



BROAD AGENCY ANNOUNCEMENT (BAA)
**Communications and Networking Discovery and
Invention**

TABLE OF CONTENTS

I. OVERVIEW OF THE RESEARCH OPPORTUNITY	1
A. Required Overview Content	1
1. Federal Awarding Agency Name	1
2. Funding Opportunity Title	1
3. Announcement Type	1
4. Funding Opportunity Number	1
5. Catalog of Federal Domestic Assistance (CFDA Numbers)	2
6. Research Opportunity Description	2
7. Key Dates	3
8. North American Industry Classification System (NAICS) Code	3
II. DETAILED INFORMATION ABOUT THE RESEARCH OPPORTUNITY	4
A. Program Description	4
B. Federal Award Information	4
1. Eligibility for Competition	4
2. Contracted Fundamental Research	4
3. Funded Amount and Period of Performance	5
4. Instrument Type	5
5. Model Contracts and Grants	6
6. Assistance Instruments	6
C. Eligibility Information	7
1. Eligible Applicants	7
2. Cost Sharing or Matching	7
D. Application and Submission Information	8
1. Address to Request (Access) Application Package	8
2. Content and Form of Application Submission	9

3. Unique Entity Identifier and System for Award Management (SAM)	12
4. Submission Dates and Times	12
5. Intergovernmental Review	13
6. Funding Restrictions	13
7. Other Submission Requirements	13

E. Application Review Information	14
1. Criteria	14
2. Review and Selection Process	15
3. Recipient Qualification	18
F. Federal Award Administration Information	19
1. Federal Award Notices	19
2. Administrative and National Policy Requirements	20
3. Reporting	23
G. Federal Awarding Agency Contacts	26
H. Other Information	

III. APPENDICES
1. Program Description
2. Applicable to Grants, Cooperative Agreements, and Technology Investment Agreements (TIA's) Only
3. Requirements Applicable to Contracts and Other Transaction Agreements

I. OVERVIEW OF THE RESEARCH OPPORTUNITY

This publication constitutes a Broad Agency Announcement (BAA) for awards by the ONR Contact and Grants Awards Management Division, ONR Code 25 (or otherwise approved by Code 25) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016, the Department of Defense Grants and Agreements regulations (DoDGARS) 32 CFR 22.315(a) and DoD's Other Transaction Guide for Prototypes Projects, USD(AT&L), OT Guide, Jan 2017. A formal Request for Proposals (RFP), solicitation, and/or additional information regarding this announcement shall not be issued.

The Office of Naval Research (ONR) shall 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 shall not be returned. It is the policy of ONR to treat all proposals submitted under this BAA as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

Hyperlinks have been embedded within this document and appear as underlined, blue-colored words. The reader may "jump" to the linked section by clicking the hyperlink.

A. Required Overview Content

1. Federal Awarding Agency Name

Office of Naval Research,
One Liberty Center
875 N. Randolph Street
Arlington, VA 22203-1995

2. Funding Opportunity Title

FY19 Communications and Networking Discovery and Invention (D&I)

3. Announcement Type

Initial Announcement

4. Funding Opportunity Number

N00014-18-S-B005

5. Catalog of Federal Domestic Assistance (CFDA) Numbers

[12.300](#)

Title: Department of Defense (DOD), Department of the Navy, Office of Chief of Naval Research, Basic and Applied Scientific Research

6. Research Opportunity Description

Communications technology that can provide seamless, robust, connectivity is at the foundation of the Sea Power 21 and FORCENet Vision "... to have the right information, at the right place, at the right time ..." The performance of Command and Control (C2) systems and decision making at all levels of command depend critically on reliable, interoperable, survivable, secure, and timely communications and networking, and the availability of high capacity multimedia (voice, data, imagery) communication networks is fundamental to nearly all Department of Navy missions.

The network-centric paradigm of the Fleet Tactical Grid depends on successfully meeting the communications and networking needs of C2, sensor and weapon systems under highly contested radio frequency (RF) conditions. These systems are deployed on a variety of platforms and users, both manned and unmanned, operating under challenging battlefield conditions (lack of infrastructure, mobility, spectrum, interference, multipath, atmospheric, size/weight/power constraint, etc.) in different environments (space, terrestrial and undersea).

The goal of the Communications and Networking Program within the Office of Naval Research (ONR 311) is to support the Navy's Information Warfare vision by developing measurable advances in technology that can directly enable and enhance end-to-end connectivity and quality-of-service for mission-critical information exchange among widely dispersed naval, joint, and coalition forces. The vision is to provide high throughput robust communications and networking to ensure all warfighters – from the operational command to the tactical edge – have access to information, knowledge, and decision-making necessary to perform their assigned tasks.

White papers for potential FY19 Exploratory Development/Applied Research (Budget category 6.2) projects are sought under the following focus areas:

1. Wide (instantaneous) bandwidth power amplifier technologies for phased array, with high drain efficiency and linearity for simultaneous multi-beam operation;

2. Innovative options for communications (e.g., RF/magnetic, optical) across the air-water interface to submerged platforms or between two underwater platforms;
3. Techniques for mobile troposcatter communications that reduces cost to acquisition by reusing shipboard SATCOM antenna and RF frontend with minimal modifications to hardware and its configuration;
4. Novel approaches for low probability of detect/intercept communications against advanced electronic threats;
5. Dynamic scheduling, routing and control mechanisms to efficiently and reliably deliver traffic with varying level of service requirements (e.g., latency, loss rate, priority); and
6. Machine learning and other techniques/concepts for autonomous network management by translating Commander's Intent into network policies.

The Office of Naval Research (ONR) is receptive to innovative ideas, which are not within the above focus areas, but nonetheless are important to the Navy/Marine Corps communications and networking, as determined under the synopsis section above.

7. Key Dates (See also Section D.4)

Anticipated Schedule of Events *		
Event	Date	Time (EST)
White Papers Due Date	6/22/2018	4 pm Washington, DC Time
Notification of Initial Navy Evaluations of White Papers*	7/13/2018	
Oral Presentation of White Papers*	8/9/2018	
Notification of Navy Evaluations of Oral Presentations*	8/24/2018	
Full Proposals Due Date	9/28/2018	4 pm Washington, DC Time
Notification of Selection for Award *	9/28/2018	
Awards*	2/8/2019	
Kickoff Meeting*	2/22/2019	

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

8. North American Industry Classification System (NAICS) code

The NAICS code for ***contracts*** under this announcement is 541715 with a small business size standard of 1000 employees.

II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY

A. Program Description

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

B. Federal Award Information

1. **Eligibility for Competition.** Proposals for renewal or supplementation of existing projects are eligible to compete with applications for new Federal awards under this BAA.

2. **Contracted Fundamental Research.** With regard to any restrictions on the conduct or outcome of work funded under this BAA, ONR shall 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 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, ONR shall 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 such research results due to subject matter sensitivity. Potential offerors should consult with the appropriate ONR Technical POCs to determine whether the proposed effort would constitute basic research, applied research or advanced research.

FAR Part 35 restricts the use of 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.

3. Funded Amount and Period of Performance

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.

The ONR plans to award multiple technology development contracts (particularly cost plus fixed fee [CPFF] type contracts) and grants that represent the best value to the Government in accordance with the evaluation criteria. The ONR is seeking participants for this program that are capable of supporting the goals described in this announcement. Offerors have the opportunity to be creative in the selection of the technical and management processes and approaches to address the research topics. ONR anticipates an annual budget of approximately \$2,000,000 for this program.

ONR plans to fund \$300,000 to \$500,000 per year per award using Applied Research funds (Budget Category 6.2). However, lower and higher cost proposals shall be considered. The average funding level of past awards was approximately \$500,000 per year. The period of performance for projects may be from one (1) to three (3) years, with an estimated start date of 22 February 2019, subject to date of final award and availability of new fiscal year funds.

