

Space and Naval Warfare Systems Center, Pacific (SSC Pacific)
53560 Hull Street
San Diego, CA 92152-5001



Broad Agency Announcement (BAA)
C4ISR, Information Operations and Information Technology System Research

N66001-16-X-3003

Amendment 1

05 October 2016

PART I: OVERVIEW INFORMATION

- **Federal Agency Name:** Space and Naval Warfare Systems Center, Pacific (SSC Pacific)
- **Funding:** RDT&E
- **Opportunity Title:** C4ISR, Information Operations and Information Technology System Research
- **Announcement Type:** Initial Announcement
- **Funding Opportunity Number:** N66001-16-X-3003
- **Catalog of Federal Domestic Assistance (CFDA) Number:** 12.335 Navy Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- **Dates:**
 - Posting Date – 05/12/2016
 - Closing Date – 365 calendar days from the original posting date (white papers and proposals are due by 4:00pm Pacific Time Zone on the closing date)
- **Concise description of funding opportunity:** The Space and Naval Warfare Systems Center, Pacific (SSC Pacific) is soliciting white papers and proposals in accordance with Federal Acquisition Regulation (FAR) 6.102(d)(2), FAR 35.016 and Department of Defense Grant and Agreement Regulations (DoDGARS) 22.315(a) which provides for competitive selection of basic research, applied research, **advanced technology development, and advanced component development and prototype** (hereinafter referred to as research). Submissions in response to this announcement shall be for areas relating to the advancement of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities, enabling technologies for Information Operations and Cyber Operations, and Information Technology systems. Accordingly, proposals selected for award are considered to be the result of full and open competition and fully compliant with PL 98-369, "The Competition in Contracting Act of 1984." This BAA is for procurement contracts (hereinafter referred to as contracts), grants, cooperative agreements, **and other transactions**. Proposed research should investigate unique and innovative approaches for defining and developing next generation integratable C4ISR capabilities and command suites.
- **Anticipated individual awards:** Multiple awards are anticipated; SSC Pacific reserves the right to select for award all, some, one, or none of the proposals received in response to this announcement
- **Types of instruments that may be awarded:** Procurement contracts, grants, cooperative agreements, **and other transactions**
- **Amendments:** Any amendments to this BAA will be posted via SPAWAR e-Commerce Central at <https://e-commerce.sscno.nmci.navy.mil> (Note that this does not include a "www" prefix) and the Grants.gov website (<https://www.grants.gov/>)
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Contents

I. FUNDING OPPORTUNITY DESCRIPTION:	5
1. General C4ISR	5
2. Command and Control	5
3. Communications	6
4. Intelligence, Surveillance and Reconnaissance	6
5. Unmanned Vehicles	6
6. Information Operations/Cyber Operations	6
7. Ubiquitous Communications and Computing Environment	7
8. Science, Technology, Engineering and Mathematics Research	7
9. Advanced Power and Energy Production and Efficient Use	7
II. AWARD INFORMATION:	7
1. Award Process for Contracts	8
2. Award Process for Grants and Cooperative Agreements	9
3. Award Process for Other Transactions	9
III. ELIGIBLE APPLICANTS:	10
1. Historically Black Colleges and Universities (HBCU) and Minority Institutions (MI)	10
2. Foreign or foreign-owned Offerors	10
3. Federally Funded Research and Development Centers (FFRDCS) and Government Entities	10
4. All Offerors and proposed subcontractors	10
5. All Offerors	10
IV. APPLICATION AND SUBMISSION INFORMATION:	11
1. White Paper Submission Instructions for Contracts	11
2. White Paper Information for Contracts	11
3. Proposal Submission Instructions for Contracts	12
4. Proposal Submission Instructions for Grants and Cooperative Agreements	12
5. Proposal Information for Contracts, Grants, and Cooperative Agreements	13
6. White Paper Submission Instructions for Other Transactions	19
7. White Paper Information for Other Transactions	19
8. Proposal Submission Instructions/Proposal Information for Other Transactions	20
V. ADMINISTRATIVE INFORMATION:	20
1. Communications and Award Notices	20
2. Types of Awards	20
3. Offer Preparation Reimbursement	20
4. Obligating of the Government	20

5. Security Guidance	20
6. Proposal Handling	21
7. Offer Markings	21
8. Export Control	21
9. Public Release.....	22
10. Electronic Systems (as applicable to the instrument)	22
11. Certificate of Current Cost and Pricing Data	22
VI. OTHER:	22
1. Applies to Grants and Cooperative Agreement applicants only	22
2. Applies to Contracts Only	24
3. Applies to Contracts, Grants and Cooperative Agreements	26
4. Applies to Other Transactions	28
VII. AGENCY CONTACTS:.....	28
Appendix A	33
Appendix B	35

I. FUNDING OPPORTUNITY DESCRIPTION:

Space and Naval Warfare Systems Center, Pacific (SSC Pacific), is soliciting proposals in accordance with FAR 35.016, DoDGARS 22.315(a), and DoD Other Transactions (OT) Guide for Prototype Projects for research in areas relating to the advancement of C4ISR capabilities, enabling technologies for Information Operations and Cyber Operations, and Information Technology systems.

This announcement is open for 365 days from the original posting date. Any white papers received during that time shall only be considered for award of a contract or other transaction; not a grant or cooperative agreement. If the Government intends to award a grant or cooperative agreement, it will issue a Research Announcement (RA). See II.2 below for further details.

Proposed research should investigate unique and innovative approaches for defining and developing next generation integratable C4ISR capabilities and command suites. The area topics reflect the interest of the SSC Pacific, but interest from other Team SPAWAR components could be generated and selections could be made for funding by other than SSC Pacific. Technical topics of interest include:

1. General C4ISR

- a. Defining and documenting next generation C4ISR concepts and command center abstractions.
- b. Innovative approaches to next generation adaptive C4ISR infrastructure and systems; enhancing: decision making in areas not pre-programmed, sensor detection and classification, and communication efficiency and tolerance.
- c. Collaboration among large diverse and dynamic groups:
 - i. Knowledge management to asynchronous collaboration.
 - ii. Approaches to automated fusion of discrete data points into a single updatable product.
 - iii. Multi-Level Security, trust, and network management for group formation, management.
- d. Novel approaches or techniques to agent based (or other intelligent information query formation) processing and cross domain coordination of composable services or C4ISR resources (i.e., forces, sensors, weapons, robots, etc.).
- e. Techniques or approaches to integrate data/information and model changes or uncertainty – temporally.
- f. Techniques or approaches to reducing cost, size, power or manning requirements for C4ISR or information systems.

2. Command and Control

- a. Language dependent and independent communications between humans and information systems.
- b. Human-information system interaction in distributed computing environments, including command system applications.
- c. Processing by information systems of human originated inputs and queries.
- d. Domain dependent and independent information detection, extraction, and retrieval.
- e. Intelligent and dynamic information summarization and presentation.
- f. Information systems infrastructure including networking technologies and architectures that support interaction or collaboration between humans and information systems.
- g. Secure networking.
- h. Network attack recognition and identification plus the ability to continue operations in the presence of a successful attack.
- i. Innovative technology and component integration including multimedia representations.
- j. New concepts in perception and visualization.
- k. Dynamic and/or probabilistic decision making.
- l. Human/robot interaction.
- m. New mechanisms for secure and coordinated policy management, in a “system of systems” environment. This may include:
 - i. Automatic workflow instantiation and enactment;
 - ii. Protocols for extending, revising and/or revoking policies in distributed environments;
 - iii. Dynamic adaptation and synchronization of authority across cooperating entities (e.g., systems or collaborative environments); or

- iv. Negotiation protocols for establishing, enforcing, amending or revoking policies among cooperating entities.

3. Communications

- a. Physical layer issues such as modulation schemes that are robust to co-channel interference and jamming.
- b. Channel access and routing schemes that support highly dynamic networks without pre-existing infrastructure.
- c. Support for dynamic spectrum access.
- d. Advanced space-temporal processing and coding.
- e. High bandwidth wireless systems.
- f. Mid-layer protocols to provide reliability over lossy bandwidth-constrained links.
- g. Support for roaming.
- h. Additional functionality for communicating with adaptive applications.
- i. Cross-layer solutions to include schemes that address topics such as security and quality of support.
- j. Extending (radio frequency) data links.
- k. Non-line-of-sight high-bandwidth digital communications.
- l. Secure radio frequency communications.
- m. Anti (radio frequency) Jamming.
- n. Physics-based propagation modeling for communications, radar and infrared applications.
- o. Optical communications.
- p. Antenna and RF system modeling (physical or computational).
- q. Testing and analysis of new antennas models and methods.
- r. Research into methods to effectively integrate antennas aboard ships.
- s. Modeling of the effects of the environment on propagating, electro-optical/infrared to radar beams.
- t. Modeling of the effects of the environment on visible/infrared (IR)/multispectral imagery.

4. Intelligence, Surveillance and Reconnaissance

- a. Data fusion and analysis for heterogeneous source data (e.g., radar and acoustic, imagery and messages).
- b. In-situ power sources for remote systems.
- c. New and improved collection systems, including chemical and biological sensor systems.
- d. Improved signal processing, analysis and reporting algorithms and techniques for active and passive sensor systems including: acoustic, EO/IR, hyper spectral, millimeter wave and Nuclear-Biological-Chemical (NBC).
- e. Improved techniques for target surveillance, detection, localization, tracking, identification, interception and prosecution.
- f. Low-size, low-weight and/or low-power in-situ signal processing for feature extraction for autonomous sensing.
- g. Immersive technology to improve visualization and Human Machine Interface (HMI).
- h. Countermeasures against unwanted micro sensor devices.
- i. Network centric countermeasure techniques.
- j. Biometric collection techniques.
- k. Knowledge discovery and dissemination.
- l. Effects based operations and beyond.
- m. Research in the area of marine mammals.

