



**Office of Naval Research (ONR)
Broad Agency Announcement (BAA) Number 11-021**

Advanced Tactical Data Link (ATDL)

INTRODUCTION:

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016 and the Department of Defense Grants and Agreements Regulations (DoDGARS) 22.315(a). A formal Request for Proposals (RFP), other solicitation, or additional information regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. The ONR reserves the right to fund all, some or none of the proposals received under this BAA. ONR 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. It is the policy of ONR to treat all proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

GENERAL INFORMATION:

- 1. Agency Name** - Office of Naval Research
- 2. Research Opportunity Title** - Advanced Tactical Data Link (ATDL)
- 3. Program Name** - Communications and Networking
- 4. Research Opportunity Number** - BAA 11-021
- 5. Response Date** -

Full Proposals: 6/15/2011

6. Research Opportunity Description -

1. Synopsis:

Military tactical mission requirements include distributed Command and Control (C2), Situational Awareness (SA), navigation, and Cooperative Integrated Fire Control (CIFC). It is critical to collaborate, coordinate and rapidly disseminate combat ID, classification and target assignments across shooters, sensors and weapons. Headway has been made; however, there is an urgent need for increased connectivity and capacity between the tactical and airborne domain to exploit complementary C2, Intelligence Surveillance and Reconnaissance (ISR) and targeting for greater mission effectiveness.

Current tactical communication capabilities have limited throughput and scalability, insufficient AJ (anti-jam) and LPE (low probability of exploitation) capability, and high latency and network join times. Link-16, the most widely used airborne tactical data link, provides C2, SA, weapons coordination, electronic warfare, and other capabilities, but does not meet emerging throughput, scalability, and latency requirements, especially in high electronic attack environments. Developed in the 1970's, Link-16 still meets the needs for a wide range of missions. Multifunction Advanced Data Link (MADL) and Cooperative Engagement Capability - Data Distribution System (CEC-DDS) use directional antennas to provide low probability of detection and a high degree of resistance against jamming respectively; however, they are limited in terms of interoperability, configurability, scalability and latency.

There is a need for an Advanced Tactical Data Link (ATDL) with technologies to provide the capability to complement these existing links to support naval integrated sensing and weapons coordination and control across air, maritime and ground domains for both manned and unmanned platforms. Such technologies must be auto-configuring and self-adapting network technologies which provide high data bandwidth and low latency communication for integrated sensing and cooperative integrated fire control. Furthermore, these technologies must be jam-resistant, and solutions such as wideband communications, novel antenna techniques, etc. should be considered. Such technologies must also be cost effective and integratable across a variety of platforms.

ONR Code 31 seeks proposals for efforts that develop and demonstrate such technologies. These technologies are considered required to enable improvements throughout the communications realms of interest.

This effort will develop Science and Technology (S&T) technologies and products that significantly enhance tactical edge communications networks. Solutions are to be delivered at a technology readiness level (TRL) suitable for transition (nominally requiring a TRL of 6) to acquisition POR (Programs of Record). Prior to transition of the technology and products developed here, the capability will first be evaluated via a fleet-lead government-coordinated experimentation process. The challenge is to develop innovative solutions that are sufficiently robust to provide to the warfighter. Potential transition programs include, but are not limited to, E-2D, F/A-18G, F-35, unmanned systems, multiple aircraft via wing or mounted pods, Multiple Ship and special operating forces (SOF) applications, Joint Tactical Radio System (JTRS), and Air Force Research Laboratory (AFRL), US Army, USMC and related programs.

In order to maximize the usefulness and availability of the solutions and technology developed under this BAA, preference will be given to the development/maturation of systems conforming to open standards. Also, solutions that do not utilize developers' proprietary toolkits or interfaces are preferred. The government may issue invitations to give oral presentations based on evaluation of the received proposals. Proposers are encouraged to review current and recent BAAs to gain insight into related technologies, platforms and programs listed in this BAA.

2. Operational Requirements:

OPNAV N2/N6 has identified the need for ATDLs in order to continue to expand Naval Integrated Fire Control-Counter Air (NIFC-CA) and irregular warfare concepts across manned aviation platforms. Our priority will be integration onto larger airborne ISR platforms followed by integration onto designated fighter platforms. The developed ATDL capability is also expected to support a limited set of Network Enabled Weapons (NEW) for Sea Strike, Anti-Surface Warfare (ASuW), and Suppression of Enemy Air Defense (SEAD). The goal is to extend Cooperative Engagement Capability (CEC) via a new network structure beyond Data Distribution System (DDS). Modification of available data link technology (e.g., Link-16, Tactical Targeting Network Technology (TTNT), Military Band Ultra High Frequency (UHF) Line-of-Sight ((LoS)) or development of new data link and network solutions to accomplish this task are needed.

In summary, the ATDL must eliminate current throughput and scalability shortfalls to shorten engagement kill chains, increase the number of missions accomplished per sortie, improve survivability against future coordinated jammer threats, and provide automation to reduce manpower needed to manage such capabilities.

3. Description of Product Thrusts and Capabilities:

There is one primary product under the ATDL Enabling Capability: Mission-Based Waveform Control & Networking.

3.1. Product Objective:

Develop wideband, high bandwidth, low latency, jam-resistant waveforms and the networking and aperture management technologies needed to support real-time network operations enabling dynamically adding/removing participants, dynamic allocation of ATDL resources to each participant, and adding/removing network partitions in support of dynamic mission execution. Performers will develop an Operational Prototype targeted to close operational gaps to complement Link-16/CEC/CDL. Such a prototype will include development of a secure terminal architecture that will allow networking multiple physical media. It should be suitable for fleet testing and potential limited rate production. This prototype will minimize platform integration, using established message standards already part of existing TDLs and platforms. But at the same time new ideas for messaging that have a significant impact will be considered.

