

NSWC IHEODTD BAA N00174-19-0001

INTRODUCTION:

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in the Department of Defense Grants and Agreements regulations (DoDGARS) 22.315(a). A formal Request for Proposals (RFP), solicitation, and/or additional information regarding this announcement will not be issued.

Naval Surface Warfare Center (NSWC) Indian Head Explosive Ordnance Disposal Technology Division (IHEODTD) will not issue paper copies of this announcement. NSWC IHEODTD reserves the right to select for award all some or none of the proposals in response to this announcement. NSWC IHEODTD reserves the right to fund all, some or none of the proposals received under this BAA. NSWC IHEODTD provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this BAA will not be returned. All proposals will be treated as sensitive competitive information and will be protected from unauthorized disclosure.

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A. Agency Name

Naval Surface Warfare Center
Indian Head Explosive Ordnance Disposal Technology Division
4081 North Jackson Road Bldg. 841
Indian Head, MD 20640

B. Research Opportunity Title

Naval Engineering Education Consortium (NEEC) Broad Agency Announcement for FY19

C. Program Name

NEEC

D. Research Opportunity Number

NSWC IHEODTD BAA N00174-19-0001

E. Response Date

Full Proposal Due: 01 November 2019 **Eastern Daylight Time** 11:59pm

F. Research Opportunity Description

This BAA is open only to colleges and universities.

On behalf of the Naval Sea Systems Command (NAVSEA) Warfare Centers, NSWC IHEODTD is soliciting research of interest in support of the NEEC. The topics of interest are listed below:

NSWC Carderock

Technical POC: Charlotte George

CA-01: Polymers, composites, smart materials, and intelligent coating systems (including adhesives) for improved performance require focus on multi-scale analysis approaches that may evolve into low-fidelity, high-reliability design tools. Consider efforts on the application of edge computing techniques for real-time structural health monitoring data processing; data fusion of structural sensor data with control signals, with techniques for intelligent, seamless updating of numerical model(s) contained within a Digital Twin based upon sensor information; as well as, methods for providing safe operating envelop calculations and structural feedback to control system.

CA-02: Techniques to aid in the prediction, quantification, and validation of ship motions and loads in conventional and/or extreme behaviors. Consider efforts on the development of mathematical and numerical methods related to the prediction and quantification of ship motions and loads; as well as the application of advanced analytics to characterize the effects of model and/or statistical uncertainty.

NSWC Corona

Technical POC: Karon Myles

CO-01: System, subsystem, and component identification utilizing Natural Language Processing (NLP). Proposal should address techniques to derive semantic relations in disparate datasets including meronymy, holonymy, and hyponymy. Novel techniques, graphic representations, and methods to apply NLP to datasets derived from sources such as technical manuals, and operator trouble reports is desired.

CO-02: Innovative concepts for automated data ingestion and combination for disparate datasets. Proposal should address automated techniques to clean and combine multiple types of data sets--an example pairing includes combining time series and manning data. Research should include effects of high dimensionality associated with volume, variety, velocity, and veracity.

NSWC Crane

Technical POC: Bryan Woosley

CR-01: Development of foundational theories, methods, and techniques for advanced modeling and simulation of complex hypervelocity flight systems-of-systems at the component scale. Focus on optimization of speed and effectiveness for integration of novel subcomponent technologies.

CR-02: Techniques and methodologies to automate the design and security assessment of field-programmable gate array (FPGA) bitstreams. Forward trust-based FPGA flow development to take protected designs to a bitstream allowing for secure remote initialization, authentication, and upgrade/downgrade capabilities.

NSWC Dahlgren

Technical POC: Chris Hodge

DD-01: Explore emerging software developments related to software scrambling in the areas of security, accuracy, or verification.

DD-02: Analysis and development of quantum and quantum-inspired algorithms for applications in machine learning and artificial intelligence which may include elements related to data classification, clustering, network security, optimization, and community detection.

DD-03: Investigation into the characterization and breakdown physics of streamer discharge to allow for a thorough understanding of the mechanisms of streamer discharge as well as the development of associated predictive models.

DD-04: Research into hypersonic vehicle thermo-protection systems (TPS); may include active and passive ablation solutions, hybrids and structural insulators, and related aerothermal, computational fluid dynamics and fluid/structure interaction methods. Advances in prediction of boundary layer transition on carbonaceous and/or ceramic ablators, the role of material processes and architecture in the development of surface roughness under hypersonic flow conditions, as well as the mechanisms of property changes of such materials in long term storage conditions. Advances in instrumentation methods for hypersonic TPS are also of interest.

DD-05: Research into new sensor development or novel methods to employ single or multiple sensors to monitor physiological signals for health and/or fatigue monitoring. Investigations may include feature extraction and development of novel algorithms for data processing and/or visualization.

DD-06: Research and development of threat missile flight simulation capability that will accurately capture significant event non-linear and unsteady flow phenomena in-line with existing threat models. Emphasis is on the development of the analytic, numeric and model solution to specific significant events that may occur during a threat missile flight engagement and provide the algorithmic means to Threat Engineering software developers to successfully integrate into existing threat simulation architectures.

NSWC Indian Head EOD Tech Div

Technical POC: John Wilkinson

IH-01: Novel energetic materials, formulations and applications to include predictive methods, energy storage, enhanced safety and reduced sensitivities in applications, processing characteristics and energy release for enhanced performance or lethality. Focus on higher energy density and innovative energy storage and release concepts that also reduce sensitivities.

IH-02: Advanced manufacturing methods and processes for energetic and explosive ordnance disposal (EOD) applications to include but not limited to additive manufacturing of co-layered materials and sensitive materials and resonance mixing. Improve chemical processing and chemical formulation scale-up methods, tools, and processes for energetic materials.