5. Unmanned Vehicles

- a. Night mission capability.
- b. Object identification and validation from a moving target.
- c. Self localization.
- d. Novel and innovative concepts integrating research from Sections 1 – 4.
- e. Integration or interoperability enhancement of C4ISR systems.
- f. Reduction in size, weight or power requirements of C4ISR systems.

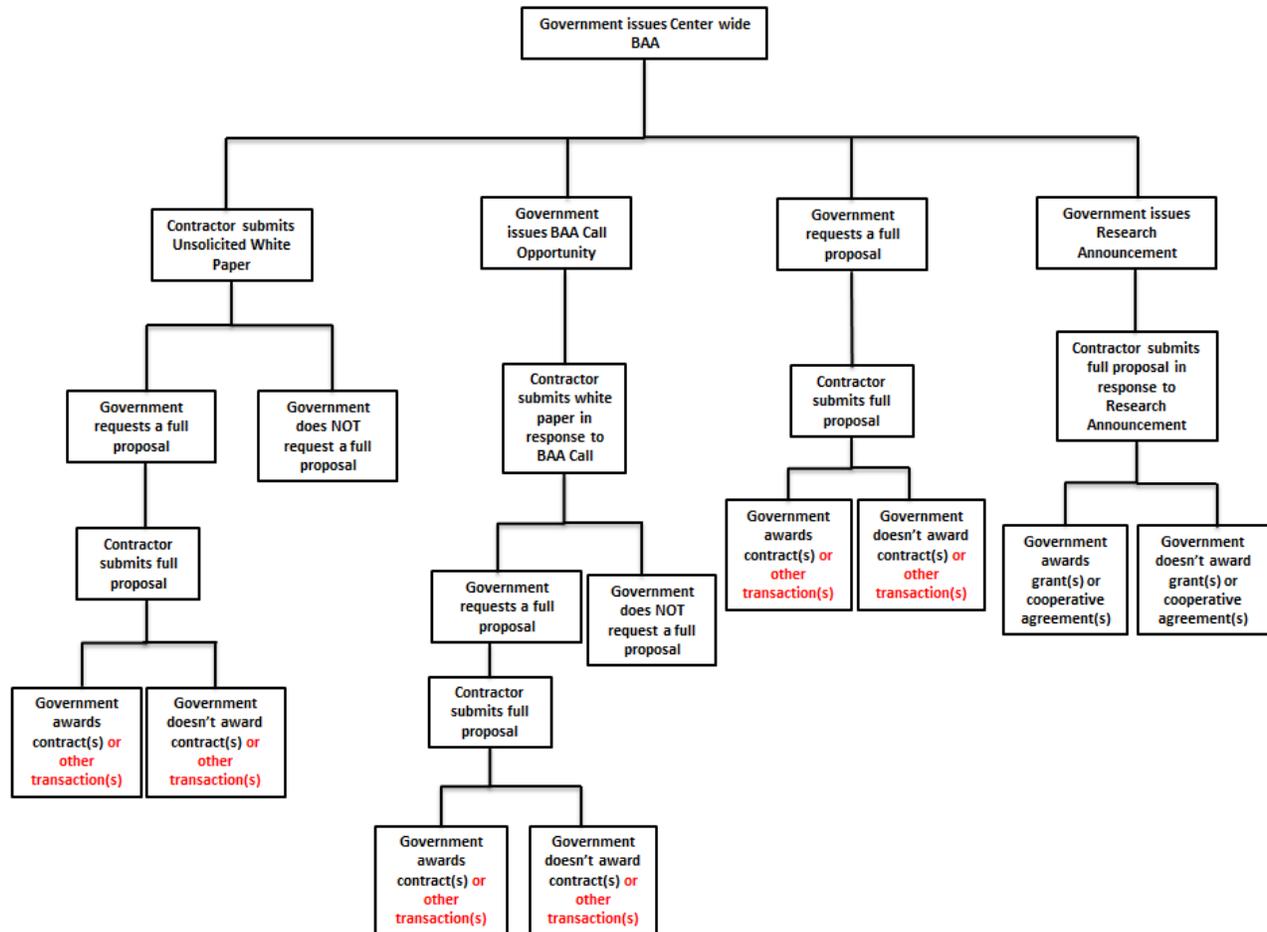
6. Information Operations/Cyber Operations

- a. Computer Network Operations (e.g., Attack, Exploit and Defend) against the interdependent network of information technology infrastructures, including the internet, telecommunications networks, computer systems and embedded processors and controllers.
 - b. Computer Network Attack (CNA) and Computer Network Exploitation (CNE) against automated systems, and the interaction between the physical, social and biological networks that define human-machine interaction.
 - c. Computer Network Defense (CND) and Information Assurance capabilities to protect and defend Naval and Joint systems.
 - d. Electronic Warfare (EW) capabilities to include Electronic Attack (EA) Electronic Support (ES) and Electric Protect (EP) in the radio frequency (RF), millimeter wave, and optical environments.
 - e. Military Deception (MILDEC) tools and capabilities.
 - f. Psychological Operations (PSYOP) tools and capabilities.
 - g. Tools for monitoring, analyzing and mitigating Operational Security (OPSEC) vulnerabilities.
 - h. Command and Control (C2) of Information Operations (IO) Capabilities.
 - i. Development of IO and/or Cyber Warfare countermeasures.
 - j. Testing and analysis of new IO and/or Cyber Warfare techniques.
- 7. Ubiquitous Communications and Computing Environment**
- a. Modeling, Simulation and Visualization of the future environment in which communications, computing, data, sensors and networks are interoperable, ubiquitous and transparent to humans.
 - b. Concepts which will enable understanding networks as a science and developing models which can provide clarity into how networks operate and resist or deter attack.
 - c. Concepts which will enable universal machine-to-machine data exchange.
 - d. Concepts which reflect the convergence of physical, biological and social networks and how this will effect human interactions.
- 8. Science, Technology, Engineering and Mathematics Research**
- a. Research and assess advanced concepts in education practices and policies for the effective use of science, technology, engineering and mathematics (STEM) professionals, university students, and students in grades 6th through 12th in support of Department of Defense efforts to educate and train the next generation of scientists and engineers.
- 9. Advanced Power and Energy Production and Efficient Use**
- a. R&D/S&T for advanced power and energy production and efficient use, including power and energy for communications systems, C2 systems, ISR, computing and network systems, autonomous systems, and all other SSC Pacific mission areas.
 - b. C2 and Cyber for energy systems including smart grids; data, information and knowledge management; Supervisory Control & Data Acquisition (SCADA) protection; Information Assurance; protection of critical infrastructure communication systems; and sensors for energy and fuel usage.
 - c. Remote Ocean ISR requirements including batteries, energy efficiency / low power electronics, remote alternative energy sources.

Testing and optimizing of concepts or prototypes may be necessary. This may involve virtual simulation and/or laboratory as well as at sea measurements. Offers that are outside the areas of basic and/or applied research are outside the scope of the competition and will not be considered (Appendix A).

II. AWARD INFORMATION:

This BAA is for contracts, grants, cooperative agreements, **and other transactions**. The Government reserves the right to award the instrument best suited to the nature of research proposed. Accordingly, the Government may award any appropriate contract type under the FAR as well as grants, cooperative agreements, **and other transactions**. Proposers are advised that if they propose grants, cooperative agreements, or other transactions, SSC Pacific may select other award instruments, as it deems appropriate. The chart below depicts the award process depending on the type of award instrument pursued:



Multiple awards are anticipated as a result of this BAA. The amount of resources made available under this BAA will depend on the quality of the submissions 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 BAA, and to make awards without discussions with Offerors.
- Request any additional, necessary documentation once a proposal is selected for award. Such additional information may include, but is not limited to, Representations and Certifications when issued with request for proposal.
- Remove Offerors from award consideration should the parties fail to reach agreement on award terms, conditions and cost/price within a reasonable time or the Offeror fails to timely provide requested additional information.
- Have sole discretion to negotiate all contract clauses with selectees.
- Accept proposals in their entirety or to select only portions of proposals for award. In the event the Government desires to award only portions of a proposal, negotiations may be opened with the Offeror.
- Fund proposals in phases with options for continued work at the end of one or more of the phases.
- **Cost Sharing or Matching** (Cost sharing is not a requirement unless stated in the Call Opportunity).

1. Award Process for Contracts

Offers may be submitted at any time during the period specified in Part I. The submission of a white paper is required before submitting a proposal to prevent undue effort on the formation and evaluation of a proposal not of interest to the Government and improbable for award. Once submissions (white papers and proposals alike) are evaluated, responses to Offerors will be provided via email notification from the Contracting Officer. This BAA utilizes a two-step process:

Step 1: White papers may be submitted during the times specified in Part I or further specified in individual Calls. All white papers will be evaluated in accordance with the evaluation criteria identified in Section IV unless further defined in individual Calls. White paper responses will contain the Government evaluation board's opinion of whether the idea expressed in the white paper is likely to generate a successful proposal. Due to the anticipated volume of white paper submissions, debriefs will not be provided for white paper submissions.

Step 2: Proposals may be requested when the Government evaluation board's opinion of the idea expressed in the white paper is likely to generate a successful proposal. All proposals will be evaluated in accordance with the evaluation criteria identified in Section IV unless further defined in individual BAA Call Opportunities. Proposal evaluations will be conducted without regard to any comments resulting from the review of a white paper. Proposal responses will contain the Government's intent to either pursue or not pursue an award based on the proposal. This BAA contains all information necessary to submit a proposal; no additional information is available nor will a formal Request for Proposals (RFP) be issued.