3.2. Transition:

The effort seeks to develop innovative technology solutions while simultaneously delivering robust products to acquisition and experimentation. Transition consists of delivering mature S&T products to acquisition in an agreed upon manner. Offerors selected to perform research will be expected to work with other technology developers and also as members of government-lead teams that will coordinate the delivery of products to acquisition programs in a way that meets the schedule and performance requirements of the acquisition sponsor. Offerors should expect that the prototypes they develop will require modifications in order to properly integrate into the acquisition program or experimentation venue. The government will provide the guidance and coordination for interfacing and integrating products into acquisition programs and experimentation. The government may choose to provide the infrastructure to host selected performer technology prototypes for transition testing and experimentation. Full government purpose rights to technology products - including intellectual property - is a necessary and important factor in the selection process.

3.3. Concept of Operations (CONOPS) Development:

Performers selected to participate in the ATDL program are expected to contribute to the development of a concept of operations (CONOPS) that will be ultimately delivered to the acquisition transition partner. The government will integrate all performer inputs and produce the final CONOPS document. Performers will be asked to contribute to the CONOPS in areas corresponding to the technology products that they develop.

Performers will also actively participate in the experimentation process. This may include fleet experiments such as Trident Warrior, Valiant Shield, Annulex, and JEFX.

The goals of experimentation in this Program are to: (a) support early evaluation of technology product capabilities in both laboratory and operational settings, and (b) validate and refine CONOPS, Tactics, Techniques and Procedures (TTP) and doctrine. Laboratory based experiments are known as Limited Technology Experiments (LTEs). Fleet operational experiments are known as Limited Objective Experiments (LOEs).

Experimentation will take place under the direction of a Fleet command, and be coordinated by the Navy Warfare Development Command (NWDC), as part of Navy Sea Trial.

Government facilities may provide the experimentation infrastructure to assess Performer's enterprise services. These facilities can be configured to operate in a distributed environment via networks such as DREN, S-DREN, and SIPRNET, providing operationally realistic environments to conduct both limited technical experiments (LTEs) and limited objective experiments (LOEs).

Offerors will be expected to support and work with an independent government experimentation and analysis team that sets objectives, defines key analytic questions, metrics, and data collection methodologies. The independent analysis team is typically aligned with NWDC and executes the approved Sea Trial analysis process. The experimentation and analysis team will develop a Data Collection and Analysis Plan (DCAP) and Control Plans to guide the experimentation and

execution and analysis. An analysis report will be developed by this team following rigorous analysis and assessment of the collected data sets with recommended courses of action. Typically, a capability subjected to a fleet experiment or exercise will also undergo a military utility assessment (MUA).

4. Government Approach:

ONR will employ the Office of Naval Research Laboratory (NRL) as Technical Lead and government/industry systems integrator (not part of this solicitation), in addition to other Navy SYSCOM labs/facilities, to combine individual vendor products and government-owned technologies into the ATDL capability. Successful vendors must allow the systems integrator to have access to their technology in order to have successful technology demonstrations. This access will likely require the systems integrator to view and work with designs, models, computer source code, and hardware devices that the vendor considers protected intellectual property or trade secrets. The government technical lead will be the Naval Research Laboratory, which will also use selected subcontractors for the tasks required for review, analysis, integration, and testing. After reviewing and selecting successful industry efforts, the government team will perform all the remaining tasks to provide the ATDL capability that are not awarded to vendors under this program.

4.1. Technologies, Engineering, and Development Environments - Topic Areas:

Development of the ATDL system capability will include development on and utilization of the following technologies, engineering, and development environments:

- **Engineering Models and Emulation Testbed.** A high fidelity emulation of the ATDL subsystems and the integrated capability will be performed to do design trade-offs and to select the appropriate technology components, and to ensure that the integrated design meets the performance objectives. This subsystem and system emulation will continue to be used for subsequent design trades during development. A detailed model of the proposed design shall be developed using the Extendable Mobile Ad-hoc Network Emulator (EMANE) framework (<http://cs.itd.nrl.navy.mil/work/emane>) prior to the implementation. This model will be used to make design tradeoffs prior and during the design and development. The model will be maintained throughout the period of the EC and will be a deliverable as part of the transition.
- **Target Development and Prototype Environment.** The NRL provided SRP (Software Reconfigurable Payload) is the target development and prototype platform. SRP is currently being proposed as an FY13 POR. (SRP description is attached as additional information.)
- **Operational Prototype.** An operational prototype will be employed to evaluate the performance, utility, and capability provided by the ATDL capability in an operationally relevant environment. The government intends to exploit the SRP platform to examine technology for insertion to expand the options for operation at a variety of frequencies, explore the reconfiguration of waveform associated with mission, explore routing capabilities to enhance delivery options, modularize the security component, and provide the basis for a detailed technical specification for transition to acquisition.

4.2. Key Attributes of the System Components:

The government is interested in proposals that address the following key attributes of the future ATDL capability:

- **Mature Critical Technologies.** Demonstration and performance evaluation of Critical Technologies Elements within the ATDL capability will be an essential activity during the vendor development, system integration, and testing activities. Suitably mature technologies will be an essential discriminator for the development of the operational prototype.
- **Multiple Physical Layer Architecture.** The ATDL should provide a secure technical architecture for multiple networked physical media, classification domains, and security enclaves. The ATDL technologies will be useable on a range of physical media, frequency allocations, and network architectures. Consideration to the use, reuse, or compatibility with the available physical media for the ATDL such as, but not limited to: CEC, Common Data Link (CDL), High-Band Networking Wave Form (HNW) or equivalent, and Link-16.
- **Forwarding/Routing Capability.** The ATDL solution should consider routing/forwarding within the proposed data link solution as well as to existing and emerging airborne data links. This may be similar to Command and Control/Communications Preprocessor (C2P) for routing but will not include address translation. Also to be considered are the application latency requirements, interoperability with existing IP and non-IP networks.
- **Timing and Relative Navigation.** The proposed solutions must be capable of generating precise time synchronization and position information solely via internal mechanisms, in addition to being able to leverage time and position/location information from external sources.
- **Reaction to Threats and Degradations.** It is expected that performers would consider (i) how new capabilities would be incorporated to include but not limited to: GEOINT and SIGINT data, (ii) how networking capabilities can be used to "route around" threats, (iii) improved performance and scalability with management features to direct data as needed, and (iv) expanded access to spectrum automation and the reconfiguration of waveforms used based on state of mission. The performers will also examine appropriateness of existing technology as well as Directional antenna vs. Omni antenna trade-off analysis to mitigate current and future threats. (Note antenna/aperture development is out of scope of this effort, but the availability and utility of specific designs and their impact on overall system performance should be considered.)
- **System Integrability.** Open interface modules, affordability and low cost of integration, as well as upgradability, are major considerations. Simulation and emulation of candidate architectures as part of the overall design process and a tool to perform design trade-offs are integral during the development process.