IH-03: Improved EOD analytical tools and methods for remote detection/characterization of unexploded ordnance (UXO) and home-made explosives (HME) to render them safe.

NSWC Panama City

Technical POC: Rex Lawrence

PC-01: Expand Unmanned Underwater Vehicle (UUV) navigation capabilities to GPS-denied environments through the development of innovative magnetic sensor configurations to include design, development, and experimentation of novel magnetic sensing systems coupled with algorithm development and integration onto viable UUV platforms for demonstration testing.

PC-02: Innovative methods for through-the-sensor environmental characterization. Consider techniques for remote sensing of hydrographic/geotechnic properties, using modalities that include: acoustic, seismic, conductivity/resistivity, magnetic, electromagnetic, electro-optic, gravimetric; and methodologies that include physics-based inversion, data/multi-sensor fusion, and artificial intelligence/machine learning.

PC-03: Advanced machine learning architectures that produce human-interpretable results and yield explainable decisions. Machine learning approaches that suitably perform with few or no training samples. Transfer learning algorithms that maintain target recognition performance when sensors are replaced or are degraded from normal wear. Reinforcement learning architectures and training approaches that improve the performance and accuracy of unmanned vehicle autonomy.

NSWC Philadelphia

Technical POC: Michael Golda

PD-01: Shipboard Energy Storage Systems: The trend for future Navy shipboard power systems is a continued increase in simultaneous, transient power demands from increasing numbers of mission loads (propulsion, sensors, and weapons). The space and weight available for AC power generation will remain limited. Optimization of shipboard power system design options integrating one or more types of energy storage either centrally located or distributed throughout the system continues to be of interest. The ability to accommodate additional growth in power demand during the service life of the system as new mission loads with new transient demand characteristics are installed is desired.

NSWC Port Hueneme

Technical POC: Alan Jaeger

PH-01: Advanced computer vision methods and algorithms to verify the completion and accuracy of complex maintenance tasks. Extend current methodologies to automatically advance the application after action is complete. Identify complex objects via available/interoperable

mobile computing platforms such as tablets and augmented reality (AR) devices. Consider interoperability with other maintenance-related applications.

PH-02: Low latency, accurate, and precise spatial registration, localization, and tracking of multiple AR devices in GPS-denied environments during fabrication/maintenance where access to tracking sensors is limited. Consider location of AR devices in real-time and display to the other interoperable devices/software. Include registration, localization, and tracking task-related objects.

PH-03: Research and development of radio frequency transparent “super hydrophobic” coatings to prevent ice formation on combat and communication systems in arctic and subarctic atmospheres. Consideration of the coating(s) to be applied on metallic and non-metallic (i.e. composite) structures and maintain effectiveness for representative deployment timeframes. Attention should be given to abrasion resistance, as ice formation on the surface will lead to accelerated wear behavior.

NUWC Keyport

Technical POC: Thai Tran

KPT-01: Automation, telerobotics and/or robotics innovation for naval maintenance applications: Applications for aboard ships, both underway and in dry dock, to reduce reliance on or hazards to personnel. Automation may include coating removal or application, enclosed tank/void inspections and repairs, internal piping system inspection/repair and other hazardous or labor-intensive tasks. Novel technologies of interest include approaches to robotics perception, simplified robot path learning techniques, as well as locomotion and gripping that are more compliant and robust than traditional wheels, rollers, and jaws.

KPT-02: Research affordable techniques in the areas of close-proximity wireless underwater communication that can enable coordination of a group of small Unmanned Underwater Vehicles. Automated object recognition, area mapping, and self-localization are desirable features to improve nearfield situational awareness and mission execution. Compact packaging, low-power consumption and component costs are all considered important.

KPT-03: Predictive analysis of user behavior and user data needs for an application in a data rich environment: Research models and methods of identifying a user’s level of expertise, and identifying user’s data needs using data analytics methods such as artificial intelligence, machine learning, and neural networks. Identify ways to pre-stage data for the user and make suggestions for the user based on these models and methods.

KPT-04: Expand Unmanned Underwater Vehicles (UUV) capabilities through artificial intelligence (AI) to static undersea sensors and/or dynamic groups (unmanned vehicles) to

improve autonomous perception. Include generation of world models, self-localization, and obtaining/processing information for autonomous planning and decision making.

KPT-05: Software and Mechanical part obsolescence management and risk impact on systems: Innovative framework for a system-level model of the impact of software and mechanical part obsolescence. This will enable the modeling, calculating, and estimating the risk of software and mechanical part obsolescence from an integrated software/hardware perspective. This framework would enable the simulation of different data scenarios with which to test prediction hypothesis.

KPT-06: Effects of Prolonged Marine Environment for Additively Manufactured (AM) Polymers: Research quantifiable data to build confidence in the use of additively manufactured polymer processes for marine systems. Characterizing the effects of prolonged seawater exposure for a range of mid-to-high performance AM polymers & processes. Mechanical property testing and hydrodynamic testing are key to establishing design guidance for maritime applications.

NUWC Newport

Technical POC: Elizabeth Magliula

NPT-01: Innovative concepts for big data collection, classification, automatic integration, and querying from potentially sensitive sources with applicability to naval readiness and naval situational awareness. Research should include effects of high dimensionality associated with volume, variety, velocity, and validity. Explore innovative capabilities to automate and filter data, increase the speed and accuracy of the data review process, and enhance the reliability of data interpretation and analysis. Research may include artificial intelligence (AI)/autonomy/deep learning for statistical pattern recognition, ocean data science, vehicle control, threat assessment, monitoring/recording enhancement, semantic reasoning, and cyber defense. Consider efficiencies within requirements of security, access control, and communication by operating personnel.