ONR has funded related technology development under numerous programs. If Offerors are enhancing work performed under other ONR or DoD projects, they must clearly identify the point of departure and what existing work shall be brought forward and what new work shall be performed under this BAA. The award(s) shall be made for the full performance period requested. Options shall not be utilized.

4. Instrument Type(s)

Awards may take the form of contracts or grants, as appropriate.

The following provides brief descriptions of potential instrument types:

a. Procurement Contract: A legal instrument, consistent with 31 U.S.C. 6303, which reflects a relationship between the Federal Government and a state government, a local government, or other entity/contractor when the principal purpose of the instrument is to acquire property or services for the direct benefit or use of the Federal Government.

b. Grant: A legal instrument consistent with 31 U.S.C. 6304, is used to enter into a relationship:

- The principal purpose of which is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law or the United States, rather than to acquire property or services for the Federal Government’s direct benefit or use.
- In which substantial involvement is not expected between the Federal Government and the recipient when carrying out the activity contemplated by the grant.
- No fee or profit is allowed

5. Model Contracts and Grants

- Examples of model contracts can be found on the ONR website at the following link: <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/contract-model-awards.aspx>.
- Examples of model grants can be found on the ONR website at the following link: <http://www.onr.navy.mil/en/Contracts-Grants/submit-proposal/grants-proposal/model-grant.aspx>.

The model contracts and grants at the links above are only provided as examples. In the event of any conflict between these examples and current FAR, DFARS, NMCARS, or ONR clauses, current FAR, DFARS, NMCARS, or ONR clauses shall govern.

6. Assistance Instruments

Any assistance instrument awarded under this announcement shall be governed by the award terms and conditions that conform to DoD’s implementation of OMB circulars applicable to financial assistance. Terms and conditions of new awards made after December 26, 2014, shall 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.” The DoD Terms and Conditions are located at <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions.aspx>.

C. Eligibility Information

1. Eligible Applicants

- a. All responsible sources from academia, industry and the research community 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 shall be set aside for Small Business or other socio-economic participation. All businesses both small and large are encouraged to submit proposals and compete for funding consideration.
 - b. 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 Offerors are allowed so long as such arrangements are permitted under the sponsoring agreement between the Government and the specific FFRDC.
 - c. Navy laboratories, military universities 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 Technical 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 eligible sources from academia and industry that are submitting proposals under this BAA.
 - d. University Affiliated Research Centers (UARCs) are eligible to submit proposals under this BAA unless precluded from doing so by their Department of Defense UARC contract.
 - e. 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.
2. **Cost Sharing or Matching** - Cost sharing is not expected and shall not be used as a factor during the merit review of any proposal hereunder. However, the Government may consider voluntary cost sharing if proposed.

D. Application and Submission Information

1. **Address to Request (Access) Application Package** - This BAA may be accessed from the sites below. Amendments, if any, to this BAA shall be posted to these websites when they occur. Interested parties are encouraged to periodically check these websites for updates and amendments.

- a. Grants.gov (www.grants.gov)
- b. FedBizOpps (www.fbo.gov)
- c. ONR website <http://www.onr.mil>

2. Content and Form of Application Submission

a. General Information

White Papers: The due date for white papers is no later than 4:00 PM (EST) on 22 June 2018. The only acceptable methods for submission of white papers are hard copy to the primary technical point of contact (Dr. Das) by the United States Postal Service (USPS) with delivery confirmation, or via a commercial carrier (FedEx, DHL, and UPS). NOTE: White Papers sent by email or fax shall not be considered. Delivery of materials by USPS, even when sent as Express Mail, may take up to a week or more due to current security procedures in place to ensure the safety of U.S. mail to DoD activities. If an Offeror does not submit a white paper before the specified due date and time, it is not eligible to participate in the remaining Full Proposal submission process and is not eligible for funding. Each white paper should state that it is submitted in response to this BAA and cite the particular sub-section of the Research Opportunity Description that the white paper is primarily addressing.

White Paper Evaluation/Notification: Navy evaluations of the white papers shall be issued via email notification on or about 13 July 2018. An expanded oral presentation shall be subsequently requested from those Offerors whose proposed technologies have been identified as being of "particular value" to the Navy. However, any such request does not assure a subsequent award. Any Offeror whose white paper technology was not identified as being of "particular value" to the Navy is ineligible to make an oral presentation or to submit a full proposal under this BAA.

Oral Presentations: An expanded oral presentation shall be subsequently requested from those Offerors whose proposed technologies have been identified through the aforementioned email as being of "particular value" to the Navy. However, a positive email response to the oral presentation does not assure a subsequent award.

The purpose of the oral presentation is to better acquaint the Government with the Offeror's proposal, especially in its understanding of the technical approach and impact. The oral presentations are tentatively scheduled

for 9 August 2018.

Offerors shall be invited by email no less than ten (10) working days before the scheduled event. The email shall also provide the detailed format for the presentation. Each presentation shall be no longer than twenty five (25) minutes in duration. An additional five (5) minutes shall be allowed for questions (if any) from the panel of government reviewers.

Oral Presentation Evaluation/Notification: Navy evaluations of the oral presentations shall be issued via email notification on or about 24 August 2018. A full proposal shall be subsequently encouraged from those Offerors whose proposed technologies have been identified through the aforementioned email as still being of “particular value” to the Navy. Any Offeror whose oral presentation was not identified as being of “particular value” to the Navy is ineligible to submit a full proposal under this BAA.

Full Proposals: The due date for receipt of Full Proposals is 4:00 PM (EST) on 28 September 2018. It is anticipated that final selections shall be made within one week after full proposal submission. As soon as the final full proposal evaluation process is completed, PI’s shall be notified via email of their project’s selection or non-selection for FY19 funding. Full proposals received after the published due date and time shall not be considered for funding in FY19.

All proposal submissions shall 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 White Papers/Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation.

b. Submission of Unclassified and Classified Proposals

- White Papers and Full Proposals submitted under this BAA are expected to be unclassified; however, classified proposals are permitted. If a classified proposal is submitted and selected for award, the resultant contract shall be unclassified. An ‘unclassified’ Statement of Work (SOW) must accompany any classified proposal.
- Unclassified Proposal Instructions: Unclassified proposals shall be submitted in accordance with this Section.
- Special Instructions for Classified White Papers and Proposal: Classified proposals shall be submitted directly to the attention of ONR’s Document Control Unit at the following address and marked in the following manner:

OUTSIDE ENVELOPE - (no classification marking):

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

The inner wrapper of the classified White Paper and/or Full Proposal should be addressed to the attention of Dr. Santanu Das, ONR Code 311, and marked in the following manner:

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

“Program Name:
Office of Naval Research
ATTN: Dr. Santanu Das
ONR Code: 311
875 North Randolph Street – Suite 1115
Arlington, VA 22203-1995”

- For both classified and unclassified proposals, a non-proprietary version of the Statement of Work must also be submitted. Do not put proprietary data or 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 for evaluation purposes, the contractor 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 contract 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 contract. This restriction does not limit the Government’s right to use information contained in this data if is obtained from another source without restriction. The data subject to this restriction are contained in (insert numbers or other identification of sheets).”

- Each sheet of data that the offeror wishes to restrict must be marked 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.”

c. White Paper Requirements.

i. White Paper Format

- Paper Size – 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing –single-spaced
- Font – Times New Roman, 12 point Page limit
- Page limit – Six (6) pages (excluding cover page, resumes, bibliographies, and table of contents)
- Format – four (4) original hard copies and (1) electronic copy in Adobe PDF format on CD-ROM

ii. White Paper Submission. Offerors shall send four (4) hard copies and one (1) electronic copy on CD-ROM in Adobe PDF format **to the attention of the TPOC noted in Section II, paragraph D. “Content and Form of Application Submission”.** The subject line of the cover letter shall read **"ONR N00014-18-S-BA005 White Paper Submission."**

iii. White Paper Content: White papers shall include the following:

FOR ALL WHITE PAPERS

- Cover Page: The Cover Page shall be labeled “WHITE PAPER” and shall include the BAA Number N00014-18-S-B005, proposed title, technical points of contact, telephone number, facsimile number, and E-mail address.
- Technical Concept: A description of the technology innovation and technical risk areas.

