, and subject to successful negotiations with the Government. Award recommendations shall not be made to offeror(s) whose proposal(s) are determined not to be selectable. Offerors are cautioned that evaluation ratings may be lowered or proposals rejected if submission instructions are not followed.

5.A.1. Overall Scientific and Technical Merit

Overall scientific and technical merit of the proposal is substantiated, including unique and innovative methods, approaches, and/or concepts. The offeror clearly articulates an understanding of the problem to be solved. The technical approach is credible, and includes a clear assessment of primary risks and a means to address them. The proposed research advances the state-of-the-art.

5.A.2. Effectiveness of Proposed Work Plan

The feasibility and likelihood that the proposed approach shall satisfy the Program's milestones and metrics are explicitly described and clearly substantiated along with risk mitigation strategies for achieving stated milestones and metrics. The proposal reflects a mature and quantitative understanding of the Program milestones and metrics, and the statistical confidence with which they may be measured. Any offeror-proposed milestones and metrics are clear and well-defined, with a logical connection to enabling offeror decisions and/or Government decisions. The schedule to achieve the milestones is realistic and reasonable.

The roles and relationships of prime and sub-contractors is clearly delineated with all participants fully documented. Work plans shall demonstrate the ability to provide full Government visibility into and interaction with key technical activities and personnel, and a single point of responsibility for contract performance. Work plans shall also demonstrate that key personnel have sufficient time committed to the Program to accomplish their described Program roles.

The requirement and rationale for and the anticipated use or integration of Government resources, including but not limited to all equipment, facilities, information, etc., is fully described including dates when such Government Furnished Property (GFP), Government Furnished Equipment (GFE), Government Furnished Information (GFI) or other similar Government-provided resources shall be required.

The offeror's proposed intellectual property and data rights are consistent with the Government's need to be able to effectively manage the program and evaluate the technical output and deliverables, communicate program information across Government organizations and support transition and further use and development of the program results to Intelligence Community users at an acceptable cost. The proposed approach to intellectual property rights is in the Government's best interest.

The offeror's Data Management Plan is complete, addressing the types of data to be collected or produced, describing how each type of data will be preserved and shared, including plans to provide public access to peer reviewed publications and the underlying research data, or provides justifiable rationale for not doing so.

5.A.3. Contribution and Relevance to the IARPA Mission and Program Goal

The proposed solution meets the letter and intent of the stated program goals and all elements within the proposal exhibit a comprehensive understanding of the problem. The offeror clearly addresses how the proposed effort shall meet and progressively demonstrate the Program goals. The offeror describes how the proposed solution contributes to IARPA's mission to invest in high-risk/high-payoff research that can provide the U.S. with an overwhelming intelligence advantage over its future adversaries.

5.A.4. Relevant Experience and Expertise

The offeror's capabilities, related experience, facilities, techniques, or unique combination of these, which are integral factors for achieving the proposal's objectives, shall be evaluated, as well as qualifications, capabilities, and experience of the proposed principal investigator, team leader, and key personnel critical in achieving the proposal objectives. .

5.A.5. Resource Realism

The proposed resources demonstrates a clear understanding of the project, a perception of the risks and the ability to organize and perform the work. The labor hours and mix are consistent with the technical and management proposal and are realistic for the work proposed. Material, equipment, software, data collection and management, and travel, especially foreign travel, are well justified, reasonable, and required for successful execution of the proposed work.

5.B. Method of Evaluation and Selection Process

IARPA's policy is to ensure impartial, equitable, comprehensive proposal evaluations and to select the source (or sources) whose offer meets the Government's technical, policy and programmatic goals. Evaluations will be conducted using a combination of an adjectival and numerical rating methodology. In order to provide the desired evaluation, qualified Government personnel will conduct reviews and (if necessary) convene panels of experts in the appropriate areas.