NPT-02: The plasticity of the human brain is seen in blind subjects who learn how to navigate using active sonar. Blind subjects generate their own active signal (clicks) and processes the echoes to where they can navigate, from hallways to streets, walking and running. This requires (using traditional sonar language) direction finding, detection, classification, tracking and learning, not necessarily in this order plus other information extraction that may not be transparent. People (both blind and seeing) can be taught how to do this click based active sonar. Research in to determining how the human brain does this in air and how it would do this in underwater acoustics has the potential to significantly improve underwater active sonar performance. Fundamental research such as what measurable information is extracted from the echoes, how and why they are used (and how they adapt for future scene scanning). Understanding the way information is combined is necessary for developing the mathematical models for underwater active acoustic processing.

NIWC Atlantic
Technical POC: Ryan Gunst

SSC-01: Extensible and scalable framework for novel management of the electromagnetic spectrum coordinated among multiple stakeholders. Integration of real-time self-reported, observed, and/or crowdsourced data from spectrum users and sensor networks, as well as data on known and/or scheduled spectrum use, and provide for human-controlled, automated, and hybrid approaches to spectrum management.

SSC-02: Innovative concepts for scalable, automated, generalized approaches that inform recommendations for DoD C4ISR applications to include planning across heterogeneous assets in electromagnetic (EM) constrained environments. Identify anomalies of interest to generate automatic options in order to complete missions constrained by social, technical, doctrinal and political policies. Areas of interest include semantic reasoning, biologically inspired computing techniques, symbolic-abductive reasoning, and hierarchical control systems.

SSC-03: New concepts for transmission methods and datalinks enabling greater bandwidth and increased security, range, and power efficiency by exploiting the unused radio spectrum and RF sensing for multiband, dynamic spectrum agility. Consider advanced modulation and spread spectrum techniques, low probability of intercept/detection, and resistance to electromagnetic countermeasures in multiple transmission spectrums (RF, mm wave, and optical). Consider also robust waveforms and networks, converged communications, electronic warfare, and resilience through autonomous adaptation.

SSC-04: Novel techniques for physical cybersecurity of Supervisory Control and Data Acquisition (SCADA) systems (i.e. Industrial facilities cyber control systems and network attacks). Focus research on authentication, specialized protocols and proprietary interfaces, virus infections, packet access, etc.

Naval Sea Systems Command (NS)
Technical POC: Elizabeth Singleton

NS1: Power distribution systems and engineering for efficiency and high power needs.

NS2: Statistical analysis of seaway hindcast data for new operating areas and existing areas that are changing due to climate change.

NS3: Naval ship maneuvering in waves to include research in performance prediction with the added resistance due to waves and ship motions. Predicting full scale ship performance including scaling model data to capture integrated hullform, propulsor, appendage geometry performance contributions.

NS4: Balanced hull form design for the navy after next operating environment: to include seakeeping, resistance, maneuvering, ice going and warfighting missions.

NS5: Designing for ship operability in a post damage condition to include impacts on maneuvering/seakeeping, powering, personnel effectiveness (arrangements, distributed systems), and hydrostatic effects.

G. Business and Technical Point of Contact:

Business POC

Naval Surface Warfare Center
 Indian Head Explosive Ordnance Disposal Technology Division
 ATTN: Devon Gormley
 Code 022DR
 301-744-6658
 Email: devon.gormley@navy.mil

Technical POCs

| Warfare Center | POC | Phone Number | Email |
|--------------------------------|--------------------------|----------------|------------------------------|
| NEEC Program Manager | Sally Sutherland | (401) 832-8735 | Sally.Sutherland@navy.mil |
| NSWC Carderock | Charlotte George | (301) 227-8869 | charlotte.george@navy.mil |
| NSWC Corona | Karon Myles | (951) 393-4982 | karon.myles@navy.mil |
| NSWC Crane | Bryan Woosley | (812) 854-8119 | bryan.d.woosley@navy.mil |
| NSWC Dahlgren | Chris Hodge | (540) 653-0415 | richard.hodge@navy.mil |
| NSWC IHEODTD | John Wilkinson | (301) 744-6765 | john.h.wilkinson@navy.mil |
| NSWC Panama City | Rex Lawrence | (850) 234-4179 | rex.lawrence@navy.mil |
| NSWC Philadelphia | Michael Golda | (215) 897-8792 | eugene.m.golda1@navy.mil |
| NSWC Port Hueneme | Alan Jaeger | (805) 228-7061 | alan.w.jaeger@navy.mil |
| NUWC Keyport | Thai Tran | (360) 315-3287 | thai.b.tran@navy.mil |
| NUWC Newport | Elizabeth (Liz) Magliula | (401) 832-7696 | elizabeth.magliula@navy.mil |
| NIWC Atlantic | Clifford (Ryan) Gunst | (828) 230-1120 | clifford.gunst@navy.mil |
| Naval Sea Systems Command (NS) | Elizabeth Singleton | (202) 781-2567 | elizabeth.singleton@navy.mil |

H. Instrument Types

Awards will take the form of grants. Any assistance instrument awarded under this announcement will be governed by the award terms and conditions that conform to DoD’s implementation of OMB circulars applicable to financial assistance. Terms and conditions may include revisions to reflect DoD implementation of new OMB guidance in 2 CFR Part 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.”