The Government may issue a BAA Call Opportunity at any time during the period specified in Part I; however to be eligible for specific Call Opportunities, submissions must adhere to the specific provisions in the desired Call. A BAA Call Opportunity topic will relate to one of the funding opportunities identified in Section I above. Call Opportunities will follow the two-step process above, however the Government reserves the right to request a proposal without first requesting and evaluating a white paper.

2. Award Process for Grants and Cooperative Agreements

If the Government anticipates awarding a grant or cooperative agreement, it will issue a Research Announcement (RA) at any time during the period specified in Part I; however to be eligible for specific Research Announcements, submissions must adhere to the specific provisions in the desired Research Announcement. A BAA Research Announcement topic will relate to one of the funding opportunities identified in Section I above. Offers may only be submitted in response to a Research Announcement during the time period specified for acceptance of proposals.

All proposals will be evaluated in accordance with the evaluation criteria identified in Section IV unless further defined in individual Research Announcements. Proposal responses will contain the Government's intent to either pursue or not pursue an award based on the proposal. This BAA contains all information necessary to submit a proposal; no additional information is available nor will a formal Request for Proposals (RFP) be issued.

3. Award Process for Other Transactions

Offers may be submitted at any time during the period specified in Part I. The submission of a white paper is required before submitting a proposal to prevent undue effort on the formation and evaluation of a proposal not of interest to the Government and improbable for award. Once submissions (white papers and proposals alike) are evaluated, responses to Offerors will be provided via email notification from the Contracting Officer. This BAA utilizes a two-step process:

Step 1: White papers may be submitted during the times specified in Part I or further specified in individual Calls. All white papers will be evaluated in accordance with the evaluation criteria identified in Section IV unless further defined in individual Calls. White paper responses will contain the Government evaluation board's opinion of whether the idea expressed in the white paper is likely to generate a successful proposal. Debriefs will not be provided for white paper submissions.

Step 2: Proposals may be requested when the Government evaluation board's opinion of the idea expressed in the white paper is likely to generate a successful proposal. All proposals will be evaluated in accordance with the evaluation criteria identified in Section IV.

The Government may issue a BAA Call Opportunity at any time during the period specified in Part I; however to be eligible for specific Call Opportunities, submissions must adhere to the specific provisions in the desired Call. A BAA Call Opportunity topic will relate to one of the funding opportunities identified in Section I

above. Call Opportunities will follow the two-step process above, however the Government reserves the right to request a proposal without first requesting and evaluating a white paper.

III. ELIGIBLE APPLICANTS:

All responsible sources as defined at FAR 9.104-1, *Contract Qualifications – Responsible Prospective Contractors, General Standards*, may submit a proposal.

1. **Historically Black Colleges and Universities (HBCU) and Minority Institutions (MI)** are encouraged to submit white papers/ proposals and join others in submitting; however, no portion of this BAA will be set aside for HBCU and MI participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.
2. **Foreign or foreign-owned Offerors** are advised that their participation is subject to foreign disclosure review procedures. Foreign or foreign-owned Offerors should immediately contact the Agency Contact identified herein by email for information if they contemplate responding. The e-mail must reference the BAA title and No. N66001-16-X-3003.
3. **Federally Funded Research and Development Centers (FFRDCS) and Government Entities** (Government/National laboratories, military educational institutions, etc.) are prohibited from submitting a proposal but, under limited circumstances, Offerors may include an FFRDC or Government entity as a subcontractor or consultant in its proposal. With respect to an FFRDC, as part of the proposal, an Offeror must include sufficient information demonstrating the FFRDCs work is not otherwise available from the private sector AND provide a letter on letterhead from their sponsoring organization citing the specific authority establishing their eligibility to propose to government solicitations and compete with industry, and compliance with the associated FFRDC sponsor agreement and terms and conditions. With respect to a proposal that offers to use a Government entity, the proposal must clearly demonstrate that the work is not otherwise available from the private sector and provide written documentation citing specific authority (as well as, where relevant, contractual authority) establishing its ability to propose to Government solicitations. At the present time, SSC Pacific does not consider 15 U.S.C. 3710a to be sufficient legal authority to show eligibility. While 10 U.S.C. 2539b and/or 10 U.S.C. 2563 may be the appropriate statutory starting point for some entities, specific supporting regulatory guidance, together with evidence of agency approval, is required to establish eligibility. SSC Pacific will consider eligibility submissions on a case-by-case basis; however, the burden to prove eligibility for all team members rests solely with the proposer. SSC Pacific will not fund an FFRDC or Government entity directly.
4. **All Offerors and proposed subcontractors** must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any SPAWAR Component through an active contract or subcontract. All affirmations must state which office(s) the Offeror supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest must be disclosed. The disclosure shall include a description of the action the Offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. Without prior approval, a contractor cannot simultaneously be a SETA and related research and development performer. Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be rejected without technical evaluation and withdrawn from further consideration for award.
5. **All Offerors** - If a prospective Offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the Offeror should promptly raise the issue with SSC Pacific by sending his/her contact information and a summary of the potential conflict by e-mail to the Agency Contact identified herein, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be effectively avoided or mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

IV. APPLICATION AND SUBMISSION INFORMATION:

The type of award instrument (contract, grant, cooperative agreement, **or other transaction**) dictates how Offerors respond to this BAA. Offerors shall follow the instructions below pertaining to the type of instrument they are responding to. Offerors are reminded that grant or cooperative agreement submissions will only be accepted if the Government issues a Research Announcement (see II.2 above).

1. White Paper Submission Instructions for Contracts

DO NOT send white papers to the Agency Contact. White paper submissions that are emailed will not be accepted. White paper submissions will only be accepted via SPAWAR e-Commerce Central at: <https://e-commerce.ssno.nmci.navy.mil>. (Note that this does not include a "www" prefix) by selecting SSC Pacific then Open BAA from the left hand menu and selecting the Solicitation number.

2. White Paper Information for Contracts

White papers shall not contain classified data. Offerors are expected to appropriately mark each page of their submission that contains proprietary information; do not provide submissions marked “classified,” “confidential,” “secret,” etc.

a. Content and Form of White Paper Submissions: Offerors are required to submit all white papers in Adobe Portable Document Format (PDF) format compatible with Adobe Acrobat Pro, with 12 pitch Times New Roman font (smaller font may be used for figures and tables), on 8-1/2 by 11 inch paper, with 1 inch margins. White papers shall be limited to 5 pages (excluding cover and executive summary), summarizing the proposed approach or solution. The page limitation shall include all figures, tables, and charts. It is the Offeror’s responsibility to appropriately mark each page of its submission that contains proprietary information. White papers shall utilize associated numbering below. White Papers that do not clearly identify the below information using the associated numbers will be considered to have not conformed to the parameters of this BAA and thus non-responsive. Such white papers will not be further evaluated. The white paper will be formatted as follows:

1. Cover Page (not included in page count): clearly labeled “WHITE PAPER”, BAA title and number, proposal title (unique title is required), date, organization name and address, anticipated period of performance, technical topic area(s) addressed, Government point of contact (if applicable), technical and administrative point of contact information (address, phone, fax & e-mail), cost summary, Commercial and Government Entity (CAGE) code, Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number, and prime’s size status: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS (specify)," "HBCU," "MI," "OTHER EDUCATIONAL," or "OTHER NONPROFIT";
2. Summary of Type of Knowledge or Capability: Summary of type of knowledge or capability to be gained through research in one of the eight listed areas of interest. Clearly state the goal(s) of the research, the key challenges, and the methods to overcome those challenges. Point out the novelty of the proposed work in relation to the current state of the art;
3. Area(s) Addressed: White papers that do not address multiple areas shall describe how the proposed research will interact with other areas and how the Offeror suggests that the Government test these interactions. “End-to-end” solutions are discouraged in favor of smaller “pluggable” components, expertly produced, which exploit the interaction between research areas or in order to address a larger set of the challenges.
4. Research Methodologies: Summary of research methodologies to be used in conducting the research and envisioned risks (if any);
5. Human or Animal Related Research: Summary description of any human or animal related research anticipated;
6. Cost Estimate: Summary of rough estimates of cost for each year;
7. Listing of Key Personnel: Listing of key personnel along with the amount of time to be expended by each person during each year proposed;
8. Qualifications of Key Personnel: Concise summary of the qualifications of key personnel;
9. Past Performance: Summary of Offeror’s relevant past performance on similar research projects;

10. Deliverables: Summary of any and all anticipated deliverables with other than unlimited rights to the Government.
11. Teaming Arrangements: Teaming arrangements must be clearly defined in the white papers.
12. In addition to the white paper, **in a separate PDF file** (is not included in white paper page limitations), provide a short executive summary of the proposed effort. This executive summary will not contain any proprietary or business sensitive information and as such should only contain FOUO markings. Executive summaries containing legends such as source selection sensitive, proprietary or any other identifiable markings will be treated as source selection sensitive material. Executive summaries, containing the appropriate FOUO markings, will be used to identify interested parties for the purpose of conducting evaluations. This summary will not affect the evaluation of the white paper. All white papers will be evaluated in accordance with the evaluation criteria of this BAA. Only US Government personnel will view the executive summary. Executive Summaries should include:
 - i. White paper title,
 - ii. Submission date,
 - iii. Organization name,
 - iv. Technical topic areas (include BAA section reference(s) and description(s)), and
 - v. Summary of the science and technology research effort proposed, not to exceed 1,000 characters (does not include spaces).

b. Funding Restrictions: The cost of preparing white papers in response to this announcement is not considered an allowable direct charge to any resulting award.

c. Evaluation Criteria: The following criteria, which are listed in descending order of importance, will be used to determine whether white papers submitted are consistent with the intent of this BAA and of interest to the Government:

1. Overall scientific or technical merits of the proposed research and development.
2. Potential for enhancing C4ISR capabilities and their effectiveness.
3. Reasonableness of the price.