IARPA shall only review proposals against the evaluation criteria, program balance, and availability of funds, and shall not evaluate them against other proposals, since they are not submitted in accordance with a common work statement. For evaluation purposes, a proposal is the document described in Section 4 of the BAA. Other supporting or background materials submitted with the proposal shall not be considered. Only Government personnel shall make evaluation and award determinations under this BAA. Selections for award shall be made on the basis of the evaluation criteria stated above, program balance, and the availability of funds.

5.C. Negotiation and Contract Award

Award of a contract is contingent on successful negotiations. After selection and before award, the contracting officer shall determine cost/price realism and reasonableness, to the extent appropriate, and negotiate the terms of the contract.

The contracting officer shall review anticipated costs, including those of associate, participating organizations, to ensure the offeror has fully analyzed the budget requirements, provided sufficient supporting cost/price information, and that cost data are traceable and reconcilable. Additional information and supporting data may be requested.

If the parties cannot reach mutually agreeable terms, a contract shall not be awarded.

5.D. 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 within 5 days after notification of proposal results.

SECTION 6: AWARD ADMINISTRATION INFORMATION

6.A. Award Notices

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

6.B. Administrative and National Policy Requirements

6.B.1. Proprietary Data

It is the policy of IARPA to treat all proposals as competitive information, and to disclose their contents only for the purpose of evaluation. All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. It is the offeror's responsibility to clearly define to the Government what the offeror considers proprietary data.

6.B.2. Intellectual Property

6.B.2.a. Noncommercial Items (Technical Data and Computer Software)

Offerors responding to this BAA requesting a procurement contract shall identify in the Restrictions on Intellectual Property Rights attachment of the proposal all noncommercial technical data and noncommercial computer software that it plans to generate, develop and/or deliver under any proposed award instrument in which the Government shall acquire less than unlimited rights and to assert specific restrictions on those deliverables, the basis for such restrictions, the potential cost to the Government to acquire GPR in all deliverables incorporating such noncommercial technical data and computer software, and the intended use of the technical data and noncommercial computer software in the conduct of the proposed research and development of applicable deliverables. If offerors intend to incorporate noncommercial, proprietary technical data or computer software into any deliverable, offerors should provide in Volume 1, Attachment 2 of their proposals all of the information regarding such proprietary technical data or computer software as described in Section 4 of this BAA.

In the event that offerors do not submit such information, the Government shall assume that it automatically has unlimited rights to all noncommercial technical data and noncommercial computer software generated, developed, and/or delivered under any award instrument, unless it is substantiated that development of the noncommercial technical data and noncommercial computer software occurred with mixed funding. If mixed funding is anticipated in the development of noncommercial technical data and noncommercial computer software generated, developed and/or delivered under any award instrument, then offerors should identify the data and software in question and that the Government shall receive GPR in such data and software. The Government shall automatically assume that any such GPR restriction is limited to a period of five years, at which time the Government shall acquire unlimited rights unless the parties agree otherwise. A sample format for complying with this request is shown in Appendix A. If no restrictions are intended, then the offeror should state "NONE."

Offerors are advised that the Government shall use this information during the source selection evaluation process to evaluate the impact of any identified restrictions and may request additional information from the offeror, as may be necessary, to evaluate the offeror's assertions.

For all technical data and computer software that the offeror intends to deliver with other than unlimited rights that are identical or substantially similar to technical data and computer software that the offeror has produced for, delivered to, or is obligated to deliver to the Government under any contract or subcontract, the offeror shall identify the contract number under which the data, software, or documentation were produced; the contract number under which, and the name and address of the organization to whom, the data and software were most recently delivered or shall be delivered; and any limitations on the Government's rights to use or disclose the data and software, including, when applicable, identification of the earliest date the limitations expire.

The Government reserves the right to reject a proposal if it does not appropriately address all data issues.