There is considerable freedom to formulate the main body of the white paper (not to exceed five (5) pages) as the Offeror sees fit. The bulk of the main body of white paper should be devoted to the technical discussion and innovation. Here is some general guidance on what may be included in the technical concept: a description of the project objectives, problem being solved, technical approach, what's new, the concept of operation for the new capabilities to be delivered and the expected operational performance improvements, a plan for demonstrating and evaluating the operational effectiveness of the Offeror's product in laboratory or simulated environment including evaluation metrics, transition potential to Navy communications networks, proprietary aspects of the project and any assertions of data rights applicable to the results of this effort.

Although relevance to Navy and the Marine Corps is one of three equally important criteria in evaluation of the white paper, not more than half a

page should be devoted to these discussions.

Cost information is needed, although not at the level of detail as required with the full proposal. White paper submissions shall include a cost summary showing requested funding per year. The cost summary (not to exceed half a page) shall be segregated by both task and year (over the period of performance (i.e., 1, 2 or 3 years).

FOR ALL FULL PROPOSALS: (See Appendices 2 and 3 for instructions.)

- i. Instructions for Grants, Cooperative Agreements, and TIA's. (See Appendix 2)
- ii. Instructions for Contracts and Other Transaction Agreements. (See Appendix 3)

3. Unique Entity Identifier and System for Award Management (SAM)

Unique Entity Identifier and System for Award Management (SAM) - All offerors submitting proposals or applications must:

- a. Be registered in the SAM prior to submission;
- b. 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
- c. Provide its DUNS number in each application or proposal it submits to the agency.

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

4. Submission Dates and Times -

(See Section I, paragraph A.7, Key Dates, for information)

Submission of Late Proposals (Applicable to White Papers / Full Proposals)

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

- (a) 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
- (b) 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 shall 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 shall 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 shall be considered

5. Intergovernmental Review

N/A

6. Funding Restrictions

N/A

7. Other Submission Requirements

a. Grant, Cooperative Agreement, and TIA Proposals shall be submitted through Grants.gov . (See Appendix 2.)

b. Submission of Full Proposals for Contracts and Other Transaction Agreements

Full proposals shall be sent to the ONR at the following address:

Office of Naval Research
ATTN: Dr. Santanu Das
ONR Code: 311
875 North Randolph Street – Suite W1115
Arlington, VA 22203-1995

E. Application Review Information

1. Criteria

In accordance with FAR 35.016(e), the primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and fund availability. Cost realism and reasonableness shall also be considered to the extent appropriate. Therefore, the following criteria shall be used for evaluation:

- 1) Overall scientific and technical merits of the proposal (i.e., the degree of innovation, soundness of technical concept, Offeror's awareness of the state of the art and understanding of the scope of the problem, significance and originality of the technical approach and effort needed to address/solve the problem, anticipated scientific impact (fundamental contribution to the field of Communications and Networking)). This criterion includes a consideration of the qualifications, capabilities and experience of the proposed Principal Investigator (PI), team leader and key personnel who are critical in achieving the proposal objectives and the offeror's capabilities, related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the proposal objectives;

[NOTE: Due to the 6.2 Discovery and Invention (applied research) nature of the program, the Offeror must adequately address the technical issues and approach, going to significant technical depth where needed to show what's new and novel, clearly and unambiguously, with associated risks/payoffs.]

- 2) Potential Naval relevance, technology transition potential, and contributions of the effort to the agency's specific mission;

[NOTE: Transition potential means a clear path exists for the technology to move from the "Discovery and Invention" phase to the "Enabling and Maturing" phase in a 'vertically integrated' sense, for subsequent acquisition by the fleet and use by the warfighter. (Note the "Enabling and Maturing" phase is NOT part of this BAA.)]

- 3) Fund Availability

The criteria of Overall Scientific and Technical Merit and Potential Naval Relevance are equal in importance. While the Fund Availability criterion is generally less important than the first two criteria, as available funding is reduced due to funding being allocated for other awards, Fund Availability becomes more important and lack of sufficient available funding may be determinative even if Overall Scientific and Technical Merit and/or Potential Naval Relevance are evaluated favorably.

2. Review and Selection Process

- a. Proposals shall not be evaluated against each other since they are not submitted in accordance with a common work statement. ONR's intent is to review proposals as

soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

The ultimate recommendation for award of proposals is made by ONR's scientific/technical community. Recommended proposals shall then be forwarded to the ONR Contracts and Grant Awards Management office. Any notification received from ONR that indicates that the Offeror's full proposal has been recommended does not ultimately guarantee an award shall be made. This notice indicates that the proposal has been selected in accordance with the evaluation criteria stated above and has been sent to the Contracting Department to conduct cost analysis, determine the offeror's responsibility, to confirm whether funds are available, and to take other relevant steps necessary prior to commencing negotiations with the offeror.

b. Commitment to Small Business- (For Contract Awards Only)

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

Businesses unfamiliar with doing business with the government and that require assistance may contact the state-specific Department of Defense (DoD) Procurement Technical Assistance Center (PTAC). DoD PTACs serve as a resource for businesses pursuing and performing under contracts with DoD, other federal agencies, state and local governments and with government prime contractors. Assistance provided by the PTACs is usually free of charge. PTAC support includes registration in systems such as SAM, identification of contract opportunities, understanding requirements and preparing and submitting proposals. The PTACs have a presence in each state, Puerto Rico and Guam.

To locate a local PTAC visit:

<http://www.dla.mil/SmallBusiness/Pages/ProcurementTechnicalAssistanceCenters.aspx> or <http://www.aptac-us.org/new/> .

- 1) Subcontracting Plan - For proposed contract awards exceeding \$700,000, large businesses and non-profits (including educational institutions) shall provide a Subcontracting Plan (hereafter known as 'the Plan') that contains all elements required by FAR 19.704, FAR 52.219-9 (DEVIATION 2016-O0009 ALT III) and as supplemented by DFARS 252.219-7003 (DEVIATION 2016-O0009).

NOTE: Small businesses are exempt from this requirement to submit a subcontracting plan.

The Plan must be submitted as an attachment to the “Proposal Checklist” and shall not be included in the page count. If a company has a Master Subcontracting Plan, as described in FAR 19.701 or a Comprehensive Subcontracting Plan, as described in DFARS 219.702, a copy of the Plan shall also be submitted as an attachment to the “Proposal Checklist”.

Plans shall be reviewed for adequacy, ensuring that the required information, goals, and assurances are included. FAR 19.702 requires an apparent successful offeror to submit an acceptable Plan. If the apparent successful offeror fails to negotiate a Plan acceptable to the contracting officer within the time limit prescribed by the contracting officer, the offeror shall be ineligible for award.

Offerors shall propose a plan that ensures small businesses (inclusive of SDBs, WOSBs, HUBZone, VOSBs and SDVOSBs) shall have the maximum practicable opportunity to participate in contract performance consistent with efficient performance.

As a baseline, Offerors shall, to the best extent possible, propose realistic goals to ensure small business participation in accordance with the current or most recent fiscal year subcontracting goals found on the DoD Office of Small Business Program website at: <http://www.acq.osd.mil/osbp/>. If proposed goals are below the statutory requirements, then the offeror shall include in the Plan a viable written explanation as to why small businesses are unable to be utilized and what attempts were taken to ensure that small business were given the opportunity to participate in the effort to the maximum extent practicable.

2) Small Business Participation Statement –

If subcontracting opportunities exist, all prime Offerors shall submit a Small Business Participation Statement regardless of size in accordance with DFARS 215.304 when receiving a contract for more than the simplified acquisition threshold (i.e., \$150,000). All offerors shall provide a statement of the extent of the offeror’s commitment in providing meaningful subcontracting opportunities for small businesses and other concerns subject to socioeconomic considerations through its awards and must agree that small businesses, VOSBs, SDVOSBs, HUBZones, SDBs, and WOSBs concerns shall have the maximum practicable opportunity to participate in contract performance consistent with efficient performance.