3. Proposal Submission Instructions for Contracts

DO NOT send proposals to the Agency Contact. Emailed proposal submissions will not be accepted.

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

4. Proposal Submission Instructions for Grants and Cooperative Agreements

DO NOT send proposals to the Agency Contact. Emailed proposal submissions will not be accepted.

Proposal submissions for grants and cooperative agreements will only be accepted via www.grants.gov.

Offerors must complete the following, one time steps, before submitting proposals on Grants.gov (these steps are also detailed at <http://www.grants.gov/web/grants/applicants/organization-registration.html>):

- Offerors must obtain a Data Universal Number System (DUNS) number for their organization
- Offerors must register their organization in the System for Award Management (SAM) (<https://www.sam.gov/portal/public/SAM/>)
- Offerors must create a Grants.gov user name and password
- Offerors must register the Authorized Organization Representative (AOR) in Grants.gov
- Offerors must have the organization's E-BIZ point of contact authorize the AOR to submit applications.

Applicants who are not registered with SAM and Grants.gov should allow at least 21 days to complete these requirements. The process should be started as soon as possible. Any questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

Application forms and instructions are available at Grants.gov. To access these materials, go to <http://www.grants.gov>, select "Apply for Grants", and then select "Get Application Package" (<http://www.grants.gov/web/grants/applicants/download-application-package.html>). Enter the CFDA number identified in the Research Announcement. Offerors can also enter the Research Announcement number in the "Funding Opportunity Number" field, and then follow the prompts to download the application package.

Proposals shall be submitted through Grants.gov using the mandatory Grants.gov form(s) from the application package template associated with the RA CALL on the Grants.gov website. Offerors are to complete the SF-424 Research and Related Form (R&R). Complete all the required fields in accordance with the pop-up instructions on the form. To activate the instructions, turn on the "Help Mode" (icon with the pointer and question mark at the top of the form). Offerors are to complete the mandatory forms in accordance with the instructions on the forms, additional information can be found through the application user guide found at Grants.gov. The use of the optional forms from the application package template associated with the RA CALL is highly encouraged. Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in the CALL. Please note that Volume I, Technical Proposal should be submitted as an attachment to the SF 424 rather than being inserted into Block 7, Project Narrative. Block 7 should be completed with a statement that Volume I is attached. To attach the Technical Proposal, open the Attachment Form in the Optional Documents box of the application package, scroll down to the Attachment page, and follow the instructions. The file should be titled "Volume I – Technical Proposal." By completing Block 17 of the Grant Application, the offeror is providing the certification on lobbying required by 32 CFR Part 28.

Proposal Receipt Notices:

After a full proposal is submitted through Grants.gov, the Authorized Organization Representative (AOR) will receive a series of three e-mails. It is extremely important that the AOR watch for and save each of the e-mails. You will know that your proposal has reached SSC Pacific when the AOR receives e-mail Number 3. You will need the Submission Receipt Number (e-mail Number 1) to track a submission. The three e-mails are:

- Number 1 – The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted.
- Number 2 – The applicant will receive an e-mail indicating that the proposal has been validated by Grants.gov within two days of submission (This means that all of the required fields have been completed). After an institution submits an application, Grants.gov generates a submission receipt via email and also sets the application status to "Received." This receipt verifies the Application has been successfully delivered to the Grants.gov system. Next, Grants.gov verifies the submission is valid by ensuring it does not contain viruses, the opportunity is still open, and the applicant login and applicant DUNS number match. If the submission is valid, Grants.gov generates a submission validation receipt via email and sets the application status to "Validated." If the application is not validated, the application status is set to "Rejected." The system sends a rejection email notification to the institution, and the institution must resubmit the application package. Applicants can track the status of their application by logging in to Grants.gov.
- Number 3 – The third notice is an acknowledgment of receipt in e-mail form from Grants.gov that will be sent after the proposal is retrieved by SSC Pacific. The e-mail is sent to the authorized representative for the institution. The e-mail for proposals notes that the proposal has been received and provides the assigned tracking number.

To avoid missing deadlines, proposers should submit their proposals to Grants.gov in advance of the proposal due date, with sufficient time to complete the registration and submission process, receive email notifications and correct errors, as applicable.

5. Proposal Information for Contracts, Grants, and Cooperative Agreements

Proposals shall not contain classified data. Offerors are expected to appropriately mark each page of their submission that contains proprietary information; do not provide submissions marked “classified,” “confidential,” “secret,” etc.

a. Content and Form of Proposal Submissions: The requirements for the Offeror's proposal are: The proposal shall be comprised of two volumes, a technical volume and a cost volume as described in detail below. Proposals shall be prepared using Microsoft Office products (i.e., Microsoft ® Word and Excel) and Adobe Portable Document Format (PDF) format compatible with Adobe Acrobat Pro or greater, in separate files for each proposal volume as set forth below. All information pertaining to a particular volume shall be confined to that file except for MS Excel. Submit the proposal in 12 pitch Times New Roman font (smaller font may be used for figures, tables, and fonts), on 8-1/2 by 11 inch paper, with 1 inch margins.

• **Proposal Cover Letter**

Each proposal should include a cover letter, not counted against the allowable page count, with the following information.

1. Summary of the proposal
2. Name and address of proposed prime
3. Prime's size status (large, small, small disadvantaged, etc...)
4. Identify Commercial and Government Entity (CAGE) code and Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number
5. Technical and Contracts Points of contact for proposal to include:
 - a. Name
 - b. Title
 - c. Phone Number
 - d. Fax Number
 - e. Email address
6. Type of Contract Proposed (e.g., CPFF, FFP or Time and Material (T&M)) (Offerors with an adequate accounting system for cost reimbursement type shall be proposed CPFF. Offerors that do not have an adequate accounting system should be proposed as fixed price type (preferable) or T&M if the requirements will not support fixed price.)
7. Subcontractor Information
 - a. Name/Cage Code
 - b. Address
 - c. Proposed Value of Subcontract
 - d. Type of Subcontract Proposed (The Offeror (Prime) shall specify the type of subcontract (e.g., CPFF, FFP or Time and Material (T&M)). Subcontractors with an adequate accounting system for cost reimbursement type should be proposed CPFF. Subcontractors that do not have an adequate accounting system should be proposed as fixed price type (preferable) or T&M if the subcontractor requirements will not support fixed price. If a subcontractor proposes a type other than CPFF, the Prime shall include a written justification and the basis on which the Prime finds the subcontractor's price as fair and reasonable.)
8. The Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA) branch offices that are responsible for auditing the prime contractor/subcontractor (i.e., must be where the company's financial records are kept) and shall provide the name, telephone number, and e-mail address of a DCAA point of contact who is familiar with the company.
9. Identification of any potential Organizational Conflicts of Interest as specified in Section III above.
10. Identify those individuals with signature authority for the Prime Contractor. Offerors must provide evidence, appropriate to the business category, of the signer's authority to bind them on a contract. This evidence may be furnished as an attachment to its offer (not included in page count).

• **Technical Volume**

The technical volume of the proposal shall not exceed fifty (50) pages and should be consecutively numbered to facilitate verification of page limitation compliance. The technical volume shall contain the

below information in the prescribed order and shall be clearly identified using the associated numbers below. Proposals that do not clearly identify the below information using the associated numbers will be considered to have not conformed to the parameters of this BAA are considered non-responsive. Proposals considered non-responsive shall not be further evaluated. Proposals shall contain the following information:

1. BAA title and number, and BAA topic area(s) addressed by the proposal;
2. A summary of key elements within the proposal;
3. Describe the ability of the proposed work to satisfy BAA goals;
4. A motivation of value and purpose (i.e., if this is successful what impact it would have to the commercial and/or military world?);
5. A concise technical scope and/or goal;
6. A detailed explanation of proposed work, technical approach, critical issues, risks, and innovative claims for the proposed research. This section is the centerpiece of the proposal and should succinctly describe the uniqueness and benefits of the proposed approach relative to the current state-of-art alternate approaches;
7. An explanation of how the proposed effort satisfies the definition(s) of basic research, applied research, or development that is not related to the development of a specific system; the definitions are available in Appendix A of this document.
8. Complete technical details, technical rationale, and constructive plan for accomplishment of technical goals in support of innovative claims and deliverable production;
9. A draft statement of work (SOW) that must provide a detailed task breakdown, citing specific tasks and their connection to the interim milestones and metrics, as applicable. Each year of the project should be separately defined. The SOW must not include proprietary information. For each defined task/subtask, provide:
 - A general description of the objective.
 - A detailed description of the approach to be taken to accomplish each defined task/subtask.
 - Identification of the primary organization responsible for task execution (prime contractor, subcontractor(s), consultant(s)), by name.
 - A measurable milestone (e.g., a deliverable, demonstration, or other event/activity that marks task completion).
 - A definition of all deliverables (e.g., data, reports, software) to be provided to the Government in support of the proposed tasks/subtasks.
10. A detailed schedule showing tasks (task name, duration, work breakdown structure element as applicable, performing organization), anticipated milestones or checkpoints and deliverables - both reports and software/hardware, and the interrelationships among tasks. The task structure must be consistent with that in the SOW. Milestones should capture key development points in tasks and should be clearly articulated and defined in time relative to start of effort;
11. Discussion of the Offeror's/Offeror team's past and present work in this area, and related work, so as to demonstrate the Offeror's knowledge and experience and put the proposed work into context; to include a clearly defined organization chart for the program team (prime, subcontractors, team members, by name, etc.) which includes, as applicable: (1) the programmatic relationship of team members; (2) the unique capabilities of team members; (3) the tasks and responsibilities of team members; (4) the teaming strategy among the team members; and (5) the key personnel along with the amount of effort to be expended by each person during each year;
12. Deliverables (to include technical data and computer software as defined in DFARS 252.227-7013 and 252.227-7014) associated with the proposed research and the plans and capability to accomplish technology transition and commercialization. A clear description of any technical data or computer software deliverables that would be provided to the Government with other than unlimited rights; A description of why any limitation on the Government's proposed rights in a data or software deliverable will satisfy the program objectives of this BAA and, in particular, the specific topic. Any designs, computer software, test results, etc. should be listed as separate data deliverables separated out by tasks. Note: Should an Offeror's proposal be selected for award, the Government and the Offeror will negotiate the list of data/software deliverables and the associated data items listed in the Contract Data Requirements List (CDRL);