6.B.2.b. Commercial Items (Technical Data and Computer Software)

Offerors shall identify in Section 4 (template provided in Appendix A) of its proposal all commercial technical data and commercial computer software that may be incorporated in any noncommercial deliverables contemplated under the research effort, along with any applicable restrictions on the Government's use of such commercial technical data and/or commercial computer software. In the event that offerors do not submit the list, the Government shall assume that there are no restrictions on the Government's use of such commercial items. The Government may use the list during the source selection evaluation process to evaluate the impact of any identified restrictions and may request additional information from the offeror, as may be necessary, to evaluate the offeror's assertions. A sample format for complying with this request is shown in Appendix A. If no restrictions are intended, then the offeror should state "NONE."

6.B.2.c. All Offerors – Patents

Include documentation using the format provided in Appendix A, proving ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a

patent application has been filed) that shall be utilized under the proposal for the IARPA program. If a patent application has been filed for an invention that the proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, the offeror may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: (1) a representation that the offeror owns the invention, or (2) proof of possession of appropriate licensing rights in the invention.

If offerors intend to incorporate patented technology into any deliverable, i.e., if offerors intend for any deliverable to embody any invention covered by any patent or patent application the offerors list in Appendix A, offerors should also provide in Volume 1, Attachment 2 of their proposals all of the information described in Section 4 of this BAA.

6.B.2.d. All Offerors – Intellectual Property Representations

The offeror shall provide a good faith representation that they either own or possess appropriate licensing rights to all other intellectual property that shall be utilized under their proposal for the program.

6.B.3. Human Use

All research involving human subjects, to include use of human biological specimens and human data, selected for funding must comply with the federal regulations for human subject protection, namely 45 CFR Part 46, *Protection of Human Subjects.*
Institutions awarded funding for research involving human subjects must provide documentation of a current Assurance of Compliance with Federal regulations for human subject protection, for example a Department of Health and Human Services, Office of Human Research Protection Federal Wide Assurance (http://www.hhs.gov/ohrp). All institutions engaged in human subject research, to include subcontractors, must also have a valid Assurance. In addition to a local IRB approval, IARPA will review and approve the HSR documentation before HSR may begin. However, IARPA does not require a secondary review by a Government IRB.

For all proposed research that will involve human subjects, the institution must provide evidence of or a plan for review by an Institutional Review Board (IRB) with the final proposal submission to IARPA as outlined in the management plan. (Reference Section 4 of the BAA)The IRB conducting the review must be the IRB identified on the institution's Assurance. The informed consent document must comply with federal regulations (45 CFR Part 46).

The amount of time required to complete the IRB review/approval process may vary depending on the complexity of the research and/or the level of risk to study participants. Ample time should be allotted to complete the approval process. No IARPA funding can be used towards human subject research until ALL approvals are granted.

In limited instances, human subject research may be exempt from Federal regulations for human subject protection, for example, under Department of Health and Human Services, 45 CFR 46.101(b). Offerors claiming that their research falls within an exemption from Federal regulations for human subject protection must provide written documentation with their proposal that cites the specific applicable exemption and explains clearly how their proposed research fits

within that exemption.

6.B.4. Animal Use

The offeror's care and use of any animals[4] in the proposed research must conform with the applicable laws of the United States, regulations of the Department of Agriculture (see 7 U.S.C. § 2131 et seq. and 9 C.F.R. subchapter A, parts 1-4), and the Department of Health and Human Service's Public Health Service Policy on Humane Care and Use of Laboratory Animals. Offerors shall acquire animals from dealers licensed by the Secretary of Agriculture under 7 U.S.C. § 2133 and 9 C.F.R. §§ 2.1 through 2.11, or from a source that is exempt from licensing under those sections[5].