I. Catalog of Federal Domestic Assistance (CFDA) Numbers

12.300

J. Catalog of Federal Domestic Assistance (CFDA) Titles

Department of Defense (DoD) Basic and Applied Scientific Research

K. Amendments

Amendments to this BAA will be posted to <https://www.grants.gov>, as needed to reflect changes in topics, instructions or points of contact. Interested parties are encouraged to periodically check this website for updates and to establish automated alerts notifying them of any amendment postings.

L. Other Information

Work funded under a BAA may include basic research, applied research and some advanced technology development research. With regard to any restrictions on the conduct or outcome of work funded under this BAA, NSWC IHEODTD will follow the guidance on and definition of “contracted fundamental research” as provided in the Under Secretary of Defense (Acquisition, Technology, and Logistics) Memorandum of 24 May 2010.

As defined therein, the definition of “contracted fundamental research” in a DoD grant or contractual context includes research performed under grants and contracts that are (a) funded by Research, Development, Test, and Evaluation Budget Activity 1 (Basic Research), whether performed by universities or industry or (b) funded by Budget Activity 2 (Applied Research) and performed on campus at a university. The research shall not be considered fundamental in those rare and exceptional circumstances where the applied research effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or grant.

Pursuant to DoD policy, research performed under grants and contracts that are (a) funded by Budget Activity 2 (Applied Research) and NOT performed on-campus at a university or (b) funded by Budget Activity 3 (Advanced Technology Development) does not meet the definition of “contracted fundamental research.” In conformance with the USD (AT&L) guidance and National Security Decision Directive 189, NSWC IHEODTD will place no restriction on the conduct or reporting of unclassified “contracted fundamental research,” except as otherwise required by applicable federal statute, regulation, or executive order. For certain research projects, it may be possible that although the research being performed by the prime contractor is restricted research, a subcontractor may be conducting “contracted fundamental research.” In those cases, it is the *prime contractor’s responsibility* in the proposal to identify and describe the subcontracted unclassified research and include a statement confirming that the work has been scoped, negotiated, and determined to be fundamental research according to the prime contractor and research performer.

Contracts and grants and other assistance agreements made under BAAs are for scientific study and experimentation directed towards advancing the state of the art and increasing knowledge or understanding.

THIS ANNOUNCEMENT IS NOT FOR THE ACQUISITION OF TECHNICAL, ENGINEERING, AND OTHER TYPES OF SUPPORT SERVICES.

I. AWARD INFORMATION

A. Funding Amount and Period of Performance

The funded amount and period of performance of each proposal selected for award may vary depending on the research area and the technical approach to be pursued by the offeror selected. The amount of resources made available to this BAA will depend on the quality of the proposals received and the availability of funds. Awards made from this BAA plan to be approximately \$150k total (base and two options years).

B. Awards

The Government may make multiple awards. 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 proposers. The Government also reserves the right to conduct discussions if determined to be necessary. The Government reserves the right to request any additional necessary documentation once it makes the award instrument determination. Such additional information may include but is not limited to Representations and Certifications. The Government reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time or the proposer fails to provide requested additional information in a timely manner.

II. ELIGIBILITY INFORMATION

A. All responsible sources from academia may submit proposals under this BAA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this BAA will be set aside for HBCU and MI participation, due to the impracticality of reserving discrete or severable items of this research for exclusive competition among such entities.

B. Federally Funded Research & Development Centers (FFRDCs), including the Department of Energy National Laboratories, are not eligible to receive awards under this BAA.

C. Navy laboratories and warfare centers as well as other Department of Defense and civilian agency laboratories are also not eligible to receive awards under this BAA.

D. University Affiliated Research Centers (UARCs) are also not eligible to submit proposals under this BAA.

E. U.S. export control legislation and authorities may apply to proposals submitted under this BAA. Proposers are solely responsible for ensuring compliance with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations (EAR). In some cases, developmental items funded by the

Department of Defense are now included on the United States Munition List (USML) and are therefore subject to ITAR jurisdiction. Proposers should address in their proposals whether export control restrictions apply or do not apply, such as in the case where research products would have both civil and military (dual-use) applications, to the work they are proposing to perform. The USML is available online at <http://www.ecfr.gov/cgi-bin/text-idx?node=pt22.1.121>; the Commerce Control List (CCL) is available through <https://www.bis.doc.gov/index.php/regulations/commerce-control-list-ccl>. Additional information regarding the President's Export Control Reform Initiative can be found at <http://export.gov/ecr/index.asp>.

III. APPLICATION AND SUBMISSION INFORMATION (ONE-STEP BAA PROCESS)

A. Application and Submission Process

Interested proposers may submit full technical and cost proposal in response to any of the topics areas identified above. Interested proposers may submit proposals under more than one topic of interest and there is no limit to the number of technical proposals a single interested proposer may submit. **However, interested proposers may not submit the same technical proposal to more than one warfare center or activity identified in this BAA.** Additional topics of interest may be added to the BAA via an amendment at any time during the open period of this BAA.

Proposers shall submit full proposals in accordance with the instructions below. The technical proposals will be evaluated in accordance with Section V of this BAA.

B. Content and Format of Proposals

Proposals submitted under this BAA are expected to be unclassified. Do not put proprietary markings in or on the Statement of Work. For proposals containing data that the offeror does not want disclosed to the public for any purpose, or used by the Government except of evaluation purposes, the offeror shall mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed – in whole or in part – for any purpose other than to evaluate the proposal. If, however, a grant is awarded to this offeror as a result of – or in connection with – the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting grant. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in (insert numbers or other identification of sheets).