Note: Detailed CONOPS and technical/performance/cost metrics will be discussed at the Pre-Proposal Conference/Industry Day which will be held at a classified (SECRET) level.

Note: Offerors may provide technology solutions that address all or some of the capabilities.

4.3. Notional Program Approach and Schedule:

The following is a notional approach in terms of development schedule and phases. (Note: The contract award process may delay execution such that fiscal years and performance years do not necessarily overlap; hence all FYs must be construed as performance years. While most technology and product development is expected to occur in the Advanced Development stage of maturity, we will also consider less mature technologies on a case-by-case basis.

- **FY12: Initial Design and Study Phase:**
 - Identify potential technologies.
 - Focus on selected technologies and implement these in the Tactical Emulator to determine which combinations of technologies best meet the range of Naval mission needs.
 - Develop an open architecture that supports multiple physical layers and the necessary security functions.
 - Incorporate jamming and relevant scenarios for the Tactical Emulator to provide the high fidelity test environment.
 - Perform a system engineering study to determine the appropriate bandwidth and Spectrum for ATDL, including the dynamic management and agile allocation/access of these resources for network participants.
 - Finalize the system level design for the ATDL.

- **FY13: Emulation and Finalize Design:**
 - Finalize hardware and software design for ATDL and the associated routing capability to support multiple physical layers.
 - Utilize the Emulation environment to further refine any design trades prior and during software development.
 - Implement the software design on the SRP.

- **FY14: Implementation:**
 - Complete ATDL software development on SRP. (Vendors are expected to have completed, by end of FY14, all unit and sub-system level integration, functional, and performance tests).

- **FY15: Laboratory tests and Controlled Link Performance Tests:**
 - Perform laboratory tests with three ATDLs operating in conjunction with the Tactical Emulator to debug as much of the design as possible before going to the field.
 - Characterize physical layer performance in the lab and over a fixed range.
 - Identify near-term platforms and initiate platform integration of the ATDL.

- **FY16: Platform Integration and Field Testing:**
 - Complete platform integration and utilize the three ATDLs in a fleet experiment to demonstrate warfighting effectiveness.

4.4. Additional Information:

Depending on the results of the proposal evaluation, there is no guarantee that any of the proposals submitted will be recommended for funding.

Offerors are encouraged to review prior and ongoing work in these areas before proposing completely new solutions.

Additional information for proposers will be posted to one or more of the web sites identified in paragraph 7 below.

7. Point(s) of Contact -

Questions of a technical nature should be submitted to:

Primary Technical Point of Contact:

Dr. Santanu Das
Program Manager
Communications and Networks, Code 312
Office of Naval Research
875 North Randolph Street - Suite 1115
Arlington, VA 22203-1995
E-mail: Santanu.Das@navy.mil

Secondary Technical Point of Contact:

Mr. Ray Cole
Head Networking and Communications Branch, Code 5520
Naval Research Laboratory
4555 Overlook Ave., SW
Washington, DC 20375
Email: Ray.Cole@nrl.navy.mil

Questions of a business nature should be submitted to:

Primary Point of Contact:

Mr. Gordon Jaquith
Contract Specialist
Contract and Grant Awards Management, Code BD251
Office of Naval Research
875 North Randolph Street - Suite W1278C
Arlington, VA 22203-1995
E-mail: Gordon.Jaquith@navy.mil

Secondary Point of Contact:

Ms. Vera M. Carroll
Acquisition Branch Head

Contract and Grant Awards Management, Code BD251
Office of Naval Research
875 North Randolph Street - Suite 1279
Arlington, VA 22203-1995
E-mail: Vera.Carroll@navy.mil

Questions of a security nature should be submitted to:

Diana Pacheco
Industrial Security Specialist
Office of Naval Research
Security Department, Code 43
One Liberty Center
875 N. Randolph Street
Arlington, VA 22203-1995
Email Address: diana.pacheco@navy.mil

Note: All UNCLASSIFIED communications shall be submitted via e-mail. All questions of an UNCLASSIFIED nature to the Technical Point of Contract (POC) shall be sent via e-mail with a copy to the designated Business POC.

CLASSIFIED questions shall be handled through the ONR Security POC. Specifically, any entity wanting to ask a CLASSIFIED question shall send an email to the ONR Security POC with a copy to both the Technical POC and the Business POC stating that the entity would like to ask a CLASSIFIED question. DO NOT EMAIL ANY CLASSIFIED QUESTIONS. The Security POC will contact the entity and arrange for the CLASSIFIED question to be asked through a secure method of communication.

Questions submitted within 2 weeks prior to a deadline may not be answered, and the due date for submission of the white paper and/or full proposal will not be extended.

Amendments will be posted to one or more of the following webpages:

- Federal Business Opportunities (FEDBIZOPPS) Webpage - <https://www.fbo.gov/>
- Grants.gov Webpage - <http://www.grants.gov/>
- ONR Broad Agency Announcement (BAA) Webpage - <http://www.onr.navy.mil/en/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx>

8. Instrument Type(s) –

Awards may take the form of Contracts and Grants as appropriate. ONR reserves the right to award a different instrument type if deemed to be in the best interest of the Government.

9. Catalog of Federal Domestic Assistance (CFDA) Numbers -

12.300

10. Catalog of Federal Domestic Assistance (CFDA) Titles -

Basic and Applied Scientific Research

11. Other Information -

Work funded under a BAA may include basic research, applied research and some advanced technology development (ATD). With regard to any restrictions on the conduct or outcome of work funded under this BAA, ONR 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 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 Category 6.2 (Applied Research) and NOT performed on-campus at a university or b) funded by Budget Category 6.3 (Advanced Research) does not meet the definition of "contracted fundamental research." In conformance with the USD(AT&L) guidance and National Security Decision Direction 189, ONR will place no restriction on the conduct or reporting of unclassified "contracted fundamental research," except as otherwise required by 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.