- Identify and assert rights to all technical data and computer software that will be delivered with less than "unlimited rights," as defined in DFARS 252.227-7013 and 252.227-7014, in accordance with Attachment 1. For computer software or computer software documentation, identify the software or documentation by specific name or module or item number.
 - Both noncommercial and commercial data/software should be identified and any restrictions should be asserted. Should the Offeror propose a specially negotiated license or a commercial license with respect to a data or software item, then the Offeror must describe, in general terms, the use limitations of the license. If an Offeror makes no assertions in Attachment 1, the Government will assume that the Offeror will deliver all data/software with "unlimited rights."
13. A description of the facilities that would be used for the proposed effort;
 14. Clearly identify any other funding agencies for which the proposal has been submitted; and
 15. In addition to the proposal, in a **separate Adobe Portable Document File**, provide a short executive summary of the proposed effort. This executive summary will not contain any proprietary or business sensitive information and as such should only contain FOUO markings. Executive summaries containing legends source selection sensitive, proprietary, or any other identifiable markings- will be treated as source selection sensitive material. Executive summaries, containing the appropriate FOUO markings, will be used within the command to identify interested parties for the purpose of conducting evaluations. This summary will not affect the evaluation of the proposal. All proposals will be evaluated in accordance with the criteria of this BAA. Only US Government personnel will view the executive summary. Executive Summaries should include:
 - i. Proposal title,
 - ii. Submission date,
 - iii. Organization name,
 - iv. Technical topic areas (include section reference(s) and description(s)), and
 - v. Summary of the science and technology research effort proposed, not to exceed 1,000 characters (does not include white spaces).

- **Cost Volume**

The proposal includes a Cost Volume. The Cost Volume has no mandatory format or page limit. Offeror's shall prepare a cost proposal in general accordance with FAR 15.400, and shall include a consolidated price summary and Pricing Cover Sheet with supporting data in order to allow for a complete review by the Government. The cost volume should provide a detailed cost breakdown of all costs, by cost category, by the funding periods described below, and by task/sub-task corresponding to the task number in the proposed draft Statement of Work. Assume that performance will start no earlier than three (3) months after the date the cost proposal is submitted. All information relating to cost or pricing type data shall be included only in the section of the proposal designated as the Cost Proposal. Under no circumstances shall cost or pricing type data be included elsewhere in the proposal.

Contract types are grouped into two broad categories: fixed-price contracts (see FAR Subpart 16.2) and cost-reimbursement contracts (see FAR Subpart 16.3). A firm-fixed-price (FFP) contract provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. Cost-reimbursement types of contracts (CPFF) provide for payment of allowable incurred costs, to the extent prescribed in the contract. These contracts establish an estimate of total cost for the purpose of obligating funds and establishing a ceiling that the contractor may not exceed (except at its own risk) without the approval of the contracting officer.

In order to be awarded a cost reimbursement contract, an Offeror must have an adequate accounting system as determined by DCAA. Offerors shall provide a copy of the report from the cognizant DCAA office stating that the Offeror's accounting system is acceptable for the accumulation, reporting and billing of costs under a cost reimbursement contract.

The type of contract proposed will result in reasonable contractor risk and provide the contractor with the greatest incentive for efficient and economical performance. It should be based on a number of factors including, but not limited to type and complexity of the requirement, Contractor's technical capability and

financial responsibility, adequacy of the contractor's accounting system, extent and nature of proposed subcontracting, and acquisition history.

The cost volume shall be prepared in accordance with the directions provided below in Microsoft Excel Spreadsheet formats to the maximum extent possible with all embedded excel formulas applied. A sample spreadsheet is provided in Appendix B "Cost Proposal Sample Spreadsheet" of this document. There is no page limitation for the cost volume. Breakout and identify separately for each tasking year of the effort proposed and on a cumulative basis for all tasking years, the following cost elements:

1. Direct Labor. Identify all of the various labor categories (providing individual names for key personnel) intended for use under this contract including the number of labor hours, hourly labor rates, and total cost for each labor category proposed for each tasking year of the contract. The labor specified under this category shall only be for the prime's direct labor and shall not include any subcontracted labor. (See subcontracted labor below.) The straight time hourly rates shall use a forty-hour week for the conversion of salaried employees to the hourly basis and shall be exclusive of loading factors; i.e., vacation, sick leave, holidays, overhead, G&A, fee, etc. *Explain the basis of estimate for the proposed hours/labor mix, as well as, the Labor hourly rates. Provide supporting documentation for the labor rates proposed.*
2. Fringe Benefits. If applicable and in accordance with your normal accounting procedures, identify the fringe benefit rate(s) and total fringe benefit cost being proposed and identify the cost elements for which the fringe benefit rate is being applied. *Explain the basis for the proposed rate and application base.* Include a copy of your Federal Government negotiated indirect bidding/billing agreement, if applicable.
3. Overhead. Identify the current and/or projected overhead rate(s) and total overhead cost being proposed and identify the various cost elements for which overhead is being applied. *Explain the basis for the proposed rate and application base.* Include a copy of your Federal Government negotiated indirect bidding/billing agreement, if applicable.
4. General and Administrative Expense. Identify the G&A rate(s) and the total G&A cost proposed and identify the various cost elements for which the G&A is being applied. *Explain the basis for the proposed rate and application base.* Include a copy of your Federal Government negotiated indirect bidding/billing agreement, if applicable.
5. Travel. Identify the following information for each trip PER period: purpose of trip, location of origin and destination; number of travelers; duration; airfare cost; rental car cost; per diem (meals and lodging) cost; any other costs. Provide rationale for the proposed trips and purpose as they directly relate to this effort and justification for the proposed relevant attendants proposed for each trip.
6. Direct Materials. Identify proposed consumable material/supply items and purchased parts by item name, quantity, and unit price. *Provide an itemization of the proposed materials and supply costs, including description, quantity, unit prices, extended price proposed vendors (if known), and the basis of the estimate (e.g., quotes, prior purchases, catalog price lists, etc.) PER period. Any item that exceeds \$5,000.00 must be supported with back-up documentation such as a copy of catalog price lists or quotes prior to purchase.* In addition to the above, the Government may later request that you further substantiate the proposed costs.
7. Equipment. Identify proposed non-consumable equipment by item name, quantity, and unit price. *Provide an itemization of the proposed equipment costs, including quantities, unit prices, proposed vendors (if known), and the basis of the estimate (e.g., quotes, prior purchases, catalog price lists, etc.). Any item that exceeds \$5,000.00 must be supported with back-up documentation such as a copy of catalog price lists or quotes prior to purchase. (NOTE: Identify equipment purchases not integrated into final deliverable and include a letter stating why the proposer cannot provide the requested resources from its own funding).* In addition to the above, the Government may later request that you further substantiate the proposed costs.
8. Subcontracts. Each subcontract and consultant identified should have a statement of work commensurate with the proposed cost. All cost should be broken out in the same format that the prime Offeror uses in its proposal. If necessary to protect cost and pricing data, the subcontractor's proposal may be submitted directly to the Government. In this event, the proposal should be clearly identified as a subcontract proposal and identify the prime. Subcontractors must submit the same detailed level of cost information as required for the prime. **Subcontractor(s) shall provide items 1-**

12, attachment 1, etc., as listed in this Cost Volume Section (same format as prime uses are preferred).

In addition to the above, the Prime contractor must provide the following for each subcontractor proposed:

- i. Identify Commercial and Government Entity (CAGE) code and Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number;
 - ii. Type of business arrangement/contract vehicle selected for each with justification of selection;
 - iii. Prime Contractor's process in selecting/pursuing/awarding the requirement to each selected subcontractor (Competition, Sole Source, etc.) and how the Prime ensured via the selection process used that each subcontractors' proposed cost is fair and reasonable;
9. Other.
- i. **Direct Cost.** Identify any other direct cost elements being proposed which are not included above but are applicable to your cost proposal, e.g., royalties, Facilities Capital Cost of Money, special tooling, computer usage, etc. *Explain the basis for the proposed rate and application base.*
 - ii. **Indirect Cost.** Identify any other indirect cost element being proposed which has not been included above and identify the various cost elements for which the rate is applied.
10. Pricing Assumptions. Identify any 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 Expert(s), etc.).
11. Administrative.
- i. With respect to your accounting system's adequacy for determining costs applicable to a contract, provide the most recent letters, audits and/or other pertinent information from your applicable federal audit and/or contract administration agency that would support an affirmative determination of adequacy by a Contracting Officer.
 - ii. Identify your cognizant Defense Contract Audit Agency or other Federal Government audit agency and provide a point of contact name, address, e-mail, and telephone number.
 - iii. Identify your cognizant Federal Government contract administration office and provide a point of contact name, address, e-mail, and telephone number.
 - iv. DCMA: Offerors can identify their DCMA office by going to the following website <https://pubapp.dema.mil/CASD/CasdSearch.do> and entering their ZIP code.
 - v. ONR: Offerors can identify their ONR office by going to the following website <http://www.onr.navy.mil/Contracts-Grants/Regional-Contacts.aspx> and searching by region
 - vi. DCAA: Offerors can identify their DCAA office by going to the following websites <http://www.dcaa.mil/fao/index.htm> and http://www.dcaa.mil/Audit_Office_Locator_OCONUS.htm and entering their ZIP code.
12. Proposal Validity. Cost proposals should be valid for a period of six (6) months after the date of submission.
- b. Funding Restrictions:** The cost of preparing proposals in response to this announcement is not considered an allowable direct charge to any resulting award.
- c. Evaluation Criteria:** The following criteria, which are listed in descending order of importance, will be used to determine whether proposals submitted are consistent with the intent of this BAA and of interest to the Government:
1. Overall Scientific or Technical Merits of the proposed research and development- Including the approach for the research, development and/or enhancement of the proposed technology and its evaluation;
 2. Potential for enhancing C4ISR capabilities and their effectiveness;

3. Related Experience and Program Team Capabilities- the extent to which the Offeror demonstrates relevant technology and domain knowledge. Consideration will be given to past and present performance on recent Government contracts/grants and the capacity to achieve the objectives of this BAA;
4. Offeror's plan of execution and facilities; and
5. Reasonableness and realism of proposed labor mix (categories and hours) and schedule.