Also, mark each sheet of data that the offeror wishes to restrict with the following legend:

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

Titles given to the proposals should be descriptive of the work they cover and should not be merely a copy of the title of this BAA or a research area of interest noted above. **Additionally, proposers may not submit the same proposal to more than one warfare center or activity identified in this BAA.**

a. SF 424 (R&R) Application for Federal Assistance Form

The SF 424 (R&R) Application for Federal assistance form must be your cover page. No pages may precede the SF 424 (R&R).

Complete all required fields in accordance with the “pop-up” instructions on the SF 424 (R&R) form. The completion of most fields is self-explanatory. You can turn on Grants.gov “Help Mode” to provide additional instructions for forms. “Help Mode” is turned on by the icon with the pointer and question mark at the top of the form.

We have special instructions for completion of several SF 424 (R&R) form fields in your application.

Our instructions are:

- Block 4a, Federal Identifier – Enter N00174
- Block 4b, Agency Routing Number – Enter the three (3) digit Program Office Code (022) and the Technical POC’s name, last name first, in brackets. The Technical POCs’s name can be obtained from the chart of technical POCs on page 10 of this BAA.
- Block 4c Previous Grants.gov Tracking ID – Enter the Grants.gov tracking number of the previous proposal submission if this submission is for a changed/corrected application; otherwise, leave blank.
- Select “I Agree” to:
 - Provide the certification regarding lobbying that is required by 31 U.S.C. 1352 as implemented by DoD 32 CFR Part 28.
 - Certify that all statements in the proposal, your Representation for Tax Delinquency, Felony Conviction, and Internal Confidentiality Agreements are true, complete, and accurate to the best of your knowledge.
- You must attach the completed D.3.b. Representation for TaxDelinquency/ Felony Conviction. You may have to attach the completed D.3.c. SF-LLL Disclosure of Lobbying Activities if you have lobbying activity that you must disclose
- Attach your Publicly Releasable Abstract

- Attach your Project Technical Proposal
- Attach your Bibliography and References Cited
- Attach a Facilities and Other Resources description document here if you need to supplement your facilities and resources section. You may supplement your Budget Justification by attaching an Equipment Justification here. Do not duplicate information included on your budget justification. If you attach an Equipment Justification, make sure you reference the attachment in your budget justification.
- Attach the Subaward Budget Attachments Form if applicable and not attached elsewhere. You should have budgets for all subawards proposed attached within this form before attachment.

b. Publicly Releasable Project Summary /Abstract

You must attach the Project Summary / Abstract to field 7 of the R&R Other Project Information form.

You must submit the “NEEC Abstract” an attachment with the proposal submission, this form’s located on the “Related Documents” tab of grants.gov. You must provide a concise abstract of 300 words or less with your proposal (no more than 2000 characters). You must mark this abstract publically releasable. Your abstract should use terms the public can understand to describe the research objective, technical approach, anticipated outcome, and potential impact of the specific research.

Your abstract header should include the Topic number from Section I.F. above along with the technical POC.

If you receive an award, we must publish your abstract to a searchable website available to the general public in accordance with Public Law 113-235. The website address is <https://dodgrantawards.dtic.mil/grants/#/home>.

c. Technical Proposal

Technical proposals are limited to ten (10) pages. The cover page, table of contents, and resumes are excluded from the page count.

- Paper Size – 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing – single or double spaced
- Font – Times New Roman, 12 point
- Cover Page: This should include the words “Technical Proposal: and the following:
 - BAA Number: N00174-19-0001
 - Title of Proposal;
 - NEEC Technical POC (Listed on page 10) & Topic Number

- Identity of prime offeror and complete list of subawards, if applicable;
- Technical contact (name, address, phone/fax, e-mail address) and;
- Proposed period of performance (identify both the base period and any options, if included).
- Table of Contents: An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.
- Technical Approach and Justification: The major portion of the proposal should consist of a clear description of the technical approach being proposed. This discussion should provide the technical foundation/justification for pursuing this particular approach/direction and why one would expect it to enable the objectives of the proposal to be met.
- Project Schedule and Milestones: A summary of the schedule of events and milestones.
- Reports: The following are sample reports that are typically required under a research effort
 - Technical and Financial Progress Report
 - Final Report

Grants do not include the delivery of software, prototypes, and other hardware deliverables.

- Management Approach: Identify which personnel and subcontractors/subrecipients (if any) will be involved. Include a description of the facilities that are required for the proposed effort, along with a description of any Government furnished equipment/hardware/software/information required, by version and/or configuration.
- Qualifications: A discussion of the qualifications of the proposed Principal Investigator and any other key personnel. Include resumes or curricula vitae for the Principal Investigator, other key personnel and consultants. The resumes/curricula vitae shall be attached to the proposal.
- Rough Order of Magnitude (ROM): Identify the estimated cost of the project. The ROM is the best guess of the anticipated cost of the effort. Do not include a cost proposal or any of the material that normally accompanies a cost proposal.

d. Bibliography and References Cited

You must attach your narrative Bibliography and References to field 9 of the R&R Other Project Information Form.

e. R&R Senior/Key Person Profile (Expanded) Form

You must attach a short biographical sketch and list of significant publications (vitae) for each Senior/Key Person. You must also attach a list of current and pending support as discussed in Principal Investigator (PI) and Senior Personnel Time including title and objectives; the percentage per year to be devoted to the other projects; the total amount of support the individual is receiving in connection to each of the other research projects or will receive if other proposals are awarded; name and address of the agencies and/or parties supporting the other research projects; and period of performance for the other research projects.

You must list all key persons proposed for the research on the R&R Senior/Key Person Profile (Expanded) Form. Key persons are generally the PI, any Co-PIs, and senior staff. We use this information to evaluate the qualifications of you and your research team.

f. R&R Budget Form

You must provide all information requested. You must estimate the total research project cost. You must categorize funds by year and provide separate annual budgets for projects lasting more than one year. A budget justification must be included.