Normally, fundamental research is awarded under grants with universities and under contracts with industry. Non-fundamental research is normally awarded under contracts and may require restrictions during the conduct of the research and DoD pre-publication review of research results due to subject matter sensitivity.

As regards to the present BAA, the Research and Development efforts to be funded will consist of applied research and advanced technology development. The funds available to support awards are

Budget Activity 6.2 and 6.3.

FAR Part 35 restricts the use of the Broad Agency Announcements (BAAs), such as this, to the acquisition of basic and applied research and that portion of advanced technology development not related to the development of a specific system or hardware procurement. 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.

II. AWARD INFORMATION

The amount and period of performance of each selected proposal may vary depending on the research area and the technical approach to be pursued by the selected offeror.

Estimated Total Amount of Funding Available: The Office of Naval Research anticipates a total budget of approximately \$22,000,000 (\$4,000,000/Base Period, \$8,000,000/Option I, and \$10,000,000/Option II) using Applied Research funds (Budget Category 6.2) and Advanced Technology Development funds (Budget Category 6.3). However, depending on the results of the proposal evaluation, there is no guarantee that any of the proposals submitted will be recommended for funding.

Anticipated Period of Performance: The period of performance may be up to three (3) years from date of award. Contracts awarded under this BAA will have a twelve (12) month base period and two (2) twelve (12) month option periods.

Anticipated Number of Awards: The Office of Naval Research intends to award one (1) or more awards per topic (a 'topic' refers to a single technology/capability or a collection of these up to the full ATDL as described in the BAA, as presented by the offeror). Offerors are not encouraged to submit multiple proposals. It is anticipated that more than one (1) proposal may be selected per 'topic' for the twelve (12) month 'base period' design and study phase, to be down selected to one (1) during the 'option' phase. The topic areas are identified under paragraph 4.1 (Technologies, Engineering, and Development Environments - Topic Areas) under Section I. General Information.

Anticipated Range of Individual Award Amounts: As required to perform tasking.

In the case of funded proposals for the production and testing of prototypes, ONR may during the contract period of performance add a contract line item or option for the provision of advanced component development or for the delivery of additional prototype units. However, such a contract addition shall be subject to the limitations contained in Section 819 of the National Defense Authorization Act for Fiscal Year 2010.

III. ELIGIBILITY INFORMATION

All responsible sources from academia and industry 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.

Federally Funded Research & Development Centers (FFRDCs), including Department of Energy National Laboratories, are not eligible to receive awards under this BAA. However, teaming arrangements between FFRDCs and eligible principal bidders are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC.

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 and should not directly submit either white papers or full proposals in response to this BAA. If any such organization is interested in one or more of the programs described herein, the organization should contact an appropriate ONR POC to discuss its area of interest. The various scientific divisions of ONR are identified at <http://www.onr.navy.mil/>. As with FFRDCs, these types of federal organizations may team with other responsible sources from academia and industry that are submitting proposals under this BAA.

University Affiliated Research Centers are eligible to submit proposals under this BAA unless precluded from doing so by their Department of Defense UARC contracts.

Teams are also encouraged and may submit proposals in any and all areas. However, Offerors must be willing to cooperate and exchange software, data and other information in an integrated program with other contractors, as well as with system integrators, selected by ONR.

Some topics may cover export controlled technologies. Research in these areas is limited to "U.S. persons" as defined in the International Traffic in Arms Regulations (ITAR) - 22 CFR § 1201.1 et seq. (See Section VII, Other Information)

For Grant, Cooperative Agreement and Other Transaction Agreement applications:

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 170.110. 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 their proposal that describes the necessary processes and systems in place to comply with the reporting requirements identified in 2 CFR 170.220 and Appendix A. Entities are **exempt** from this requirement **UNLESS** in the preceding fiscal year, it received: a) 80 percent or more of its annual gross revenue in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; b) \$25 million or more in annual gross revenue from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and c) the public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 or section 6104 of the Internal Revenue Code of 1986.

IV. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process – Pre-Proposal Conference/Industry Day, Oral Presentation, and Full Proposals

Pre-Proposal Conference/Industry Day: The ONR Code 312 Program will conduct a classified (SECRET) briefing for potential Officers. The purpose of the meeting will be to provide potential Offerors with a better understanding of the scope of the Program and objectives of this BAA. Pre-Proposal Conference/Industry Day will be held on Friday, 20 May 2011 from 9:00AM until 12:00 Noon - Eastern Daylight Time (EDT) at 4100 North Fairfax Drive, Suite 800, Arlington VA 22203. Visit Request Verification and Registration is from 8:30 AM until 09:00 AM EDT. Offerors interested in participating in the Pre-Proposal Conference/Industry Day event should send their email Visit Request no later than 3:00 PM on Friday, 13 May 2011 to Security: Erica Burnam at erica.burnam@qinetiq-na.com. Your visit request should be amended to read “Industry Day within JPAS” in lieu of “JPAS: 49JZ24”. The facility information should read “ITS-Noesis (QNA), 4100 North Fairfax Drive, Suite 800, Arlington, VA 22203. Pre-registration by email is mandatory; WALK-IN REGISTRATION WILL NOT BE PERMITTED. Attendance is limited to three (3) per organization. Since the meeting is classified (SECRET), any person attending must establish in advance his eligibility to attend. The Government reserves the right to reduce the number of attendees from any one party if needed to accommodate all interested parties. Directions to the Pre-Proposal Conference/Industry Day are provided as an attachment to this BAA.