The labor mix consists of labor categories and labor hours proposed. The proposed mix should be consistent for the type of work and skill mix needed to effectively and efficiently perform the contract.

No further evaluation criteria will be used in selecting proposals. Individual proposals will be evaluated against the evaluation criteria without regard to other white papers and proposals submitted under this BAA.

6. White Paper Submission Instructions for Other Transactions

DO NOT send white papers to the Agency Contact. White paper submissions that are emailed will not be accepted. White paper submissions will only be accepted via SPAWAR e-Commerce Central at: <https://e-commerce.sscno.nmci.navy.mil>. (Note that this does not include a "www" prefix) by selecting SSC Pacific then Open BAA from the left hand menu and selecting the Solicitation number.

7. White Paper Information for Other Transactions

White papers shall not contain classified data. Offerors are expected to appropriately mark each page of their submission that contains proprietary information; do not provide submissions marked "classified," "confidential," "secret," etc.

a. Content and Form of White Paper Submissions: Offerors are required to submit all white papers in Adobe Portable Document Format (PDF) format compatible with Adobe Acrobat Pro, with 12 pitch Times New Roman font (smaller font may be used for figures and tables), on 8-1/2 by 11 inch paper, with 1 inch margins. White papers shall be limited to 5 pages (excluding cover and executive summary), summarizing the proposed approach or solution. The page limitation shall include all figures, tables, and charts. It is the Offeror's responsibility to appropriately mark each page of its submission that contains proprietary information. White papers shall utilize associated numbering below. White Papers that do not clearly identify the below information using the associated numbers will be considered to have not conformed to the parameters of this BAA and thus non-responsive. Such white papers will not be further evaluated. The white paper will be formatted as follows:

1. Cover Page (not included in page count): clearly labeled "WHITE PAPER", BAA title and number, proposal title (unique title is required), date, organization name and address, anticipated period of performance, technical topic area(s) addressed, Government point of contact (if applicable), technical and administrative point of contact information (address, phone, fax & e-mail), and cost summary;
2. Summary of Type of Knowledge or Capability: Summary of type of knowledge or capability to be gained through research in one of the eight listed areas of interest. Clearly state the goal(s) of the research, the key challenges, and the methods to overcome those challenges. Point out the novelty of the proposed work in relation to the current state of the art. Identify the relevant weapons or weapon systems proposed to be acquired or developed by DoD;
3. Area(s) Addressed: White papers that do not address multiple areas shall describe how the proposed research will interact with other areas and how the Offeror suggests that the Government test these interactions. "End-to-end" solutions are discouraged in favor of smaller "pluggable" components, expertly produced, which exploit the interaction between research areas or in order to address a larger set of the challenges.
4. Cost Estimate: Summary of rough estimates of cost for each year;
5. Teaming Arrangements: Teaming arrangements must be clearly defined in the white papers.
6. Identify why an other transaction is the appropriate instrument.
7. In addition to the white paper, **in a separate PDF file** (is not included in white paper page limitations), provide a short executive summary of the proposed effort. All white papers will be

evaluated in accordance with the evaluation criteria of this BAA. Only US Government personnel will view the executive summary. Executive Summaries should include:

- i. White paper title,
- ii. Submission date,
- iii. Organization name,
- iv. Technical topic areas (include BAA section reference(s) and description(s)), and
- v. Summary of the science and technology research effort proposed, not to exceed 1,000 characters (does not include spaces).

b. Funding Restrictions: The cost of preparing white papers in response to this announcement will not be reimbursed.

c. Evaluation Criteria: The following criteria, which are listed in descending order of importance, will be used to determine whether white papers submitted are consistent with the intent of this BAA and of interest to the Government:

1. Overall scientific or technical merits of the proposed research and development.
2. Potential for enhancing C4ISR capabilities and their effectiveness.
3. Reasonableness of the price.

8. Proposal Submission Instructions/Proposal Information for Other Transactions

Proposal Submission Instruction and Proposal Information will be specified in the request for proposal.

V. ADMINISTRATIVE INFORMATION:

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

Once the evaluation of a proposal is complete, the Offeror will be notified of the results and that the proposal has or has not been selected for funding pending negotiations. These official notifications will be sent via e-mail to the Administrative POC identified on the proposal coversheet. Invitations to begin negotiations does not assure that the submitting organization it will receive an award.

2. **Types of Awards** – Procurement contracts, grants, cooperative agreements, and other transactions awards will be made under this announcement.
3. **Offer Preparation Reimbursement** – The Government provides no funding for direct reimbursement of white paper or proposal development costs.
4. **Obligating of the Government** – Prospective Offerors are advised that only Contracting Officers are legally authorized to commit the Government. Only Contracting Officers may obligate the Government to an agreement involving the expenditure of Government funds. Any resultant contract award would include all clauses required by the FAR and appropriate supplements.
5. **Security Guidance** – Security classification guidance via a DD Form 254, “DoD Contract Security Classification Specification,” will not be provided at this time since SSC Pacific is soliciting ideas only. After reviewing the incoming proposals, if a determination is made that the award instrument may result in access to classified information a DD Form 254 will be issued and attached as part of the award. Depending on the work to be performed, the Offeror may require a SECRET facility clearance and safeguarding capability; therefore, personnel identified for assignment to a classified effort must be cleared for access to SECRET information at the time of award. In addition, the Offeror may be required to have, or have access to, a certified and Government-approved facility to support work under this BAA.

6. **Proposal Handling** – Only Government employees will review the white papers and/or proposals for selection. SSC Pacific has contracted for various business and staff support services, some of which require contractors to obtain administrative access to proprietary information submitted by Offerors. Administrative access is defined as "handling or having physical control over information for the sole purpose of accomplishing the administrative functions which do not require the review, reading, or comprehension of the content of the information on the part of non-technical professionals assigned to accomplish the specified administrative tasks." These contractors have signed general non-disclosure agreements and organizational conflict of interest statements. The required administrative access will be granted to non-technical professionals. Examples of the administrative tasks performed include, but is not limited to: a. Assembling and organizing information for R&D case files; b. Accessing library files for use by Government personnel; and c. Handling and administration of proposals, funding and queries. Any objection to administrative access must be in writing to the Contracting Officer and shall include a detailed statement of the basis for the objection.
7. **Offer Markings** – All white papers/ proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. If only portions of the page contain proprietary information, those portions should be clearly marked. It is the Proposer's responsibility to clearly define to the Government what is considered proprietary data. No proposals containing classified information should be submitted under this announcement.
8. **Export Control** – Offerors are warned that compliance with International Traffic in Arms Regulations (ITAR) may be required and will be included in all procurement contracts. The ITAR, issued by the Dept. of State, controls the export of defense-related articles and services, including technical data, ensuring compliance with the Arms Export Control Act (22 U.S.C. 2751 et seq.) If a proposer has questions regarding how to comply with the ITAR, they are directed to look at DFARS 252.225-7048(c).

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

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

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

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

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

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

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

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

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

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

9. Public Release – It is the policy of the Department of Defense that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. Research to be performed as a result of this BAA may be Fundamental. SSC Pacific does not anticipate applying publication restrictions of any kind but reserves the right to require prior review before publication in appropriate or required circumstances, e.g. review necessary to ensure SSC Pacific in compliance with Privacy Act.

10. Electronic Systems (as applicable to the instrument) –

a. System for Award Management (SAM)

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

b. Representations and Certifications

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

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

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

d. SPAWAR e-Commerce Central

White paper/ proposal submissions for contracts will only be accepted via SPAWAR e-Commerce Central at <https://e-commerce.sscno.nmci.navy.mil> (Note that this does not include a "www" prefix) by selecting SSC Pacific then Open BAAs from the left hand menu and selecting the Solicitation number. The submission of white papers is required to limit any undue effort exerted on the preparation and evaluation of proposal not of interest to the Government.

e. Grants.gov

Proposal submissions for grants and cooperative agreements will only be accepted via Grants.gov. Registration to Grants.gov will be required prior to any award under this BAA.

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

VI. OTHER:

1. Applies to Grants and Cooperative Agreement applicants only

- a. Federal Funding Accountability and Transparency Act of 2006: The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252, requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR Part 170. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or other transaction agreements) as either a prime or sub-recipient under this BAA must provide information in its proposal that describes the necessary processes and systems in place to comply with the reporting requirements identified in 2 CFR Part 170 Appendix A. Entities are required to meet reporting requirements unless an exception or exemption applies. Please refer to 2 CFR Part 170, including Appendix A, for a detailed explanation of the requirements, exceptions, and exemptions.
- b. Military Recruiting on Campus (DoDGARS Part 22.520): This applies to domestic U. S. colleges and universities. Appropriate language from 32 CFR 22.520, Campus access for military recruiting and Reserve Officer Training Corps (ROTC), will be incorporated in all university grant awards.
- c. Certification regarding Restrictions on Lobbying: Grant and Cooperative Agreement awards greater than \$100,000, require a certification of compliance with a national policy mandate concerning lobbying. Grant applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted via Grants.gov (complete Block 17). The following certification applies likewise to each Cooperative Agreement applicant seeking federal assistance funds exceeding \$100,000:

(1) No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, or cooperative agreement.