This assertion shall be reviewed to ensure that it supports this policy by providing meaningful subcontracting opportunities. The statement should be submitted as an attachment to the “Proposal Checklist” and shall not be included in the page count.

3) Subcontracting Resources -

Subcontracting to a prime contractor can be a good way to participate in the contracting process. The following is a list of potential resources that may assist in

locating potential subcontracting partners/opportunities/resources:

- *Companies Participating in DoD Subcontracting Program Report
- *DAU Small Business Community of Practice (SB COP)
- *DefenseLink \geq \$7.0 M Award Notices
- *DoD OSBP Prime Contractors and Subcontractors with Subcontracting Plans
- *Dynamic Small Business Search
- *Electronic Subcontracting Reporting System (eSRS)
- *Federal Business Opportunities (FEDBIZOPPS)
- *Navy SBIR/STTR Search – Website or Brochure
- *DoD Procurement Technical Assistance Centers (PTAC)
- *Small Business Administration (SBA) Subcontracting Opportunities Directory
- *SBA Subnet

For a description and associated websites visit the ONR Office of Small Business webpage at:

<http://www.onr.navy.mil/Contracts-Grants/small-business.aspx>.

In accordance with FAR 5.206, the following entities may transmit a notice to the Government-wide Point of Entry (GPE) at www.fbo.gov to seek competition for subcontracts, to increase participation by qualified small businesses, VOSBs, SDVOSBs, HUBZones, SDBs, and WOSBs, and to meet established subcontracting plan goal as follows:

- (a) A contractor awarded a contract exceeding \$150,000 that is likely to result in the award of any subcontracts;
- (b) A subcontractor or supplier, at any tier, under a contract exceeding \$150,000, which has a subcontracting opportunity exceeding \$15,000.

The notices must describe:

- (a) The business opportunity;
- (b) Any prequalification requirements; and
- (c) Where to obtain technical data needed to respond to the requirement.

An example of a place in which prime contractors may post solicitations or sources sought notices for small business is the SBA SUB-Net.. The SUB-Net database provides a listing of subcontracting solicitations and opportunities posted by large prime contractors and other non-federal organizations.

c. Options

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

d. Evaluation Panel

Technical and cost proposals submitted under this BAA shall be protected from unauthorized disclosure in accordance with FAR 3.104-4 and 15.207. The cognizant Program Officer and other Government scientific experts shall 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 shall be required to sign a non-disclosure agreement prior to receipt of any proposal submissions. This NDA includes third-party beneficiary language giving the submitter of proprietary information a right of direct action against the contractor employee and/or his/her employer in the event that the NDA is violated.

3. Recipient Qualifications

- a. Applicable to Grants, Cooperative Agreements and TIAs

(See Appendix 2.)

- b. Applicable to Contracts and Other Transaction Agreements

(See Appendix 3.)

F. Federal Award Administration Information

1. Federal Award Notices

a. Applicants whose proposals are recommended for award may be contacted by a Contract or Grant specialist to discuss additional information required for award. This may include representations and certifications, revised budgets or budget explanations, certificate of current cost or pricing data, subcontracting plan for small businesses, and/or other information as applicable to the proposed award.

The notification e-mail must not be regarded as an authorization to commit or expend funds. The Government is not obligated to provide any funding until a Government Contracting Officer or Grants Officer, as applicable, signs the award document.

The award document signed by the Contracting Officer or Grants Officer is the official and authorizing award instrument.

b. Office of Naval Research (ONR) award/modification documents are only available via the Department of Defense (DoD) Electronic Document Access System (EDA) within the Wide Area WorkFlow e-Business Suite (<https://wawf.eb.mil/>).

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

ONR creates an award notification profile for every award.

For grants, the notification profile shall use the email addresses from the Application for Federal Assistance, SF424, to notify the recipient of an award. ***ONR recommends that organizations provide a global business address for their entity in Field 5 (Application Information) of the SF424.*** ONR is using the following three email addresses entered by the grantee on the SF424 application to create the EDA notification profile:

- i. Applicant Information (Field 5 - Email)
- ii. Project Director / Principal Investigator (Field 14 - Email)
- iii. Authorized Representative (Field 19 - Email)

For all other awards, the notification profile shall use the email address from the Business Point of Contact to notify the recipient of an award.

IMPORTANT: In some cases, EDA notifications are appearing in recipients' Junk Email folder. If you are experiencing issues receiving EDA notifications, please check your junk email. If found, please mark EDA notifications as "not junk."

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 (iRAPT at a minimum)
6. Complete the User Profile and follow the site instructions

Allow five business days for your registration to be processed. EDA shall 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 Contract Number (or, if applicable, enter the Grant Number in the Contract Number field), 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).

2. **Administrative and National Policy Requirements**

a. **Applicable to All**

- i. Offerors should be aware of recent changes in export control laws. Offerors are responsible for ensuring compliance with all U.S. export control laws and regulations, including the International Traffic in Arms Regulation (ITAR)(22 CFR Parts 120 - 130) and Export Administration Regulation (EAR) (15 CFR Parts 730 – 774), as applicable. In some cases, developmental items funded by the Department of Defense are now included on the United States Munition List (USML) (22 CFR Part 121) and are therefore subject to ITAR jurisdiction. In other cases, items that were previously included on the USML have been moved to the EAR Commerce Control List (CCL). Offerors should address in their proposals whether ITAR or EAR restrictions apply to the work they are proposing to perform for ONR. The ITAR and EAR are available online at <http://www.ecfr.gov/cgi-bin/ECFR?page=browse>.

Offerors must comply with all U.S. export control laws and regulations, including the ITAR and EAR, in the performance of any award or agreement resulting from this BAA. Offerors shall be responsible for obtaining any required licenses or other approvals, or license exemptions or exceptions if applicable, for exports of hardware, technical data, and software (including deemed exports), or for the provision of technical assistance.

- ii. *Security Classification:*

In order to facilitate intra-program collaboration and technology transfer, the Government shall attempt to enable technology developers to work at the unclassified level to the maximum extent possible. If access to classified material shall be required at any point during performance, the Offeror must clearly identify such need in Section II, Block 11 of the Proposal Checklist . The Proposal Checklist can be found at

If it is determined that access to classified information shall be required during the performance of an award, a Department of Defense (DD) Form 254 shall be attached to the contract, and FAR 52.204-2 - Security Requirements shall be incorporated into the contract.

ONR does not provide access to classified material under grants.

iii. *Requirements Concerning Live Organisms:*

(1) Use of Animals: If animals are to be utilized in the research effort proposed, the Offeror must submit a Full Appendix or Abbreviated Appendix with supporting documentation (copies of Institutional Animal Care and Use Committee (IACUC) Approval, IACUC Approved Protocol, and most recent United States Department of Agriculture (USDA) Inspection Report) prior to award. For assistance with submission of animal research related documentation, contact the ONR Animal Use Administrator at (703) 696-4046. Guidance:

<https://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/animal-use>.

(2) Use of Human Subjects in Research:

(a) You must protect the rights and welfare of individuals who participate as human subjects in research under this award and comply with the requirements of the Common Rule at 32 CFR part 219 and applicable provisions of DoD Instruction 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research (2011), the DON implementation of the human research protection program contained in SECNAVINST 3900.39D (or its replacement), 10 USC 980 “Limitation on Use of Humans as Experimental Subjects,” and when applicable, Food and Drug Administration (FDA) and other federal and state law and regulations.