Full Proposals: The due date for receipt of Full Proposals is 2:00 PM, Eastern Daylight Time (EDT) on Wednesday, 15 June 2011. The only acceptable method for submission of full proposals for contracts is hard copy to the Technical Point of Contact (Dr. Das) by the United States Postal Service (USPS) with delivery confirmation, or via a commercial carrier (FedEx and UPS). If the proposer prefers, its full proposal can also be hand delivered to the Primary Technical Point of Contact by the date and time indicated above. However, any proposer wishing to hand deliver their full proposal package must make arrangements with Dr. Das at Santanu.Das@navy.mil provided they pre-arrange a time and date at least two (2) business days prior to the date and time for which full proposals are due. **Full proposals sent by fax or email will not be considered.** Full Proposals will be reviewed by the Technical Point of Contacts and other evaluators. Each proposer will thereafter be notified in writing as to whether its proposal is determined to be “of particular interest to the Navy” Those proposals determined not to be of particular interest to the Navy will not be pursued further, and the proposers will be notified accordingly. Those determined to be of “particular interest to the Navy” will be invited to make an oral presentation to Government evaluators.

Oral Presentations: Oral Presentations will be made on Wednesday, 03 August 2011 at a time and location to be announced by the Primary Technical Point of Contact to those invited to present. The presentation is another opportunity to show the strengths of your proposal and to answer any questions or concerns of the evaluators. Some days following the Oral Presentations each presenter will be advised whether its proposal remains of “particular interest to the Navy”. If required, only those offerors who Oral Presentations are determined to be of “particular interest to

the Navy” will be eligible to submit a revised Full Proposal for award consideration.

2. Content and Format of Full Proposals -

Full Proposals submitted under the BAA are expected to be unclassified; however, confidential/classified responses are permitted. If a classified response is submitted, the resultant contract will be unclassified.

Unclassified Proposal Instructions:

Unclassified Full Proposals shall be submitted in accordance with paragraphs 5 and 6 of Section IV. entitled Application and Submission Information.

Classified Proposal Instructions:

Classified Full Proposals shall be submitted directly to the attention of ONR's Document Control Unit at the following address:

OUTSIDE ENVELOPE (no classification marking):

Office of Naval Research
Document Control Unit
ONR Code 43
875 North Randolph Street
Arlington, VA 22203-1995

The inner wrapper of the classified proposal should be addressed to the attention of Dr. Santanu Das (santanu.das@navy.mil), ONR Code 312 and marked in the following manner:

INNER ENVELOPE (stamped with the overall classification of the material)

Program: Advanced Tactical Data Link (ATDL)
Office of Naval Research
Attn: Dr. Santanu Das
ONR Code: 312
875 North Randolph Street – Suite 1115
Arlington, VA 22203-1995

An unclassified Statement of Work (SOW) must accompany any classified proposal.

Proposal submissions will be protected from unauthorized disclosure in accordance with FAR Subpart 15.207, applicable law, and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

IMPORTANT NOTE: Titles given to the Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation.

a. **FULL PROPOSALS**

INSTRUCTIONS FOR CONTRACTS (Does not include Grants)

NOTE: Submission instructions for BAAs issued after FY2010 have changed significantly from previous requirements. Potential Offerors are advised to carefully read and follow the instructions below. The new format and requirements have been developed to streamline and ease both the submission and review of proposals. Both the Template and the Spreadsheet have instructions imbedded into them that will assist in completing the documents. Also, both the Template and the Spreadsheet require completion of cost-related information – both documents must be fully completed to constitute a valid proposal.

All proposals must use ONR's Technical and Cost Proposal Template and Cost Proposal Spreadsheet. The Template can be found by following this link: <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/cost-proposal.aspx>.

Please note that all the attachments listed in Section III.8 of the Template can be incorporated into the Template file for submission.

The Cost Proposal Spreadsheet can be found by following this link:

<http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/cost-proposal.aspx>.

Click on the "proposal spreadsheet" link and save a copy of the spreadsheet. Instructions for completion have been embedded into the spreadsheet. Any proposed options that are identified in the Technical and Cost Proposal Template, but are not fully priced out in the Cost Proposal Spreadsheet, will not be included in any resulting contract or other transaction. If proposing options, they **must** be separately priced and separate spreadsheets should be provided for the base period and each option period.

For proposed subcontracts or interorganizational transfers over \$150,000, Offerors must provide a separate fully completed Cost Proposal Spreadsheet in support of the proposed costs. This spreadsheet, along with supporting documentation, must be provided either in a sealed envelope with the prime's proposal or via e-mail directly to both the Program Officer and the Business Point of Contact at the same time the prime proposal is submitted. The e-mail should identify the proposal title, the prime Offeror and that the attached proposal is a subcontract, and should include a description of the effort to be performed by the subcontractor. Offerors should also familiarize themselves with the new subcontract reporting requirements set forth in Federal Acquisition Regulation (FAR) clause 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards. From October 1, 2010 through February 28, 2011, any newly awarded subcontract must be reported if the prime contract award amount is \$550,000 or more. Starting March 1, 2011, any newly awarded subcontract must be reported if the prime contract award amount was \$25,000 or more. The pertinent requirements can be found in Section VII, Other Information, of this document.

Offerors should submit one (1) original, plus five (5) hard copies and one (1) electronic copy on CD-ROM. Offerors shall follow the Technical and Cost Proposal Template. The electronic Technical and Cost Proposal should be submitted in a secure, pdf compatible format, save for the

electronic file for the Cost Proposal Spreadsheet which should be submitted in a Microsoft Excel 2007 compatible format. All attachments should be submitted in a secure, pdf compatible format.

The secure pdf compatible format is intended to prevent unauthorized editing of the proposal prior to any award. A password should not be required for opening the proposal document, but the Government must have the ability to print and copy text, images, and other content. Offerors may also submit their Technical and Cost Proposal in an electronic file that allows for revision (preferably in Microsoft Word) to facilitate the communication of potential revisions. Should an Offeror amend its Technical and Cost Proposal package, the amended proposal should be submitted following the same hard and electronic copy guidance applicable to the original proposal.

The electronic submission of the Excel spreadsheet should be in a "useable condition" to aid the Government with its evaluation. The term "useable condition" indicates that the spreadsheet should visibly include and separately identify within each appropriate cell any and all inputs, formulas, calculations, etc. The Offeror should not provide "value only spreadsheets" similar to a hard copy.