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

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

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- d. Representation Regarding an Unpaid Delinquent Tax Liability or a Felony Conviction Under any Federal Law - DoD Appropriations: All grant applicants are required to complete the "Representation on Tax Delinquency and Felony Conviction" found at <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal.aspx> by checking the "I agree" box in block 17 and attaching the representation to block 18 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation reads as follows:

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

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

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

- e. Representation Regarding the Prohibition on Using FY15 Funds with Entities that Require Certain Internal Confidentiality Agreements Agreement with the representation below will be affirmed by checking the "I agree" box in block 17 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation reads as follows:

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

Note that: (1) the basis for this representation is a prohibition in Section 743 of the Financial Services and General Government Appropriations Act, 2015, Pub. L. 113-235) on provision of funds through grants and cooperative agreements to entities with certain internal confidentiality agreements or statements; and 92) Section 743 states that it does not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

- f. Applicants for grants or cooperative agreements as applicable are required to comply with 2 CFR 215.42, Codes of Conduct, to prevent real or apparent conflicts of interest in the award and administration of any contracts supported by federal funds. This provision will be incorporated into all assistance instruments awarded under this BAA.

2. Applies to Contracts Only

- a. Government Property/Government Furnished Equipment (GFE) and Facilities: Government research facilities and operational military units are available and should be considered as potential government-furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for any one specific program. The use of these facilities and resources will be negotiated as the program unfolds. Offerors should indicate in their Technical Volume which of these facilities are critical for the project's success.
- b. Use of Arms, Ammunition and Explosives:

Safety

The Offeror is required to be in compliance with DoD manual 4145.26-M, DoD Contractor's Safety Manual for Ammunition and Explosives if ammunitions and/or explosives are to be utilized under the proposed research effort. (See DFARS 223.370-5 and DFARS 252.223-7002)

If ammunitions and/or explosives (A&E) are to be utilized under the proposed research effort, the Government requires a preaward safety survey in accordance with DFARS PGI 223.370-4(C)(iv) entitled Preaward survey. The Offeror is solely responsible for contacting the cognizant Defense Contract Management Agency (DCMA) office and obtaining a required preaward safety survey before proposal submission. The Offeror should include required preaward safety surveys with proposal submissions.

If the Offeror proposes that the Government provide Government-furnished A&E containing any nitrocellulose-based propellants and/or nitrate ester-based materials (such as nitroglycerin) or other similar A&E with a tendency to become chemically unstable over time, then NMCARS 5252.223-9000 will also apply to a resulting contract award. (See NMCARS 5223.370-5)

Security

If arms, ammunition or explosives (AA&E) are to be utilized under the proposed research effort, the Government requires a preaward security survey. The Offeror is solely responsible for contacting the cognizant DCMA office and obtaining a required preaward security survey before proposal submission. The Offeror should include a required preaward security survey with proposal submission. (See DoD manual 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition and Explosives, paragraph C1.3.1.4)

If AA&E are to be utilized under the proposed research effort, the Government may require the Contractor to have perimeter fencing around the place of performance in accordance with DoD 5100.76-M, Appendix 2.

If AA&E are to be utilized under the proposed research effort, the Offeror is required to provide a written copy of the Offeror’s AA&E accountability procedures in accordance with DoD 5100.76-M. If the Offeror is required to provide written AA&E accountability procedures, the Offeror should provide the respective procedures with its proposal submission. See DoD 5100.76-M Appendix 2.12.

- c. System for Award Management (SAM): FAR 52.204-7 System for Award Management and FAR 52.204-13 System for Award Management Maintenance are incorporated into this BAA, and FAR 52.204-13 will be incorporated in all awards.
- d. Employment Eligibility Verification (E-verify): As per FAR 22.1802, recipients of FAR-based procurement contracts must enroll as Federal Contractors in E-verify and use E-verify to verify employment eligibility of all employees assigned to the award. All resultant contracts from this solicitation will include FAR 52.222-54, “Employment Eligibility Verification.”
- e. FAR / DFARS Provisions:

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

Clause #	Provision
52.204-7	System for Award Management
52.215-16	Facilities Capital Cost of Money
52.215-22	Limitations on Pass Through Charges - Identification of Subcontract Effort
52.216-1	Type of Contract
52.216-27	Single or Multiple Awards
52.217-4	Evaluation of Options Exercised at time of Contract Award
52.217-5	Evaluation of Options
52.222-24	Preaward On-Site Equal Opportunity Compliance Evaluation (Applies if exceeds \$10M)
25.226-2	Historically Black College or University and Minority Institution Representation
52.230-7	Proposal Disclosure - Cost Accounting Practice Changes
52.232-15	Progress Payments not included
52.233-2	Service of Protest
52.252-1	Solicitation Provisions Incorporated by Reference
52.252-3	Alterations in Solicitation

52.252-5	Authorized Deviations in Provisions
252.203-7005	Representation Relating to Compensation of Former DoD Officials
252.204-7004	Alternate A, System for Award Management
252.215-7003	Requirements for Submission of Data Other than Certified Cost or Pricing Data - Canadian Commercial Corporation
252.219-7000	Advancing Small Business Growth

- f. Combating Trafficking in Persons: Appropriate language from FAR Clause 52.222-50 will be incorporated in all awards.
- g. Certification Regarding Trafficking in Persons Compliance Plan: Prior to award of a contract, for the portion of the contract that is for supplies, other than commercially available off-the-shelf items, to be acquired outside the United States, or services to be performed outside the United States, and which has an estimated value that exceeds \$500,000, the contractor shall submit the certificate as specified in paragraph (c) of 52.222-56, Certification Regarding Trafficking in Persons Compliance Plan.
- h. Updates of Information regarding Responsibility Matters: FAR clause 52.209-9, “Updates of Publicly Available Information Regarding Responsibility Matters”, will be included in all contracts valued at \$500,000 where the contractor has current active Federal contracts and grants with total value greater than \$10,000,000.

3. Applies to Contracts, Grants and Cooperative Agreements

- a. Reporting: The number and types of reports will be specified in the award document, but will include as a minimum monthly financial status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed on before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be continued under a follow-on vehicle. Reporting will be specified in the resulting contract award via DD1423, Contract Data Requirements List (CDRL).
- b. 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. Further, research involving human subjects that is conducted or supported by the DoD must comply with 32 CFR 219, Protection of Human Subjects (http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title32/32cfr219_main_02.tpl), and DoD Directive 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research (<http://www.dtic.mil/whs/directives/corres/pdf/321602p.pdf>).

Institutions awarded funding for research involving human subjects must provide documentation of a current institutional Assurance of Compliance with Federal regulations for human subject protection and a DoD addendum to the Assurance. A Federal Wide Assurance example can be found at Department of Health and Human Services, Office of Human Research Protection (<http://www.hhs.gov/ohrp>). A DoD addendum can be obtained from Army, Navy, or Air Force offices. Information on DoD addendums can be found at (<http://www.onr.navy.mil/en/About-ONR/compliance-protections/Research-Protections/Research-Protection-Addendum-Assurance.aspx>). All institutions engaged in human subject research, to include subcontractors, must also have a valid Assurance. In addition, personnel involved in human subject research must provide documentation of completing appropriate training for the protection of human subjects.

For all proposed research that will involve human subjects in the first year or phase of the project, the institution must provide evidence of or a plan for review by an Institutional Review Board (IRB) upon final proposal submission to SSC Pacific. The IRB conducting the review must be the IRB identified on the institution’s Assurance. The protocol, separate from the proposal, must include a detailed description

of the research plan, study population, risks and benefits of study participation, recruitment and consent process, data collection, and data analysis. Consult the designated IRB for guidance on writing the protocol. The informed consent document must comply with federal regulations (32 CFR 219.116). A valid Assurance along with evidence of appropriate training of all investigators should accompany the protocol for review by the IRB.

In addition to a local IRB approval, a secondary review of concurrence review and approval is required for all research intending to use military and/or civilian subjects by a cognoscente DOD IRB. The Army, Navy, or Air Force office associated with subject recruitment can provide guidance and information about their component's IRB review process.

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. The IRB approval process can last between one to three months, followed by a DoD review that could last between three to six months. No DoD funding can be placed on a contract/grant toward human subject tasking until ALL approvals are granted and documentation provided to SSC Pacific for compliance verification and approval.

- c. **Animal Use:** Any Recipient performing research, experimentation, or testing involving the use of animals shall comply with the rules on animal acquisition, transport, care, handling, and use in: (i) 9 CFR parts 1-4, Department of Agriculture rules that implement the Laboratory Animal Welfare Act of 1966, as amended, (7 U.S.C. 2131-2159); (ii) the guidelines described in National Institutes of Health Publication No. 86-23, "Guide for the Care and Use of Laboratory Animals"; (iii) DoD Directive 3216.01, "Use of Laboratory Animals in DoD Programs." For submissions containing animal use, proposals should briefly describe plans for Institutional Animal Care and Use Committee (IACUC) review and approval. Animal studies in the program will be expected to comply with the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals, available at <http://grants.nih.gov/grants/olaw/olaw.htm>. All Recipients must receive approval by a DoD certified veterinarian, in addition to an IACUC approval. No animal studies may be conducted using DoD funding until the U.S. Army Medical Research and Material Command (USAMRMC) Animal Care and Use Review Office (ACURO) or other appropriate DoD veterinary office(s) grant approval. As a part of this secondary review process, the Recipient will be required to complete and submit an ACURO Animal Use Appendix, which may be found at https://mrmc-www.army.mil/index.cfm?pageid=Research_Protections.acuro&rn=1.