Institutions awarded funding for research involving animals must register with the Secretary of Agriculture in accordance with 7 U.S.C. § 2136 and 9 C.F.R.§ 2.30 and furnish evidence of such registration to the Contracting Officer before undertaking work under this contract[4]. Performers shall maintain their registration and comply with the requirements of 9 C.F.R. part 2, subpart C throughout all Phases of the program.
For all proposed research that will involve animals, the offeror must provide a plan for review by the cognizant Institutional Animal Care and Use Committee(s) (IACUC). If selected for award, the offeror must provide IARPA a copy of the cognizant Institutional Animal Care and Use Committee(s)'s (IACUC) approval of the animal research protocols, along with the protocols, before beginning any animal research. Consult the designated IACUC for guidance on writing the protocol. An awardee will not be authorized to begin animal research using IARPA funding until ACUC approval is granted and IARPA receives and accepts the IACUC approval documents.

Use of non-human primates is not permitted under this BAA.

6.B.5. Publication Approval

It is anticipated that research funded under this Program shall be unclassified research that shall not require a pre-publication review. However, performers 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 Program Manager and the Contracting Officer Representative (COR) a minimum of 5 days prior to release in any forum.

6.B.6. Export Control

(1) The offeror shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the offeror shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of

[4] The term "animal" shall have the meaning provided in 9 C.F.R. § 1.1.
[5] Offerors may request registration of their facility and obtain a current listing of licensed dealers from the Regional Office of the Animal and Plant Health Inspection Service (APHIS), USDA, for the region in which its research facility is located. The location of the appropriate APHIS Regional Office, as well as information

(including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.

(2) The offeror shall be responsible for obtaining export licenses, if required, before utilizing non-U.S. persons (as defined in the ITAR and EAR, as applicable) in the performance of this contract, including instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person shall have access to export-controlled technologies, including technical data or software.

(3) The offeror shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(4) The offeror shall appropriately mark all contract deliverables controlled by ITAR and/or EAR.

(5) The offeror shall be responsible for ensuring that the provisions of this section apply to its sub-contractors**.**

(6) The offeror may be required to certify knowledge of and intended adherence to these requirements in the representations and certifications of the contract.

6.B.7. 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 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 offeror teams. Individuals or organizations associated with multiple teams shall take care not to over-commit those resources being applied.

6.B.8. Reporting

Fiscal and management responsibility are important to the Program. Although the number and types of reports shall be specified in the award document, all performers shall, at a minimum, provide the Contracting Office, Contracting Officer Representative and the Program Manager with monthly technical reports and monthly financial 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. Additional reports and briefing material may also be required, as appropriate, to document progress in accomplishing program metrics.

The performer shall prepare and provide a research report of their work annually by month 12. The reports shall be delivered to the Contracting Officer, Contracting Officer Representative and the Program Manager. The reports shall include:

- Problem definition
- Findings and approach
- System design
- Possible generalization(s)
- Information on performance limitations and potential mitigation
- Anticipated path ahead
- Final identification of all commercial, third-party, or proprietary hardware, software, or technical data integrated into any deliverable and all applicable use restrictions.
- Any research products, including publications, data, and software, resulting from the project during the reporting period. The final report shall list in-progress scientific manuscripts and other research products.

6.B.9. System for Award Management (SAM)

Selected offerors not already registered in the Systems for Award Management (SAM) may be required to register in SAM prior to any award under this BAA. Information on SAM registration is available at http://www.sam.gov**.**

6.B.10. Representations and Certifications

Selected offerors may be required to complete electronic representations and certifications at http://www.sam.gov and may also be required to complete additional representations and certifications prior to award.

6.B.11. Lawful Use and Privacy Protection Measures

All data gathered by the performer 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 performer shall provide proof that the data was acquired in accordance with U.S. laws and regulations.

6.B.12. Public Access to Results

Upon acceptance for publication, 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 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 www.iarpa.gov.

IARPA 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.

6.B.13. Cloud Compatibility

Software deliverables must be deployable to cloud platforms for testing and must be approvable for production use in the cloud. Technical approaches should generally avoid the following: requiring high-performance, special-purpose, or excessive quantities of virtual hardware not readily available in the cloud; requiring an obscure operating system, middleware, or plug-in code not readily available for use in the cloud or on the desktops used to access the cloud; leveraging inherently risky protocols, e.g., Telnet, or software packages, e.g., FOCI-relevant; or including custom code that is not inspectable by Information System Security professionals.