INSTRUCTIONS FOR GRANTS (Does not include contracts, cooperative agreements, and other transaction agreements)

The following information must be completed as follows in the SF 424 to ensure that the application is directed to the correct individual for review: Block 4a, Federal Identifier: Enter the previous ONR award number, or N00014 if the application is not a renewal or expansion of an existing award; Block 4b, Agency Routing Number: Enter the three (3) digit Program Office Code (312) and the Program Officer's name, last name first, in brackets i.e., [Das, Santanu]). Applicants who fail to provide a Department code identifier may receive a notice that their proposal will be rejected.

Please note that Volume I, Technical Proposal should be submitted as an attachment to the SF 424 rather than being inserted into Block 8, Project Narrative. Block 8 should be completed with a statement that Volume 1 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."

Full Proposal Format - Volume 1 - Technical and Volume 2 - Cost Proposal

- Paper Size - 8.5 x 11 inch paper
- Margins - 1 inch
- Spacing - single-spaced
- Font - Times New Roman, 12 point
- Number of Pages - Volume 1 is limited to no more than thirty-nine (39) pages. Limitations within sections of the proposal, if any, are indicated in the individual descriptions shown below. The cover page, table of contents, resumes and current and pending project and proposal submissions information are excluded from the page limitations. Full Proposals exceeding the page limit may not be evaluated.

- There are no page limitations to Volume 2.
- Copies - the full proposal should be submitted electronically at <http://www.grants.gov> as delineated in paragraph 5 below.

Full Proposal Content

Volume 1: Technical Proposal

- **Cover Page:** This should include the words "Technical Proposal" and the following:
 1. BAA number BAA 11-021;
 2. Title of Proposal;
 3. Identity of prime Offeror and complete list of subcontractors, if applicable;
 4. Technical contact (name, address, phone/fax, electronic mail address)
 5. Administrative/business contact (name, address, phone/fax, electronic mail address);
 6. Proposed period of performance (identify both the base period and any options, if included); and
 7. Signature of Authorized Representative.
- **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 could expect it to enable the objectives of the proposal to be met. *Limit the number of pages for this section to twenty (20).*
 - **Operational Naval Concept:** A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.
 - **Operational Utility Assessment Plan:** A plan for demonstrating and evaluating the operational effectiveness of the Offeror's proposed products or processes in field experiments and/or tests in a simulated environment.
- **Project Schedule and Milestones:** A summary of the schedule of events and milestones. *Limit the number of pages for this section to one (1).*
- **Reports:**

The following are sample data deliverables that are typically required under a research effort:

 - Technical and Financial Progress Reports
 - Presentation Materials
 - Final Report

Grants do not include the delivery of software, prototypes, and other hardware deliverables. Limit the number of pages for this section to one (1).

- **Management Approach:** A discussion of the overall approach to the management of this effort, including brief discussions of the total organization; use of personnel; project/function/subcontractor/subrecipient relationships; government research interfaces; and planning, scheduling and control practice. Identify which personnel and subcontractors/subrecipients (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any Government Furnished Equipment/Hardware/Software/Information required, by version and/or configuration. *Limit the number of pages for this section to ten (10).*
- **Current and Pending Project and Proposal Submissions:** Offerors are required to provide information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing contracts, grants, and other assistance agreements. Offerors shall provide the following information of any related proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations).

The information must be provided for all proposals already submitted or submitted concurrently to other possible sponsors, including ONR. Concurrent submission of a proposal to other organizations will not prejudice its review by ONR:

- 1) Title of Proposal and Summary;
 - 2) Source and amount of funding (annual direct costs; provide contract and/or grant numbers for current contracts/grants);
 - 3) Percentage effort devoted to each project;
 - 4) Identity of prime Offeror and complete list of subcontractors, if applicable;
 - 5) Technical contact (name, address, phone/fax, electronic mail address)
 - 6) Administrative/business contact (name, address, phone/fax, electronic mail address);
 - 7) Duration of effort (differentiate basic effort);
 - 8) The proposed project and all other projects or activities requiring a portion of time of the Principal Investigator and other senior personnel must be included, even if they receive no salary support from the project(s);
 - 9) The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months or labor hours per year to be devoted to the project, regardless of source of support; and
 - 10) State how projects are related to the proposed effort and indicate degree of overlap.
- Limit the number of pages for this section to one (1).*

- **Qualifications:** A discussion of the qualifications of the proposed Principal Investigator and any other key personnel. Include resumes or curricular vitae for the Principal Investigator, other key personnel and consultants. The resumes/curricula vitae shall be attached to the proposal and will not count toward the page limitations. *Limit the number of*

pages for this section to two (2).

- **Other Requirements:**

Statement of work: 3 pages

Assertion of Data Rights: 1 page

Limit the number of pages for this section to four (4).

VOLUME 2: Cost Proposal

The offeror must use the Grants.gov forms from the application package template associated with the BAA on the Grants.gov web site located at <http://www.grants.gov/>. If options are proposed, the cost proposal must provide the pricing information for the option periods; failure to include the proposed costs for the option periods will result in the options not being included in the award. Assume that performance will start no earlier than three (3) months after the date the cost proposal is submitted. A separate Adobe .pdf document should be included in the application that provides appropriate justification and/or supporting documentation for each element of cost proposed.

Part 1: The itemized budget must include the following:

- **Direct Labor** - Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years.

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 significantly 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.

- **Fringe Benefits and Indirect Costs** - (i.e., F&A, Overhead, G&A, etc) - The proposal should show the rates and calculation 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.
- **Travel** - The proposed travel cost should include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organization's historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principals.