You must include enough budget related information in your proposal to support your costs as reasonable and realistic, and in compliance with 2 CFR 200 Subpart E - Cost Principles.

Not having enough information in your proposal to understand if your costs are reasonable and realistic is the most common reason awards are delayed.

g. Budget Justification

Use the following notional schedule to determine proposed period of performance and associated budget:

Estimated Award Date: 01 March 2020

Estimated Approximate Award amount: \$150k total (typically a base and 2 option years)

You must provide a detailed budget justification for each year that clearly explains the need for each item. The entire budget justification and supporting documentation must be combined into a single file and attached to field L of the R&R Budget Form. The budget narrative submitted with the application must match the dollar amounts on all required forms. Please explain each calculation and provide a narrative that supports each budget category. This detailed budget justification must match the proposed budget categories. Each year of the budget justification narrative must stand alone; lump sum budget justifications are not allowed. If options are proposed, option detailed budget justifications must stand alone as well, no lump sum justifications allowed.

(1) Direct Labor: Individual labor categories or persons with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years.

(2) Administrative and Clerical Labor: Salaries of administrative and clerical staff are normally indirect costs (and included in an indirect cost rate). Direct charging of these costs may be appropriate when a major project requires an extensive amount of administrative or clerical support greater than normal and routine levels of support. Budgets proposing direct charging of administrative or clerical salaries must be supported with a budget justification which adequately describes the major project and the administrative and/or clerical work to be performed.

(3) Fringe Benefits and Indirect Costs: The proposal must show the rates and calculations of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the rates have not been approved/negotiated, provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. Additional information may be requested, if needed. If composite rates are used, provide the calculations used in deriving the composite rates.

(4) Fully Burdened Rates: Proposers are cautioned that fully burdened rates in excess of \$156 per hour may require additional approvals. If a proposer includes a fully burdened labor rate in excess of \$156 per hour (with indirect rates applied), then the proposer shall provide a narrative to justify any such labor category.

(5) You must itemize travel. Estimate the cost and purpose of each trip proposed, the number of trips, the number of travelers, the destination, the duration, and the basis for calculating costs such as airlines and hotels.

(6) You must itemize materials/supplies. List all material/equipment by type and kind with associated costs. Indicate what your costs are based on, such as vendor quotes, historical data and/or engineering estimates. You should include vendor quotes and/or catalog pricing data.

(7) Proposals including request to purchase equipment must include equipment quotes or vendor agreements. "Equipment" is nonexpendable, tangible personal property with a unit cost of \$5,000 or more having a useful life of more than 1 year, unless determined otherwise by recipient's internal policy. Items that do not meet the "equipment" definition can be included under supplies. List each piece of equipment to be purchased and provide description of how it will be used in the project. Budget narrative should explain why the equipment is necessary for successful completion of the project. Provide quotes in US Dollars if available, or indicate the basis of equipment cost. If you have any subaward(s), you should describe how you determined subaward costs were determined fair and reasonable. Your business office usually makes this determination.

(8) Other Direct Costs: Provide an itemized list of all other proposed other direct costs such as Graduate Assistant tuition, laboratory fees, report and publication costs, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

(9) DHHS/ONR Rate Agreement: If you use a Government rate agreement to propose indirect cost rates and/or fringe benefit rates, you must attach a signed DHHS or ONR copy of the agreement you used.

C. Significant Dates and Times

This announcement will remain open until 11:59pm, 01 November 2019 or until replaced by a successor BAA, whichever occurs first. Proposals may be submitted any time during this period. The Government reserves the right to reopen this BAA at a later date if deemed in the best interest of the Government. A full technical and cost proposal should be submitted by 11:59pm, 01 November 2019.

D. Submission of Late Proposals

The Government reserves the right to not review proposals submitted after 11:59pm, 01 November 2019, or after a successor to this BAA is issued, whichever occurs first. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

E. Submission of Grant Proposals through Grants.gov

This section provides the application submission and receipt instructions for applications. Please read the following instructions carefully and completely.

a. Electronic Delivery

NEEC is participating in the Grants.gov initiative to provide the grant community with a single site to find and apply for grant funding opportunities. All applicants must submit their applications online through Grants.gov.

b. How to Register to Apply through Grants.gov

Instructions: Read the instructions below about registering to apply for NEEC funds. Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

The registration process can take up to four weeks to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required application submission deadlines.

Organization applicants can find complete instructions here:

<https://www.grants.gov/web/grants/applicants/organization-registration.html>

1) *Obtain a DUNS Number:* All entities applying for funding, including renewal funding, must have a Data Universal Numbering System (DUNS) number from Dun & Bradstreet (D&B). Applicants must enter the DUNS number in the data entry field labeled "Organizational DUNS" on the SF-424 form. For more detailed instructions for obtaining a DUNS number, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html>

2) *Register with SAM:* In addition to having a DUNS number, organizations applying online through Grants.gov must register with the System for Award Management (SAM). All organizations must register with SAM in order to apply online. Failure to register with SAM will

prevent your organization from applying through Grants.gov. For more detailed instructions for registering with SAM, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html>

3) *Create a Grants.gov Account*: The next step in the registration process is to create an account with Grants.gov. Applicants must know their organization's DUNS number to complete this process. Completing this process automatically triggers an email request for applicant roles to the organization's E-Business Point of Contact (EBiz POC) for review. The EBiz POC is a representative from your organization who is the contact listed for SAM. To apply for grants on behalf of your organization, you will need the Authorized Organizational Representative (AOR) role.