APPENDIX A: Templates for Volume 1: Technical Proposal

Academic Institution Acknowledgement Letter

-- Please Place on Official Letterhead --

<Insert date>

To: Contracting Officer
ODNI/IARPA
Office of the Director of National Intelligence
Washington, D.C. 20511

Subject: Academic Institution Acknowledgement 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 IARPA-BAA-17-07 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>

Restrictions on Intellectual Property Rights

Noncommercial Items (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)

Description of 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:

Potential cost to the Government to acquire GPR in all deliverables incorporating the technical data and computer software listed above:

Intended use of the technical data and computer software listed above in the conduct of the proposed research:

Commercial Items (Technical Data and Computer Software)

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)

Patents

PATENTS			
Patent number (or application number)	**Patent name**	**Inventor name(s)**	**Patent owner(s)**
(LIST)	(LIST)	(LIST)	(LIST)

Organizational Conflicts of Interest Certification Letter

(Month DD, YYYY)

Office of the Director of National Intelligence
Intelligence Advanced Research Projects Activity (IARPA)
FELIX
ATTN: Amanda Dion-Schultz
Washington, DC 20511

Subject: OCI Certification

Reference: <Insert Program Name>, IARPA-BAA-17-07, (Insert assigned proposal ID#, if received)

Dear Amanda Dion-Schultz,

In accordance with IARPA Broad Agency Announcement IARPA-BAA-17-07, *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 FELIX program.

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).

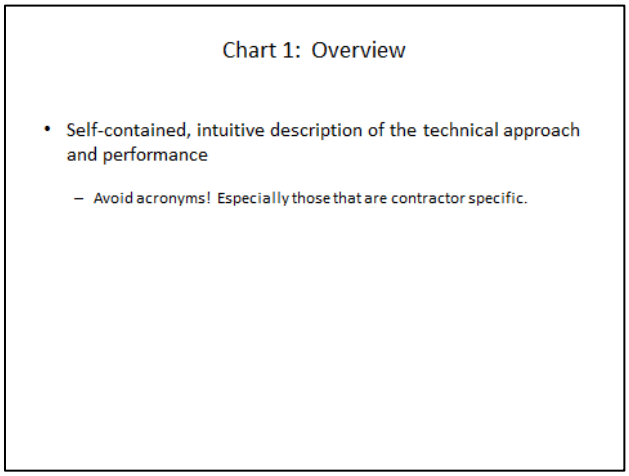
Sincerely,

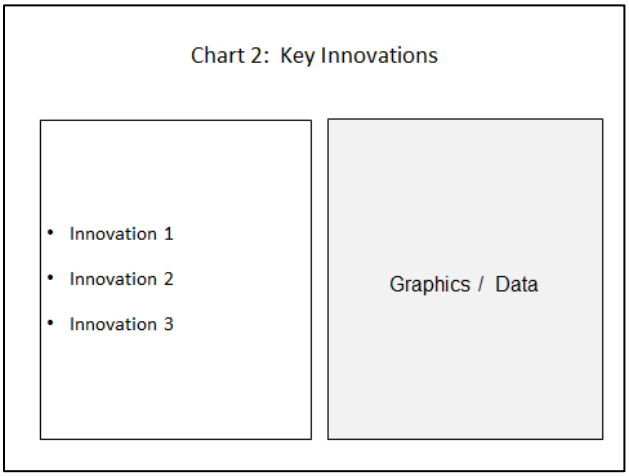
(Insert organization name) (Shall be signed by an official that has the authority to bind the organization)