- Subawards - Provide a description of the work to be performed by the subrecipients. For each subaward, a detailed cost proposal is required to be submitted by the subrecipient(s). Fee/profit is unallowable. The subawardee's or subrecipient(s) cost proposal can be provided in a sealed envelope with the recipient's cost proposal or via e-mail directly to both the Program Officer and the Business Point of Contact at the same time the prime proposal is submitted. The e-mail should identify the proposal title, the prime Offeror and that the attached proposal is a subcontract. A proposal and supporting documentation must be received and reviewed before the Government can complete its cost analysis of the proposal and enter negotiations. Fee/profit is not allowable on any subawards made through assistance agreements. Fee is allowable on subcontract awards.
- Consultants - Provide a breakdown of the consultant's hours, the hourly rate proposed, any other proposed consultant costs, a copy of the signed Consulting Agreement or other documentation supporting the proposed consultant rate/cost, and a copy of the consultant's proposed statement of work if it is not already separately identified in the prime contractor's proposal.
- Materials & Supplies - Provide an itemized list of all proposed materials and supplies including quantities, unit prices, proposed vendors (if known), and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Recipient Acquired Equipment or Facilities - Equipment and/or facilities are normally furnished by the Recipient. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided. Provide an itemized list of all equipment and/or facilities costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). Allowable items normally would be limited to research equipment not already available for the project. General purpose equipment (i.e., equipment not used exclusively for research, scientific or other technical activities, such as personal computers, office equipment and furnishings, etc.) should not be requested unless they will be used primarily or exclusively for the project. For computer/laptop purchases and other general purpose equipment, if proposed, include a statement indicating how each item of equipment will be integrated into the program or used as an integral part of the research effort.
- 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).
- Options - The Base Period of Performance and Option Periods must be priced at the submission of the proposal. Unpriced options will not be included in any resulting award or agreement.
- Fee/Profit - Fee/profit is unallowable under assistance agreements at either the prime or subaward level but may be permitted on any subcontracts issued by the prime awardee.

Part 2 - Cost breakdown by Government fiscal year and task/sub-task corresponding to the same task breakdown in the proposed Statement of Work. When options are contemplated, options must be separately identified and priced by task/subtask.

3. Significant Dates and Times –

Event	Date	Time
Pre-Proposal Conference / Industry Day	5/20/2011	
Full Proposals Due	6/15/2011	2:00 PM Eastern Daylight Time
Notification for Oral Presentation (based on proposals evaluation*)	7/15/2011	
Oral Presentations*	8/3/2011	
Revised Full Proposals (based on oral presentation evaluation)	8/22/2011	2:00 PM Eastern Daylight Time
Notification of Selection: Full Proposals*	9/1/2011	
Awards*	1/1/2012	

**These dates are estimates as of the date of this announcement.*

NOTE: Due to changes in security procedures since September 11, 2001, the time required for hard-copy written materials to be received at the Office of Naval Research has increased. Materials submitted through the U.S. Postal Service, for example, may take seven days or more to be received, even when sent by Express Mail. Thus any hard-copy proposal should be submitted long enough before the deadline established in the solicitation so that it will not be received late and thus be ineligible for award consideration.

4. Submission of Late Proposals –

Any proposal, modification, or revision that is received at the designated Government office after the exact time specified for receipt of proposals is "late" and will not be considered unless it is received before award is made, the contracting officer determines that accepting the late proposal would not unduly delay the acquisition, and:

- a. If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 P.M. one working day prior to the date specified for receipt of proposals; or
- b. There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government's control prior to the time set for receipt of proposals; or
- c. It was the only proposal received.

However, a late modification of an otherwise timely and successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time or receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the Government office designated for receipt of proposals by the exact time specified in the announcement, and urgent Government requirements preclude amendment of the announcement closing date, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the announcement on the first work day on which normal Government processes resume.

The contracting officer must promptly notify any offeror if its proposal, modifications, or revision was received late and must inform the offeror whether its proposal will be considered.

5. Submission of Grant Proposals through Grants.gov -

(NOT APPLICABLE TO PROPOSALS FOR CONTRACTS,)

Detailed instructions entitled "Grants.gov Electronic Application and Submission Information" on how to submit a Grant proposal through Grants.gov are under the Submit Proposals section of the website at <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-gov.aspx>.

By completing Block 17, the Grant Applicant is providing the certification on lobbying required by 32 CFR Part 28. Refer to Section VI, "Award Administration Information" entitled "Certifications" for further information.

For electronic submission of grant full proposals, there are several one-time actions that must be completed in order to submit an application through Grants.gov. These include obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registry (CCR), registering with the credential provider, and registering with Grants.gov. See www.grants.gov, specifically www.grants.gov/GetStarted.

Use the Grants.gov Organization Registration Checklist at http://www.grants.gov/applicants/register_your_organization.jsp which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called 'MPIN' are important steps in the CCR registration process. Applicants who are not registered with CCR 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.

6. Special Notices Relative to Grant Applications to be submitted through Grants.gov -

All attachments to grant applications submitted through [Grants.gov](https://www.grants.gov) must be in Adobe Portable Document Format (i.e., .PDF files). Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

Applicants who have registered with Grants.gov are urged to submit their proposals electronically at least three (3) days before the date and time that proposals are due so that they will not be received late and be ineligible for award consideration.

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. You will know that your proposal has reached ONR 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.

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).

Number 3 - The third notice is an acknowledgement of receipt in e-mail form from ONR within ten days from the proposal due date, if applicable. 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.

7. Address for the Submission of Full Proposals for Contracts -

Hard copies of Full Proposals for Contracts should be sent to the Office of Naval Research at the following address:

Office of Naval Research
Attn: Dr. Santanu Das
ONR Department Code 312
875 North Randolph Street – Suite 1115
Arlington, VA 22203-1995

NOTE: PROPOSALS SENT BY FAX OR E-MAIL WILL NOT BE CONSIDERED.

V. EVALUATION INFORMATION

1. Evaluation Criteria -

Award decisions will be based on a competitive selection of proposals resulting from a scientific and cost review. Evaluations will be conducted using the following evaluation criteria:

1. Overall scientific and technical merits of the proposal;
2. The qualifications, capabilities and experience of the proposed Principal Investigator (PI), team leader and key personnel who are critical in achieving the proposal objectives;
3. The offeror's capabilities, related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the proposal objectives;
4. Potential Naval relevance and contributions of the effort to the agency's specific mission; and
5. The realism of the proposed costs and availability of funds.

Overall, the technical factors 1 - 4 above are significantly more important than the cost factor, with the technical factors all being of equal value. The degree of importance of cost will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly high as to diminish the value of the proposal's technical superiority to the Government.