(b) For proposals containing activities that include or may include “research involving human subjects” as defined in DoDI 3216.02, prior to award, the Offeror must submit documentation of:

(i) Approval from an Institutional Review Board (IRB) (IRB-approved research protocol, IRB- approved informed consent document, and other material they considered); proof of completed human research training (e.g., training certificate or institutional verification of training for the principal investigator, co-investigators); and the Offeror’s Department of Health and Human Services (DHHS)-issued Federal wide Assurance (FWA#),

(ii) Any claimed exemption under 32 CFR 219 101(b), including the category of exemption, supporting documentation considered by your institution in making the determination (e.g., protocol, data collection tools, advertisements, etc.). The documentation shall include a short rationale supporting the exemption determination. This documentation should be signed by the IRB Chair or IRB vice Chair, designated IRB administrator or official of the human research protection program.

(iii) Any determinations that the proposal does not contain activities that constitute research involving human subjects, including supporting documentation considered by your institution in making the determination. This documentation should be issued by the IRB Chair or IRB vice Chair, designated IRB administrator or official of the human research protection program.

(c) Documentation must be submitted to the ONR Human Research Protection Official (HRPO), by way of the ONR Program Officer. If the research is determined by the IRB to be greater than minimal risk, you also must provide the name and contact information for the independent research monitor and a written summary of the monitors' duties, authorities, and responsibilities as approved by the IRB. For assistance with submission of human subject research related documentation, contact the ONR Human Research Protection Official (HRPO) at (703) 696-4046.

(d) Contracts, orders, or grant awards and any subawards or modifications shall include a statement indicating successful completion of the HRPO review. Research involving human subjects must not be commenced under any contract award or modification or any subcontract or grant subaward or modification until awardee receives notification from the Contracting or Grants Officer that the HRPO has approved the assurance as appropriate for the research under the award or modification and that the HRPO has reviewed the protocol and accepted the IRB approval or determination for compliance with Federal, DoD and DON research protection requirements. See, DFARS 252.235-7004. Guidance: <http://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/Human-Subject-Research.aspx>

iv. *Use of Recombinant DNA or Synthetic Nucleic Acid Molecules:* Proposals which call for experiments using recombinant or synthetic nucleic acid molecules must include documentation of compliance with NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines), approval of the Institutional Biosafety Committee (IBC), and copies of the DHHS Approval of the IBC letter. Guidance: <https://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/recombinant-or-synthetic-nucleic-acid-molecules>.

v. *Institutional Dual Use Research of Concern:* As of September 24, 2015, all institutions and United States Government (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>.

vi. *Department of Defense High Performance Computing Program:* The DoD High Performance Computing Program (HPCMP) furnishes the DoD S&T and RDT&E communities with use-access to very powerful high performance computing systems. Awardees of ONR contracts, grants, and other assistance instruments may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer approval is obtained and if

security/screening requirements are favorably completed. Additional information and an application may be found at <https://www.hpc.mil/>.

vii. *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 shall be held at various sites throughout the country. For costing purposes, offerors should assume that 40% of these meetings shall be at or near ONR, Arlington VA and 60% at other locations such as the contractor/grantee's facility, other contractor's facility or government facilities. (This statement does not apply to international offerors submitting proposals to ONRG. International offerors should contact the cognizant ONRG Administrative Director (AD) for guidance prior to submitting a proposal.) Interim meetings are likely, but these shall be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

3. **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 CFR Part 200 Appendix XII), is applicable as follows:

A. Reporting of Matters Related to Recipient Integrity and Performance

1. **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 this award term and condition. This is a statutory requirement under section 41 U.S.C. 2313. 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, shall be publicly available.

2. **Proceedings About Which You Must Report**. Submit the information required about each proceeding that:

- a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- b. Reached its final disposition during the most recent five year period; and
- c. Is one of the following:

(i) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;

(ii) 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;

(iii) 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

(iv) 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.

3. 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.

4. 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.

5. Definitions. For purposes of this award term and condition:

a. 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.

b. 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.

c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—

(i) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and

(ii) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

**b. Applicable to Grants, Cooperative Agreements, and TIA's
(See Appendix 2).**

**c. Applicable to Contracts and Other Transaction Agreements
(See Appendix 3).**

G. Federal Awarding Agency Contacts

1. Communications:

a. All UNCLASSIFIED communications shall be submitted via e-mail to (the Technical Point of Contract) at (e-mail address) with a copy to (the designated Business POC) at (e-mail address).

b. CLASSIFIED questions shall be handled through the ONR Security POC. Specifically, any entity wanting to ask a CLASSIFIED question shall send an UNCLASSIFIED 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 shall contact the entity and arrange for the CLASSIFIED question to be asked through a secure method of communication.

2. Questions of a Technical nature:

Comments or questions submitted should be concise and to the point, eliminating any unnecessary verbiage. In addition, the relevant part and paragraph of the Broad Agency Announcement (BAA) should be referenced. 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 shall not be extended.

Questions of a technical nature should be submitted to:

Dr. Santanu Das
Communications and Networks Program Officer
Office of Naval Research
Mathematics Computer and Information Sciences Division, Code: 311
One Liberty Center
875 N. Randolph St – Suite 1115
Arlington, VA 22203-1995
Email Address: santanu.das@navy.mil

Questions of a Security nature should be submitted to:

Torri Woodfolk
Industrial Security Specialist
Office of Naval Research
Security Department, Code 43
One Liberty Center
875 North Randolph St.
Arlington, VA 22203-1995
Email Address: torri.powell@navy.mil

H. Other Information

Not applicable.

Appendix 1 – PROGRAM DESCRIPTION

See Section I.A.6 for the research opportunity description, Section I.A.7 for key dates, and Section II.B.3 for funding guidance.

APPENDIX 2 – REQUIREMENTS APPLICABLE TO GRANTS, TIA’s AND COOPERATIVE AGREEMENTS

D. Application and Submission Information

2. Content and Form of Application Submission

(e) Full Proposals:

i. Instructions for Grants, Cooperative Agreements, and TIAs

Content and Form of Application:

Applicants must complete the mandatory forms in accordance with the instructions provided on the forms and the additional instructions below. Files that are attached to the forms must be in Adobe Portable Document Format (.PDF).

Full Proposal Format

- Spacing – single spaced
- Font – Times New Roman, not smaller than 12 point
- Discuss the limit on the number of pages for the Technical Proposal with the cognizant Program Officer. There are no page limitations to the Budget.

NOTE: The electronic file name for all documents submitted under this BAA must not exceed 68 characters in length, including the file name extension.

Required Forms

(1) SF-424 (RESEARCH & RELATED) (Mandatory)

The SF-424 (R&R) form must be used as the cover page for all proposals. Complete all required fields in accordance with the “pop-up” instructions on the form and the following instructions for specific fields. Please complete the SF-424 first, as some fields on the SF-424 are used to auto-populate fields on other forms.

The completion of most fields is self-explanatory with the exception of the following special instructions:

- Field 3 - Date Received by State: The Date Received by State and the State Application Identifier are not applicable to research.

- Field 4a - Federal Identifier: For new proposals, enter N00014. If the application is a renewal or expansion of an existing award, enter the ONR award number.

- Field 4b - Agency Routing Number: Enter the three (3) digit Program Office Code and the Program Officer's name, last name first, in brackets (e.g., 331 [Smith, John]).
 - Where the Program Office Code only has two digits, add a "0" directly after the Code (e.g., Code 30 would be entered as 300)
 - Use Code 600 for ONRG).

Applicants who fail to provide a Program Officer Code identifier may receive a notice that their proposal is rejected.

- Field 4c - Previous Grants.gov Tracking ID: If this submission is for a Changed/Corrected Application, enter the Grants.gov tracking number of the previous proposal submission; otherwise, leave blank.
- Field 7 - Type of Applicant. Complete as indicated: If the organization is a Minority Institution, select "Other" and under "Other (Specify)" note that the institution is a Minority Institution (MI).
- Field 9 - Name of Federal Agency: List the Office of Naval Research as the reviewing agency. This field is pre-populated in Grants.gov.
- Field 16 - Is Application Subject to Review by State Executive Order 12372 Process? Choose "No". Check "Program is Not Covered by Executive Order 12372."
- Field 17 – Certification: All awards require some form of certifications of compliance with national policy requirements. By checking the "I agree" box in field 17, and attaching the representation to Field 18 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov, the Grant Applicant is providing the certification on lobbying required by 32 CFR Part 28 and representation regarding an unpaid delinquent tax liability or a felony conviction under any federal law – DoD appropriations.