The amount of time required to complete the IACUC review/approval process may vary depending on the complexity of the research. Ample time should be allotted to complete the approval process. The IACUC approval process can last between one to three months, followed by a DoD review that could last between three to six months. No DoD funding can be spent on animal subject tasking until ALL approvals are granted and documentation provided to SSC Pacific for compliance verification and approval.

- d. **Recombinant DNA:** Proposals which call for experiments using recombinant DNA must include documentation of compliance with Department of Health and Human Services (DHHS) recombinant DNA regulations, approval of the Institutional Biosafety Committee (IBC), and copies of the DHHS Approval of the IBC letter.
- e. **Institutional Dual Use Research of Concern:** As of September 24, 2015, all institutions and USG funding agencies subject to the United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern must comply with all the requirements listed therein. If your research proposal directly involves certain biological agents or toxins, contact the cognizant Technical Point of Contact. U.S. Government Science, Safety, Security (S3) guidance may be found at <http://www.phe.gov/s3/dualuse>.
- f. **Meeting and Travel Requirements:** Contracts, grants and cooperative agreements awarded from the BAA may require a program kick-off meeting. These meetings may be conducted either in-person at a Government or Contractor facility or by teleconference. Meeting attendees would include contractor administrative and technical personnel, Government contracting, technical, and programmatic personnel.

Travel may be required in support of such meetings. Any costs associated with travel shall be part of the contract price. Proposers should also anticipate potential program-wide technical meetings and periodic site visits.

- g.** Reporting Executive Compensation and First-Tier Subcontract Awards: The FAR clause 52.204-10, "Reporting Executive Compensation and First-Tier Subcontract Awards," will be used in all procurement contracts valued at \$25,000 or more. A similar award term will be used in all grants and cooperative agreements.
- h.** Electronic and Information Technology: All electronic and information technology acquired through the BAA must satisfy the accessibility requirements of Section 508 of the Rehabilitation Act (29 U.S.C. § 794d) and FAR Subpart 39.2. Each proposer who submits a proposal involving the creation or inclusion of electronic and information technology must ensure that Federal employees with disabilities will have access to and use of information that is comparable to the access and use by Federal employees who are not individuals with disabilities. Additionally, each proposer must ensure that members of the public with disabilities seeking information or services from SSC Pacific will have access to and use of information and data that is comparable to the access and use of information and data by members of the public who are not individuals with disabilities.

4. Applies to Other Transactions

- a.** Specific requirements, term, and conditions (e.g., Section VI, paragraph 3) will be specified in the request for proposal.

VII. AGENCY CONTACTS:

Questions of a technical and/or business nature shall be submitted to the Contract Specialist through the e-Commerce Central web site (<https://e-commerce.sscno.nmci.navy.mil>).

Questions must reference the title and number of the BAA including Call number, if applicable.

This notice constitutes a BAA as contemplated in FAR 35.016. No additional written information is available, nor will a formal request for proposal (RFP) or other solicitation regarding this announcement be issued. Interested parties are invited to respond to this announcement. All responsible parties' responses will be considered.

Attachment 1

Identification and Assertion of Use, Release, or Disclosure Restrictions

1. The identification and assertion requirements in this provision apply only to technical data, including computer software documentation, or computer software to be delivered with other than unlimited rights. Notification and identification is not required for restrictions based solely on copyright.
2. Offerors shall identify, to the extent known at the time of submission of a proposal, the technical data or computer software that the Offeror, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure. If “None,” Attachment should explicitly state in the appropriate areas.
3. The Offeror's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers, shall be submitted as an attachment to its proposal in the following format, dated and signed by an official authorized to contractually obligate the Offeror.
4. An Offeror's failure to submit, complete, or sign the notification and identification with its offer may render the offer ineligible for award. Note: Completion is required for subcontractors as well.
5. If the Offeror receives an award, the assertions identified below shall be listed in an attachment to that award. Upon request by the Grants/Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.
6. Attachment 1 format (begins on next page):

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

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

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

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

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

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

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

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

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

Appendices

Appendix A

Broad Agency Announcement for C4ISR and Information Technology System Research

No. N66001-16-X-3003

As stated in the Broad Agency Announcement, all technical proposals must include an explanation of how the proposed effort satisfies the definition(s) of basic research, applied research, or **advanced technology development** that is not related to the development of a specific system or **advanced component development and prototype**. Definitions are as follows:

Basic research – systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress. Basic research may lead to: (a) subsequent applied research and advanced technology developments in Defense-related technologies, and (b) new and improved military functional capabilities in areas such as communications, detection, tracking, surveillance, propulsion, mobility, guidance and control, navigation, energy conversion, materials and structures, and personnel support.

Applied research – systematic study to understand the means to meet a recognized and specific need. It is a systematic expansion and application of knowledge to develop useful materials, devices, and systems or methods. It may be oriented, ultimately, toward the design, development, and improvement of prototypes and new processes to meet general mission area requirements. Applied research may translate promising basic research into solutions for broadly defined military needs, short of system development. This type of effort may vary from systematic mission-directed research beyond that in basic research to sophisticated breadboard hardware, study, programming and planning efforts that establish the initial feasibility and practicality of proposed solutions to technological challenges. It includes studies, investigations, and non-system specific technology efforts. The dominant characteristic is that applied research is directed toward general military needs with a view toward developing and evaluating the feasibility and practicality of proposed solutions and determining their parameters. Applied research precedes system specific technology investigations or development.

Advanced technology development – includes the development of subsystems and components and efforts to integrate subsystems and components into system prototypes for field experiments and/or tests in a simulated environment. Projects in this category include concept and technology demonstrations of components and subsystems or system models. The models may be form, fit and function prototypes or scaled models that serve the same demonstration purpose. The results of this type of effort are proof of technological feasibility and assessment of subsystem and component operability and producibility rather than the development of hardware for service use. Projects in this category have a direct relevance to identified military needs. Projects in this category demonstrate the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques. Projects in this category do not necessarily lead to subsequent development or procurement phases, but should have the goal of moving out of science and technology and into the acquisition process within the future year's defense program. Upon successful completion of projects that have military utility, the technology should be available for transition.

Advanced component development and prototype – efforts necessary to evaluate integrated technologies, representative modes, or prototype systems in a high fidelity and realistic operating environment are funded in this category. Projects in this category include system specific efforts that help expedite technology transition from the laboratory to operational use. Emphasis is on proving component and subsystem maturity prior to integration in major and complex systems and may involve risk reduction initiatives. Projects in this category are referred to as advanced component development activities and include technology demonstrations.

Appendix B

Assumptions:

Work Hours per week 40
 Work Hours per Year 2080

Labor Category	Task 1 Year 1 10/1/98 - 9/30/99			Task 1 Year 2 10/1/99 - 9/30/00			Task 1 Total		Task 2 Year 1 10/1/98 - 9/30/99			Task 2 Year 2 10/1/99 - 9/30/00			Task 2 Total		Grand Total Year 1 10/1/98 - 9/30/99		Grand Total Year 2 10/1/99 - 9/30/00		Grand Total All Years	
	Hours	Rate	Total Cost	Hours	Rate	Total Cost	Hours	Total Cost	Hours	Rate	Total Cost	Hours	Rate	Total Cost	Hours	Total Cost	Hours	Total Cost	Hours	Total Cost	Hours	Total Cost
Program Manager - John D	2,000	\$35.00	\$70,000	1,800	\$36.50	\$65,700	3,800	\$135,700	500	\$35.00	\$17,500	2,000	\$36.50	\$73,000	2,500	\$90,500	2,500	\$87,500	3,800	\$138,700	6,300	\$226,200
Senior Analyst - Dave Smith	1,000	\$27.00	\$27,000	1,200	\$28.50	\$34,200	2,200	\$61,200	2,000	\$27.00	\$54,000	1,000	\$28.50	\$28,500	3,000	\$82,500	3,000	\$81,000	2,200	\$62,700	5,200	\$143,700
Technical Writer - Mary Kell	1,500	\$15.00	\$22,500	1,000	\$16.00	\$16,000	2,500	\$38,500	3,000	\$15.00	\$45,000	200	\$16.00	\$3,200	3,200	\$48,200	4,500	\$67,500	1,200	\$19,200	5,700	\$86,700
Total	4,500		\$119,500	4,000		\$115,900	8,500	\$235,400	5,500		\$116,500	3,200		\$104,700	8,700	\$221,200	10,000	\$236,000	7,200	\$220,600	17,200	\$456,600
Fringe, Overhead, Benefits		50%	\$83,650			\$81,130		\$164,780			\$81,550			\$73,290		\$154,840		\$165,200		\$154,420		\$319,620
Total Labor & Fringe, Overhead,Benefit:	50%		\$203,150			\$197,030		\$400,180			\$198,050			\$177,990		\$376,040		\$401,200		\$375,020		\$776,220
Other Direct Costs																						
Travel			\$14,000			\$10,000		\$24,000			\$14,000			\$14,000		\$28,000		\$28,000		\$24,000		\$52,000
Material & Supplies			\$1,000			\$500		\$1,500			\$1,000			\$1,000		\$2,000		\$2,000		\$1,500		\$3,500
Equipment			\$5,000		\$-	\$5,000		\$5,000			\$5,000			\$5,000		\$10,000		\$10,000		\$5,000		\$15,000
Subcontract			\$50,000			\$60,000		\$110,000			\$50,000			\$50,000		\$100,000		\$100,000		\$110,000		\$210,000
Total Other Direct Costs			\$70,000			\$70,500		\$140,500			\$70,000			\$70,000		\$140,000		\$140,000		\$140,500		\$280,500