For more detailed instructions about creating a profile on Grants.gov, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-3-username-password.html>

4) *Authorize Grants.gov Roles*: After creating an account on Grants.gov, the EBiz POC receives an email notifying them of your registration and request for roles. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the AOR role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been approved as an AOR. For more detailed instructions about creating a profile on Grants.gov, refer to:

<https://www.grants.gov/web/grants/applicants/organization-registration/step-4-aor-authorization.html>

5) *Track Role Status*: To track your role request, refer to:

<https://www.grants.gov/web/grants/applicants/organization-registration/step-5-track-aor-status.html>

6) *Electronic Signature*: When applications are submitted through Grants.gov, the name of the organization's AOR that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize individuals who are able to make legally binding commitments on behalf of the organization as an AOR; **this step is often missed and it is crucial for valid and timely submissions.**

c. How to Submit an Application via Grants.gov

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different web forms within an application. For each funding opportunity announcement (FOA), you can create individual instances of a workspace.

Below is an overview of applying on Grants.gov. For access to complete instructions on how to apply for opportunities, refer to:

<https://www.grants.gov/web/grants/applicants/apply-for-grants.html>

Create a Workspace

Creating a workspace allows you to complete it online and route it through your organization for review before submitting.

Complete a Workspace

Add participants to the workspace, complete all the required forms, and check for errors before submission.

(1) Adobe Reader: If you decide not to apply by filling out web forms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or administering agency forms. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader. NOTE: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at: <https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>

(2) Mandatory Fields in Forms: In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.

(3) Complete SF-424 Fields First: The forms are designed to fill in common required fields across other forms, such as the applicant name, address, and DUNS number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will transfer to the other forms.

Submit a Workspace

An application may be submitted through workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

Track a Workspace

After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. The number will be listed on the Confirmation page that is generated after submission.

For additional training resources, including video tutorials, refer to:

<https://www.grants.gov/web/grants/applicants/applicant-training.html>

Applicant Support: Grants.gov provides applicants 24/7 support via the toll-free number 1-800-518-4726 and email at support@grants.gov. For questions related to the specific grant opportunity, contact the number listed in the application package of the grant you are applying for.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist the administering agency with tracking your issue and understanding background information on the issue.

IV. EVALUATION INFORMATION

A. Evaluation Criteria

Awards under this BAA, if any, will be made to proposers on the basis of the evaluation criteria listed below, and program balance to provide overall value to the Government. NSWC

IHEODTD reserves the right to request any additional, necessary documentation once it makes the award instrument determination. NSWC IHEODTD reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time, or the proposer fails to provide requested additional information in a timely manner. Technical proposals will first be screened by an evaluator at each warfare center or activity identified in the BAA to determine if the proposal falls under the topic under which it was submitted. After this screening process, evaluations will be conducted using the following evaluation criteria:

1. Technical, based on the following:
 - a) Overall scientific and technical merits of the technical proposal and SOW;
 - b) Potential Naval relevance and contributions of the effort to the Navy's specific mission;
 - c) The proposer's capabilities, related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the proposal objectives; and
 - d) The qualifications, capabilities and experience of the proposed Principal Investigator (PI), team leader, and key personnel who are critical in achieving the proposal objects.

Criteria a through d are of equal value.

2. Student participation - educational quality of the effort, number of students and education levels pursued. Additionally, proposed students must be eligible for Navy intern programs and/or eligible for membership in the Navy's civil service, and have the ability to obtain a security clearance.

The primary bases for selecting proposals for acceptance shall be technical, importance to agency programs and student participation. Cost realism and reasonableness may be considered to the extent considered appropriate by the Government in its sole discretion.

B. Options

The Government will evaluate options for award purposes by adding the total cost for all options to the total cost of the basic requirement. Evaluation of options will not obligate the Government to exercise the options during contract of grant performance.

C. Evaluation Panel

Technical and cost proposals submitted under this BAA will be protected from unauthorized disclosure using the same protections as contractor proposal information under FAR 3.104-4 and 15.207. The Government scientific experts will perform the evaluation of technical proposals.

D. General Information Regarding the Review and Selection Process for Grants

- i) Prior to making an award, NSWC IHEODTD shall review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS).

- ii) The applicant, at its option, may review information in the designated integrity and performance systems available through SAM and comment on any information itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance systems available through SAM.
- iii) NSWC IHEODTD will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by the applicant as described in Title 2, Part 200, Subsection 200.205 Federal awarding agency review of risk posed by applicants.
- iv) NSWC IHEODTD will also ensure that an offeror is not debarred or suspended prior to making an award.

V. AWARD ADMINISTRATION INFORMATION

A. North American Industry Classification System (NAICS) code: The NAICS code for contracts under this announcement is “541715” with a small business size standard of “1,000 employees”.

B. System for Award Management (SAM): All Proposers submitting proposals or applications must:

- 1) be registered in the SAM prior to submission;
- 2) maintain an active SAM registration with current information at all times during which it has an active Federal award or an application under consideration by any agency; and
- 3) provide its DUNS number in each application or proposal it submits to the agency.

The System for Award Management (SAM) is a FREE WEBSITE that consolidates the capabilities you used to find in CCR/FedReg, ORCA, and EPLS. Future phases of SAM will add the capabilities of other systems used in Federal procurement and awards processes.

SAM may be accessed at <https://www.sam.gov/portal/public/SAM/>

NOTE TO FORMER CCR REGISTRANTS: If you had an active record in CCR, you have an active record in SAM. You do not need to do anything in SAM at this time, unless a change in your business circumstances requires a change in SAM in order for you to be paid or to receive an award. SAM will send notifications to the registered user via email 60, 30, and 15 days prior to expiration of the record. You can search for registered entities in SAM by typing the DUNS number or business name into the search box.