(2) R&R Form: Project/Abstract Form (Mandatory)

The project summary/abstract must identify the research problem and objectives, technical approaches, anticipated outcome of the research, if successful, and impact on DoD capabilities. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed and there is a 4,000 character limit including spaces.

Do not include proprietary or confidential information. The project summary/ abstract must be marked by the applicant as "Approved for Public Release". Abstracts of all funded research projects shall be posted on the public DTIC website: <https://dodgrantawards.dtic.mil/grants>

(3) R&R Form: Research and Related Other Project Information (Mandatory)

- Fields 1 and 1a - Human Subject Use: Each proposal must address human subject involvement in the research by completing Fields 1 and 1a of the R&R Other Project Information form. For proposals containing activities that include or may include “research involving human subjects” as defined in DoDI 3216.02, prior to award, the Applicant must submit the documentation under “Use of Human Subjects in Research” (Section F).

- Fields 2 and 2a – Vertebrate Animal Use: Each proposal must address animal use protocols by addressing Fields 2 and 2a of the R&R Other Project Information form. If animals are to be utilized in the research effort proposed, the Applicant must submit the documents described under “Use of Animals” (Section F).

- Fields 4a through 4d - Environmental Compliance: Address these fields and briefly indicate whether the intended research shall result in environmental impacts outside the laboratory, and how the applicant shall ensure compliance with environmental statutes and regulations.

Federal agencies making grant or cooperative agreement awards and recipients of such awards must comply with various environmental requirements. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. Sections 4321-4370 (a), requires that agencies consider the environmental impact of “major Federal actions” prior to any final agency decision. With respect to those awards which constitute “major Federal actions,” as defined in 40 CFR 1508.18, federal agencies may be required to comply with NEPA and prepare an environmental impact statement (EIS), even if the agency does no more than provide grant funds to the recipient. Questions regarding NEPA compliance should be referred to the technical point of contact. Most research efforts funded by ONR shall, however, qualify for a categorical exclusion from the need to prepare an EIS. Navy instructions/regulations provide for a categorical exclusion for basic and applied scientific research usually confined to the laboratory, if the research complies with all other applicable safety, environmental and natural resource conservation laws.

- Field 7 – Project Summary/Abstract: Leave Field 7 blank; complete Form SF424, Project Abstract.

- Field 8 – Project Narrative: Describe clearly the research, including the objective and approach to be performed, keeping in mind the evaluation criteria. Attach the entire proposal narrative to R&R Other Project Information form in Field 8. To attach a Project Narrative in Field 8 click on “Add Attachment” and attach the technical proposal as a single PDF file. (Save the file as “Technical Proposal,” as typing in the box is prohibited).

The technical proposal must describe the research in sections as described below:

- **Cover Page:** This must include the words “Technical Proposal” and the following:
 - (a) BAA Number: N00014-18-S-B005;
 - (b) Title of Proposal;

- (c) Identity of prime applicant and complete list of subawards, if applicable;
- (d) Technical contact (name, address, phone/fax, electronic mail address)

- (e) Administrative/business contact (name, address, phone/fax, electronic mail address) and;

- (f) 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.** Describe the basic scientific or technical concepts that shall be investigated, giving the complete research plan. Describe what is innovative about the proposed approach. Provide the proposed approach compared to alternate approaches other researchers in this field have taken. Given the successful completion, describe the results, new knowledge, or insights.

- Operational Naval Concept (where applicable): 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 (where applicable): A plan for demonstrating and evaluating the operational effectiveness of the applicant'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:

- Reports: The following are sample reports that are typically required under a research effort:

- Technical and Financial Progress Reports
- Final Report

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

- **Management Approach.** Describe the overall management approach and provide rationale for participation of key team members. Describe the planned relationships with any subawardees or collaborators. This is a single PI award; if there are subawardees or collaborators, explain how the proposed team fits the single PI structure. If appropriate, briefly describe anticipated schedule.

- **Current and Pending Project and Proposal Submissions:** Applicants 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. Applicants shall provide the following information of any related or complementary proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations). Concurrent submission of a proposal to other organizations shall not prejudice its review by ONR.

- Title of Proposal and Summary;
- Source and amount of funding (annual direct costs; provide contract and/or grant numbers for current contracts/grants);
- Percentage effort devoted to each project;
- Identity of prime applicant and complete list of subwards, if applicable;
- Technical contact (name, address, phone/fax, electronic mail address)
- Administrative/business contact (name, address, phone/fax, electronic mail address);
- Period of performance (differentiate basic effort);
- 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);
 - 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
 - State how projects are related to the proposed effort and indicate degree of overlap.

- **Principal Investigator 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.

- **Responsibility:** Applicants must provide the following information to ONR in order to assist in ONR's evaluation of the applicants's responsibility:

- Describe how you have adequate resources or the ability to obtain such resources as required to complete the activities proposed.
- Describe how you have the ability to comply with the grant conditions, taking into account all existing and currently prospective commitments of the applicant, nongovernmental and governmental.
- Describe your performance history; specifically your record in managing Federal awards and the extent to which any previously awarded amounts shall be expended prior to future awards.
- Describe your record of integrity and business ethics.
- Describe qualifications and eligibility to receive an award under applicable laws

and regulations.

- Describe your organization, experience, accounting, and operational controls and technical skills, or the ability to obtain them (including as appropriate such elements as property control systems, quality assurance measures, and safety programs applicable to the efforts to be performed).

- **Facilities & Equipment.** Describe facilities available for performing the proposed research and any additional facilities or equipment the organization proposes to acquire at its own expense. Indicate government-owned facilities or equipment already possessed that shall be used. Justify the need for each equipment item. (Additional facilities and equipment shall not be provided unless the research cannot be completed by any other practical means.)

(4) R&R Form: Research & Related Budget

The applicant must use the Grants.gov forms (including the Standard Form (SF) Research and Related (R&R) Budget Form) 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 shall result in the options not being included in the award.

Notional Schedule. The following provides a notional schedule to determine proposed period of performance and associated budget for Grant submissions.

Grant proposals submitted	Use this start date
October 1 through December 31, 2018	March 1, 2019
January 1 through March 31, 2019	July 1, 2019
April 1 through June 30, 2019	September 1, 2019
July 1 through September 30, 2019	January 1, 2020

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. This document shall be attached under Section K. “Budget Justification” of the Research and Related Budget form. Click “Add Attachment” to attach.

(a) **Part 1:** The itemized budget should 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 (F&A, Overhead, G&A, etc.) – The application 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 must 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 organizations 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. Applicants may include travel costs for the Principal Investigator to attend the peer reviews described in Section II of this BAA.

- Subawards/Subcontracts – Provide a description of the work to be performed by the subrecipient/subcontractor. For each subaward, a detailed cost proposal is required to be submitted by the subrecipient(s). A proposal and any supporting documentation must be received and reviewed before the Government can complete its cost analysis of the proposal and enter negotiations. ONR's preferred method of receiving subcontract information is for this information to be included with the Prime's proposal. However, a subcontractor's cost proposal can be provided in a sealed envelope with the recipient's cost proposal or via e-mail directly to the Program Officer at the same time the prime proposal is submitted. The e-mail should identify the proposal title, the prime Applicant and that the attached proposal is a subcontract.

- 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, 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 are 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, laptops, office equipment) should not be requested unless they shall 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 shall 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).
- Fee/Profit – Fee/profit is unallowable under assistance agreements at either the prime or subaward level but may be permitted on subcontracts issued by the prime awardee.