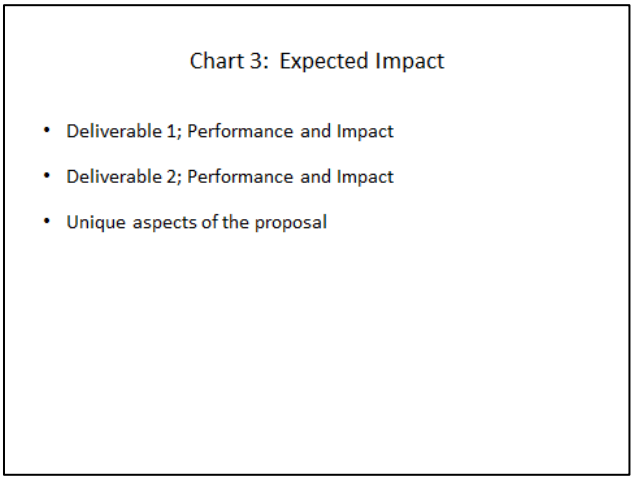
(Insert signature)

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

Three Chart Summary of the Proposal







Data Management Plan (DMP)

The offeror must address each of the elements noted below in red text. Upon completion of the Plan, no red text should remain.

The DMP shall comply with the requirements stated in Section 4.B.1.c.L of the BAA. In doing so, it will support the objectives of the ODNI Public Access Plan at https://www.iarpa.gov/index.php/working-with-iarpa/public-access-to-iarpa-research

1. **Sponsoring IARPA Program** (required):
2. **Offeror** (i.e., lead organization responding to BAA) (required):
3. **Offeror point of contact** (required):
   The point of contact is the proposed principal investigator (PI) or his/her Designee.
   a. **Name** and **Position**:
   b. **Organization**:
   c. **Email**:
   d. **Phone**:
4. **Data types** (required):
   Provide a brief, high-level description of the types of data to be collected or produced in the course of the project.
5. **Standards for data and metadata content and format** (required):
   Use standards reflecting the best practices of the relevant scientific discipline and research community whenever possible.
6. **Plans for making the research data that underlie the results in peer-reviewed journal articles and conference papers digitally accessible to the public** at the time of publication/conference or within a reasonable time thereafter (required):
   The requirement could be met by including the data as supplementary information to a peer reviewed journal article or conference paper or by depositing the data in suitable repositories available to the public.
   a. **Anticipated method(s) of making data publicly accessible**:
      ___ Provide dataset(s) to publisher as supplementary information (if publishers allow public access)
      ___ Deposit dataset(s) in Data Repository
      ___ Other (*specify*)_____
   b. **Proposed data repository or repositories** (for dataset(s) not provided as supplementary information):
      Suitable repositories could be discipline-specific repositories, general purpose research data repositories, or institutional repositories, as long as they are publicly accessible.
   c. **Retention period, at least three years after publication of associated research results**:
      State the minimum length of time the data will remain publicly accessible.
   d. **Submittal of metadata to IARPA**:
      Offerors are required to make datasets underlying the results published in peer-reviewed journal or conferences digitally accessible to the public to the extent feasible. Here, the offeror should state a commitment to submit metadata on such

datasets to IARPA in a timely manner. Note: This does not supersede any requirements for deliverable data, as the award document may include metadata as a deliverable item.

7. **Policies and provisions for sharing and preservation** (as applicable):
    a. Policies and provisions for appropriate protection of privacy, confidentiality, security, and intellectual property:

    b. Descriptions of tools, including software, which may be needed to access and interpret the data:

    c. Policies and provisions for re-use, re-distribution, and production of derivatives:

8. **Justification for not sharing and/or preserving data underlying the results of peer-reviewed publications** (as applicable):
    If, for legitimate reasons, the data cannot be shared and preserved, the plan must include a justification detailing such reasons. Potential reasons may include privacy, confidentiality, security, intellectual property rights considerations; size of data sets; cost of sharing and preservation; time required to prepare the dataset(s) for sharing and preservation.