2. Evaluation of Options -

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

3. Partnering -

Industry-Academia Partnering - ONR highly encourages partnering among industry and academia with a view toward speeding the incorporation of new science and technology into fielded systems. Proposals that utilize industry-academic partnering which enhances the development of novel S&T advances will be given favorable consideration.

Industry-Government Partnering - ONR highly encourages partnering among industry and Government with a view toward speeding the incorporation of new science and technology into fielded systems. Proposals that utilize industry-Government partnering which enhances the development of novel S&T advances will be given favorable consideration

4. Commitment to Small Business –

The Office of Naval Research is strongly committed to providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, historically underutilized business zone (HUBZone) small businesses, veteran-owned small business, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions, and other concerns subject to socioeconomic considerations through its awards.

Awards made as contracts to small businesses at any value or to other than small businesses that are less than \$650,000, a 'statement of commitment to small business' will be evaluated to ensure that it supports this policy.

For proposed awards to be made as contracts that exceed \$650,000 to other than small businesses, the offeror is required to submit a Small Business Subcontracting Plan in accordance with FAR 52.219-9. As such, Subcontracting Plans will be evaluated to ensure that submissions are compliant with FAR Subpart 19.7.

For proposed awards to be made as contracts to other than small businesses, the socio-economic merits of each proposal will be evaluated based on the extent the offeror's commitment in providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, women-owned small businesses, historically underutilized zone (HUBZone) small businesses, veteran-owned small businesses, service-disabled veteran-owned small businesses, and other concerns subject to socioeconomic considerations through its awards.

5. Evaluation Panel -

Technical and cost proposals submitted under this BAA will be protected from unauthorized disclosure in accordance with FAR 3.104-4 and 15.207. The cognizant Program Officer and other Government scientific experts will perform the evaluation of technical proposals. Restrictive notices notwithstanding, one or more support contractors may be utilized as subject-matter-expert technical consultants. However, proposal selection and award decisions are solely the responsibility of Government personnel. Each support contractor's employee having access to technical and cost proposals submitted in response to this BAA will be required to sign a non-disclosure statement prior to receipt of any proposal submissions.

VI. AWARD ADMINISTRATION INFORMATION

1. Administrative Requirements -

- The North American Industry Classification System (NAICS) code - The NAICS code for this announcement is "541712" with a small business size standard of "500 employees".
- Central Contractor Registration: All Offerors submitting proposals or applications must:
 - (a) be registered in the Central Contractor Registration (CCR) prior to submission;
 - (b) maintain an active CCR registration with current information at all times during which it has an active Federal award or an application under consideration by any agency; and
 - (c) provide its DUNS number in each application or proposal it submits to the agency.

NOTE: Central Contractor Registry (CCR), Subcontracting Plan requirements and Certification requirements are all set forth in the ONR Technical and Cost Proposal Template for those submitting contract proposals.

Grant Certification Requirements:

Grant 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](https://www.grants.gov) (complete Block 17). The following certification applies to each applicant seeking federal assistance funds exceeding \$100,000:

CERTIFICATION REGARDING LOBBYING ACTIVITIES

(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 sub awards at all tiers (including sub contracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients 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.

Grants not through Grants.gov:

Proposers seeking grants who have received [Grants.gov](https://www.grants.gov) waiver approval for awards greater than \$100,000 shall complete and submit electronic representations and certifications at the Contracts and Grants Section of the ONR Home Page at <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal.aspx>.

VII. OTHER INFORMATION

1. 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 submitting proposals for contracts should indicate in the Technical and Cost Proposal Template, Section II, Blocks 8 and 9, which of these facilities are critical for the project's success. Offerors submitting proposals for grants should address the need for government-furnished facilities in their technical proposal.

2. 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 by completing Section II, Block 11, DD 254 - Security Classification Specification in the technical and cost proposal template.

Normally, work done under a grant does not require access to classified material.

3. Use of Animals and Human Subjects in Research

RESERVED

4. Recombinant DNA

RESERVED

5. Department of Defense High Performance Computing Program

RESERVED

6. Organizational Conflicts of Interest

All Offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any ONR technical office(s) 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 (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 ONR 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 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.

7. Project Meetings and Reviews

Individual program reviews between the ONR 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. For costing purposes, offerors should assume that 40% of these meetings will be at or near ONR, Arlington VA and 60% at other contractor or government facilities. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

8. Executive Compensation and First-Tier Subcontract Reporting

Section 2(d) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract with a value of \$25,000 or more, (and any modifications to these subcontracts that change previously reported data), the Contractor shall report the following information at <http://www.fsrs.gov> for each first-tier subcontract:

- (a) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has one.
- (b) Name of the subcontractor.
- (c) Amount of the subcontract award.
- (d) Date of the subcontract award.
- (e) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.
- (f) Subcontract number (the subcontract number assigned by the Contractor).
- (g) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

- (h) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
- (i) The prime contract number, and order number if applicable.
- (j) Awarding agency name and code.
- (k) Funding agency name and code.
- (l) Government contracting office code.
- (m) Treasury account symbol (TAS) as reported in FPDS.
- (n) The applicable North American Industry Classification System (NAICS) code.

By the end of the month following the month of a contract award, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for the Contractor's preceding completed fiscal year at <http://www.ccr.gov>, if –

- (a) In the Contractor's preceding fiscal year, the Contractor received -
 - (i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
 - (ii) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
- (b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>).

Unless otherwise directed by the Contracting Officer, by the end of the month following the month of a first-tier subcontract with a value of \$25,000 or more, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for each first-tier subcontractor for the subcontractor's preceding completed fiscal year at <http://www.fsr.gov>, if –

- (a) In the subcontractor's preceding fiscal year, the subcontractor received -
 - (i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

- (ii) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
- (b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>).

If the Contractor in the previous tax year had gross income, from all sources, under \$300,000, the Contractor is exempt from the requirement to report subcontractor awards. Likewise, if a subcontractor in the previous tax year had gross income from all sources under \$300,000, the Contractor does not need to report awards to that subcontractor.

9. Disclosure of Information

Awards made under this BAA will contain DFARS Clause 252.204-7000 entitled “Disclosure of Information”.

10. Other Guidance, Instructions, and Information

None