NOTE: To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. A§ 1681 Et. Seq.), the Department of Defense is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in science, technology, engineering, or mathematics disciplines. To enable this assessment, each application must include the following forms completed as indicated.

(5) Research and Related Senior/Key Person Profile (Expanded) (Mandatory)

The Degree Type and Degree Year fields on the Research and Related Senior/Key Person Profile (Expanded) form shall be used by DoD as the source for career information. In addition to the required fields on the form, applicants must complete these two fields for all individuals that are identified as having the project role of PD/PI or Co-PD/PI on the form. Additional senior/key persons can be added by selecting the “Next Person” button.

(6) Research and Related Personal Data (Mandatory):

This form shall be used by DoD as the source of demographic information, such as gender, race, ethnicity, and disability information for the Project Director/Principal Investigator and all other persons identified as Co-Project Director(s)/Co-Principal Investigator(s). Each application must include this form with the name fields of the Project Director/Principal Investigator and any Co-Project Director(s)/Co-Principal Investigator(s) completed; however, provision of the demographic information in the form is voluntary. If completing the form for multiple individuals, each Co-Project Director/Co-Principal Investigator can be added by selecting the “Next Person” button. The demographic information, if provided, shall be used for statistical purposes only and shall not be made available to merit reviewers. Applicants who do not wish to provide some or all of the information should check or select the “Do not wish to provide” option.

7. Other Submission Requirements

- a. Submission of Grant, Cooperative Agreement, and TIA Proposals through Grants.gov

Grants.gov Application Submission and Receipt Procedures

This section provides the application submission and receipt instructions for the Office of Naval Research (ONR) program applications. Please read the following instructions carefully and completely.

1. Electronic Delivery

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

2. How to Register to Apply through Grants.gov

a. *Instructions:* Read the instructions below about registering to apply for ONR 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 shall 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.

If individual applicants are eligible to apply for this grant funding opportunity, refer to: <https://www.grants.gov/web/grants/applicants/registration.html>

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 shall 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 shall 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/registration.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 shall 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 shall be able to submit your application online anytime after you have been approved as an AOR.

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

<https://www.grants.gov/web/grants/applicants/registration/track-role-status.html>

b. *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.**

3. How to Submit an Application to the Office of Naval Research via Grants.gov

White Papers must not be submitted through the Grants.gov application process. White paper submissions must be e-mailed directly to the appropriate ONR Program Officer/Program Manager.

All attachments to grant applications submitted through Grants.Gov must be in Adobe Portable Document Format. Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format shall not be considered for award.

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

webforms 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>

1) *Create a Workspace*: Creating a workspace allows you to complete it online and route it through your organization for review before submitting.

2) *Complete a Workspace*: Add participants to the workspace, complete all the required forms, and check for errors before submission.

a. *Adobe Reader*: If you decide not to apply by filling out webforms you can download individual PDF forms in Workspace so that they shall appear similar to other Standard or [INSERT AGENCY NAME] 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>

b. *Mandatory Fields in Forms*: In the forms, you shall 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.

c. *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 shall transfer to the other forms.

3) *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.

4) *Track a Workspace*: After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. The number shall 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. (Foreign applicants should contact 1-606-545-5035.) 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 shall assist ONR with tracking your issue and understanding background information on the issue.

4. Timely Receipt Requirements and Proof of Timely Submission

a. *Online Submission.* All applications must be received by 4pm Eastern time on the due date established for each program. Proof of timely submission is automatically recorded by Grants.gov. An electronic date/time stamp is generated within the system when the application is successfully received by Grants.gov. The applicant AOR shall receive an acknowledgement of receipt and a tracking number (GRANTXXXXXXXX) from Grants.gov with the successful transmission of their application. Applicant AORs shall also receive the official date/time stamp and Grants.gov Tracking number in an email serving as proof of their timely submission.

When the Office of Naval Research successfully retrieves the application from Grants.gov, and acknowledges the download of submissions, Grants.gov shall provide an electronic acknowledgment of receipt of the application to the email address of the applicant with the AOR role. Again, proof of timely submission shall be the official date and time that Grants.gov receives your application. Applications received by Grants.gov after the established due date for the program shall be considered late and shall not be considered for funding the Office of Naval Research

Applicants using slow internet, such as dial-up connections, should be aware that transmission can take some time before Grants.gov receives your application. Again, Grants.gov shall provide either an error or a successfully received transmission in the form of an email sent to the applicant with the AOR role. The Grants.gov Support Center reports that some applicants end the transmission because they think that nothing is occurring during the transmission process. Please be patient and give the system time to process the application.

E. Application Review Information

3. Recipient Qualifications

a. Grant, Cooperative Agreement, and TIA Proposals

i. The Grants Officer is responsible for determining a recipient's qualification prior to award. In general, a Grants Officer shall award grants or cooperative agreements only to qualified recipients that meet the standards at 32 CFR 22.415. To be qualified, a potential recipient must:

(1) Have the management capability and adequate financial and technical resources, given those that would be made available through the grant or cooperative agreement, to executed the program of activities envisioned under the grant or cooperative agreement;

(2) Have a satisfactory record of executing such programs or activities (if a prior recipient of an award);

(3) Have a satisfactory record of integrity and business ethics; and

(4) Be otherwise qualified and eligible to receive a grant or cooperative agreement under applicable laws and regulations.

Applicants are requested to provide information with proposal submissions to assist the Grants Officer's evaluation of recipient qualification.

ii. In accordance with Office of Management and Budget (OMB) guidance in parts 180 and 200 of Title 2, CFR, in its DoD policy that DoD Components must report and use integrity and performance information in the Federal Awardee Performance and Integrity Information System (FAPIIS), or any successor system designated by OMB, concerning grants, cooperative agreements, and TIA's as follows:

If the total Federal share shall be greater than the simplified acquisition threshold on and Federal award under a notice of funding opportunity (see 2 CFR 200.88 Simplified Acquisition Threshold):

(1) The Federal awarding agency, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, shall review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS)(see 41 U.S.C. 2313);

(2) An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM;

(3) The Federal awarding agency shall 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 applicants as described in 2 CFR 200.205 Federal awarding agency review of risk posed by applicants.

F. Federal Award Administration Information

2. Administrative and National Policy Requirements

b. Applicable to Grants, Cooperative Agreements, and TIA's (See Appendix 2).

i. 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 and expanded by the Digital Accountability and Transparency Act of 2014 (Public Law 113-101), 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 TIAs) 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.

ii. Certification regarding Restrictions on Lobbying:

Grant and Cooperative Agreement awards greater than \$100,000, as well as OTAs not under 10 U.S.C. 2371b, require a certification of compliance with a national policy mandate concerning lobbying. Grant applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted via Grants.gov (complete Block 17). The following certification applies likewise to each Cooperative Agreement and normal OTA applicant seeking federal assistance funds exceeding \$100,000:

(1) No Federal appropriated funds have been paid or shall 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 shall 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.

iii. Representation Regarding an Unpaid Delinquent Tax Liability or a Felony Conviction Under any Federal Law - DOD Appropriations:

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

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

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

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

iv. Representation Regarding the Prohibition on Using Funds with Entities that Require Certain Internal Confidentiality Agreements

Agreement with the representation below shall be affirmed by checking the "I agree" box in block 17 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation reads as follows:

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

Note that, 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. Pub. L. 114-223, Continuing Appropriations Act, 2017, or any other Act that extends to fiscal year 2017 funds the same prohibitions as contained in section 743, Division E, title VII, of the Consolidated Appropriations Act, 2016 (Pub. L. 114-113).

d. 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.

v. Code of Conduct:

Applicants for assistance are required to comply with 2 CFR 200.318(c), 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 shall be incorporated into all assistance instruments awarded under this BAA.

v. Peer Review

In the case of proposals funded as basic research, ONR may utilize peer reviewers from academia, industry, and Government agencies to assist in the periodic appraisal of performance under the awards, as outlined in ONR Instruction 3966.1. Such periodic program reviews monitor the cost, schedule and technical performance of funded basic research efforts. The reviews are used in part to determine which basic research projects shall receive continued ONR funding. Peer reviewers who are not U.S. Government employees must sign nondisclosure agreements before receiving full or partial copies of proposals and reports submitted by the basic research performers. Applicants may include travel costs for the Principal Investigator (PI) to attend the peer review.