APPENDIX B: Templates for Volume 2: Cost Proposal

Prime Contractor Cost Element Sheet for Volume 2: Cost Proposal			
Complete a Cost Element Sheet for the Base Period and <u>each</u> Option Period			
COST ELEMENT	**BASE**	**RATE**	**AMT**
DIRECT LABOR (List each labor category separately. Identify Key Personnel by name.)	# 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 & INTELLECTUAL Property (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/INTERORGANIZATIONAL TRANSFERS (IOT) & CONSULTANTS PRICE SUMMARY

A	B	C	D	E	F
SUB-CONTRAC-TOR IOT & CONSULTANT NAME	**SOW TASKS PERFORMED***	**TYPE OF AWARD**	**SUB-CONTRAC-TOR, IOT & CONSULTANT QUOTED PRICE**	**COST PROPOSED BY PRIME FOR SUBCONTRAC-TOR, 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 Intellectual Property Costs		
Item	**Cost**	**Date of Expiration**
(List)		

NOTE: Educational institutions and non-profit organizations as defined in FAR part 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 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.

Subcontractor Cost Element Sheet for Volume 2: Cost Proposal			
Complete a Cost Element Sheet for each applicable period			
COST ELEMENT	**BASE**	**BURDENED RATE**	**AMT**
DIRECT LABOR (List each labor category separately. Identify Key Personnel by name.)	# hrs	$	$
TOTAL DIRECT LABOR			$
SUBCONTRACTORS, IOTS, CONSULTANTS			$
MATERIALS & EQUIPMENT (List each material and equipment item separately.)	Qty	$ unit price	$
TOTAL MATERIALS & EQUIPMENT			$
TRAVEL (list each trip separately)	# of travelers	$ price per traveler	$
TOTAL TRAVEL			$
OTHER DIRECT COSTS (List each item separately.)	Qty	$ unit price	$
TOTAL OTHER DIRECT COSTS			$
TOTAL PRICE/COST			$

Software and Intellectual Property Costs		
Item	**Cost**	**Date of Expiration**
(List)		

NOTE: Educational institutions and non-profit organizations as defined in FAR part 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 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.

APPENDIX C: Cover Sheet Templates

Cover Sheet for Volume 1: Technical Proposal

(1) BAA Number	**IARPA-BAA-17-07**
(2) Technical Area	
(3) Lead Organization Submitting Proposal	
(4) Type of Business, Selected Among the Following Categories: "Large Business", "Small Disadvantaged Business", "Other Small Business", "HBCU", "MI", "Other Educational", or "Other Nonprofit"	
(5) Contractor's Reference Number (if any)	
(6) Other Team Members (if applicable) and Type of Business for Each	
(7) Proposal Title	
(8) Technical Point of Contact to Include: 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) Data Management Plan included?	Yes/No
(13) OCI Waiver Determination, Notification or Certification [see Section 3 of the BAA] Included?	Yes/No
(13a) If No, is written certification included (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 Acknowledgement Statement with your proposal for each U.S. Academic Organization that is part of your team (Appendix A)?	Yes/No
(15) Total Funds Requested from IARPA and the Amount of Cost Share (if any)	$
(16) Date Proposal as Submitted.	

Cover Sheet for Volume 2: Cost Proposal

(1) BAA Number	**IARPA-BAA-17-07**
(2) Technical Area	
(3) Lead organization submitting proposal	
(4) Type of Business, Selected Among the Following Categories: "Large Business", "Small Disadvantaged Business", "Other Small Business", "HBCU", "MI", "Other Educational", or "Other Nonprofit"	
(5) Contractor's Reference Number (if any)	
(6) Other Team Members (if applicable) and Type of Business for Each	
(7) Proposal Title	
(8) Technical Point of Contact to Include: 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 [minimum of 180 days]	
(20) Cost Summaries Provided (Appendix B)	
(21) Size of Business in accordance with NAICS Code 541712	