C. Access to your Grant

NSWC IHEODTD award/modification documents are only available via the Department of Defense (DoD) Electronic Document Access System (EDA) within the Procurement Integrated Enterprise Environment (<https://wawf.eb.mil/>).

Unless otherwise specified by the Offeror, notifications for the posting of award and modification documents to EDA will be directed to both the Technical Point of Contact and the Business Point of Contact identified in the Offeror's proposal.

EDA is a Web-based system that provides secure online access, storage and retrieval of awards and modifications to DoD employees and vendors.

If you do not currently have access to EDA, you may complete a self-registration request as a "Vendor" via <https://wawf.eb.mil/> following the steps below:

1. Click "Accept"
2. Click "Register" (top right)
3. Click "Agree"
4. In the "What type of user are you?" drop down, select "Vendor"
5. Select the systems you would like to access
6. Complete the User Profile and follow the site instructions.

Allow five business days for your registration to be processed. EDA will notify you by email when your account is approved.

To access awards after your registration has been approved, log into <https://wawf.eb.mil/>, select "EDA", select either EDA location, Select "Contracts", select your search preference, enter the Grant Number, and select "View."

Registration questions may be directed to the EDA help desk toll free at 866-618-5988, commercial at 801-605-7095, or via email at disa.ogden.esd.mbx.cscassig@mail.mil (Subject: EDA Assistance).

VI. OTHER INFORMATION

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, as well as, 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. The following certification applies likewise to each Cooperative Agreement and normal OTA 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 making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, 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, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering 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 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, or 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, as applicable, the bases for this representation are the prohibition(s) as follow:

- (a) Section 743 of the Financial Services and General Government Appropriation Act, 2015 (Division E of the Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. 113-235)
- (b) Section 101(a) of the Continuing Appropriation Act, 2016 (Pub. L. 114-53) and any subsequent FY2016 appropriations act that extends to FY2016 the same restrictions as are contained in section 743 of Division E, title VII of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub L. 113-235)
- (c) Any successor provision of law on making funds available through grants and cooperative agreements to entities with certain internal confidentiality agreements or statements.

The prohibitions stated above do 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. Codes of Conduct and Conflicts of Interest:

Applicants for grants, cooperative agreements, or other transaction 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.

G. Reporting:

If the Federal share of any Federal award may include more than \$500,000 over the period of performance, the post award reporting requirements , Award Term and Condition for Recipient Integrity and Performance Matters (2 U.S.C. 200 Appendix XII), is applicable as follows:

(i) Reporting of Matters Related to Recipient Integrity and Performance

a. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of the award terms and conditions. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

b. Proceedings About Which You Must Report:

Submit the information required about each proceeding that:

- (i) Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- (ii) Reached its final disposition during the most recent five year period; and
- (iii) Is one of the following:
 - (1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of the award terms and conditions;
 - (2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - (3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - (4) Any other criminal, civil, or administrative proceeding if:
 - (i) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;

- (ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
- (iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

c. Reporting Procedures:

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

d. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

e. Definitions

For purposes of this award term and condition:

- (i) Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- (ii) Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
- (iii) Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - (1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - (2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

H. Security Classification:

In order to facilitate intra-program collaboration and technology transfer, the Government will attempt to enable technology developers to work at the unclassified level to the maximum extent possible. If access to classified material will be required at any point during performance, the Offeror must clearly identify such need in Section II, Block 11 of the Proposal Checklist. If it is determined that access to classified information will be required during the performance of an award, a Department of Defense (DD) Form 254 will be attached to the contract, and FAR 52.204-2 - Security Requirements will be incorporated into the contract.

NSWC IHEODTD does not provide access to classified material under grants.

I. 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>.

J. Project Meetings and Reviews:

Individual program reviews between the NEEC sponsor and the performer may be held as necessary. Program status reviews may also be held to provide a forum for reviews of the latest results from experiments and any other incremental progress towards the major demonstrations. These meetings will be held at various sites throughout the country. Additionally, there may be peer reviews in which all current NEEC projects are presented together. For costing purposes, proposers should assume that 40% of these meetings will be at or near the warfare center identified in the topic area 60% at other contractor or government facilities. Program reviews may also be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

K. Reporting Executive Compensation and First-Tier Subcontract Awards:

All grants and cooperative agreements awarded under this BAA will use an award term similar to FAR clause 52.204-10, "Reporting Executive Compensation and First-Tier Subcontract Awards."

VII. AWARD NOTICES

Offerors will be notified in writing whether or not their proposal is recommended for award. Our selection notice is not an authorization to start work, and is not an award guarantee. We will contact your business office to get answers to any questions we have about your proposal, and negotiate specific award terms. A grant signed by a warranted Grants Officer is the only official notice that an award has been made.

VIII. DEBRIEFINGS

Proposers whose proposals are not recommended for award may request a debriefing within ten (10) calendar days to discuss the evaluation of their proposal. The nature, form, and date of a debriefing is within the discretion of the Government. Additional information on debriefing requests will be forwarded to proposers with the notice advising of a proposal not being recommended for award.

IX. OTHER INFORMATION

Organizational Conflicts of Interest

All Proposers and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any of the activities identified in the BAA through an active procurement contract, subcontract, grant or cooperative agreement. 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 (FAR 9.5) 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. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a 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. 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 NSWC IHEODTD by sending his/her contact information and a summary of the potential conflict by e-mail to the Business Point of Contact in Section I, item 7 above, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Grants Officer 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.