APPENDIX 3 - REQUIREMENTS APPLICABLE TO CONTRACTS AND OTHER TRANSACTION AGREEMENTS

D. Application and Submission Information

2. Content and Form of Application Submission

(e) Full Proposals:

ii. Instructions for Contracts and Other Transaction Agreements

Proposal Package:

The following six documents with attachments comprise a complete proposal package:

- (1) Proposal Checklist (.pdf)
- (2) Technical Proposal Template (.pdf)
- (3) Cost Proposal Spreadsheet (Excel)
- (4) Adequacy Checklist for Pre Award Audit (SF 1408) (as applicable)
- (5) Stand-alone non-proprietary Statement of Work (SOW) in Word
- (6) Representations and Certifications

NOTE: The electronic file name for all documents submitted under this BAA must not exceed 68 characters in length, including the file name extension.

Items 1 – 5 above are located at: <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/>. All have instructions imbedded into them that shall assist in completing the documents. Also, both the Proposal Checklist and the Cost Proposal Spreadsheet require completion of cost-related information. Please note that attachments can be incorporated into the Proposal Checklist.

For item 6, above, ONR contract specific representations and certifications are located at <http://www.onr.navy.mil/en/Contracts-Grants/submit-proposal/contracts-proposal.aspx>

The format requirements for attachments are as follows:

- Paper Size- 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing- single or double spaced
- Font- Times New Roman, 12 point

Offerors responding to this BAA must submit a separate list of all technical data or computer software that shall be furnished to the Government with other than unlimited rights. The Government shall assume unlimited rights if offerors fail to identify any intellectual property restrictions in their proposals. Include all proprietary claims to results, prototypes, and/or

deliverables. If no restrictions are intended, then the offeror should state “NONE.”

For proposals below the simplified acquisition threshold (less than or equal to \$150K), the Technical Proposal Template and Proposal Checklist documents, and the Cost Proposal Spreadsheet are required. Purchase orders can also contain options, as long as the total amount of the base and all options does not exceed \$150K.

For proposed subcontracts or inter-organizational 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 submit an appropriate number of hard copies as discussed with the cognizant Program Officer of their proposal package.

The electronic copy must be submitted in a secure, pdf-compatible format, except for the electronic file of the Cost Proposal Spreadsheet which must be submitted in a Microsoft Excel 2010 compatible format and the Statement of Work Template which must be submitted in Microsoft Word format. All attachments to any required proposal documents must 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. Should an Offeror amend its proposal, the amended proposal should be submitted following the same hard and electronic copy guidance applicable to the original proposal.

Any proposed options that are identified in the Technical Proposal Template or Proposal Checklist documents, but are not fully priced out in the Cost Proposal Spreadsheet, shall not be included in any resulting contract, cooperative agreement, or other transaction. If proposing options, they **must** be separately priced and separate spreadsheets should be provided for the base period and each option. In addition to providing summary by period of performance (base and any options), the Contractor is also responsible for providing a breakdown of cost for each task identified in the Statement of Work. The sum of all costs by task worksheets **MUST** equal the total cost summary.

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.

Fixed Fees on ONR Contracts: The Government Objective is set in accordance with the DFARS 215.404-71. See the below table for range and normal values:

Contract Risk Factor	Contract Type	Assigned Value (Normal range)	Normal Value
Technical (1)		3% - 7% (2)	5%
Management/Cost Control (1)		3% - 7% (2)	5%
Contract Type Risk	Firm Fixed Price	2% - 6% (3)	3% - 5% (4)
Contract Type Risk	Cost Plus Fixed Fee	0% - 1% (2)	0.5%

- (1) Assign a weight (percentage) to each element according to its input to the total performance risk. The total of the two weights equal 100%
- (2) Assign a weighting score relative to the Risk Factor.
- (3) Depends on the specific Contract Type (With/without financing, performance-based payments, and/or progress payments).
- (4) Depends on the specific Contract Type.

Technology Incentive (TI) is rarely utilized at ONR, because the contracts issued by ONR typically are not eligible for TI (See DFARS 215.404-71-2(c) (2)). Any consideration of TI requires strong and convincing justification in the proposal, which are then subject to negotiation and determination of a fair and reasonable fee, within the context of the specific award.

Typically the range of fee is 5% to 7.5% on an ONR awarded contract.

E. Application Review Information

3. Recipient Qualifications
 - b. Contract Proposals:

- i. Contracts shall be awarded to responsible prospective contractors only. See FAR 9.104-1 for a listing of the general standards against which an applicant shall be assessed to determine responsibility.

Applicants are requested to provide information with proposal submission to assist the Contracting Officer's evaluation of responsibility

- ii. FAPIIS (Federal Awardee Performance and Integrity Information System) shall be checked prior to making an award. The web address is:

<https://www.fapiis.gov/fapiis/index.action>

The applicant representing the entity may comment in this system on any information about the entity that a federal government official entered. The information in FAPIIS shall be used in making a judgment about the entity's integrity, business ethics, and record of performance under Federal awards that may affect the official's determination that the applicant is qualified to receive an award.

F. Federal Award Administration Information

2. Administrative and National Policy Requirements

c. Applicable to Contracts and Other Transaction Agreements (See Appendix 3).

i. Applies to Contracts (and may be applicable, as revised, to Other Transactions):

(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 shall be negotiated as the program unfolds. Offerors should indicate in the Proposal Checklist, Section II, Blocks 8 and 9, which of these facilities are critical for the project's success.

(2) Use of Arms, Ammunition and Explosives:

Safety

The Offeror is required to be in compliance with DoD manual 4145.26-M, *DoD Contractor's Safety Manual for Ammunition and Explosives* if ammunitions and/or explosives are to be utilized under the proposed research effort. (See DFARS 223.370-5 and DFARS 252.223-7002) If ammunitions and/or explosives (A&E) are to be utilized under the proposed research effort, the Government requires a preaward safety survey in accordance with DFARS PGI 223.370-4(C)(iv) entitled *Preaward survey*.

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

Security

If arms, ammunition or explosives (AA&E) are to be utilized under the proposed research effort, the Government requires a preaward security survey. (See DoD manual 5100.76-M, dated April 17, 2012, *Physical Security of Sensitive Conventional Arms, Ammunition and Explosives*, Enclosure 2, paragraph 2.a.)

If AA&E are to be utilized under the proposed research effort, the Government may require the Contractor to have perimeter fencing around the place of performance in accordance with DoD 5100.76-M dated April 17, 2012, Enclosure 5, paragraph 2.a.

If AA&E are to be utilized under the proposed research effort, the Offeror is required to provide a written copy of the Offeror's AA&E accountability procedures in accordance with DoD 5100.76-M. If the Offeror is required to provide written AA&E accountability procedures, the Offeror should provide the respective procedures with its proposal submission. See DoD 5100.76-M dated April 17, 2012, Enclosure 9, paragraph 9.

(3) System for Award Management (SAM):

FAR 52.204-7 System for Award Management and FAR 52.204-13 System for Award Management Maintenance are incorporated into this BAA, and FAR 52.204-13 shall be incorporated in all awards.

(4) Employment Eligibility Verification (E-verify):

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

(5) Conflicts of Interest:

(a) Disclosure. An offeror shall state in its proposal whether it is aware of any information bearing on the existence of any actual or potential organizational conflict of interest (OCI) as defined in FAR 2.101 and as further discussed in FAR Subpart 9.5 as to itself and any proposed subcontractors, partners, consultants or other affiliates. Offerors performing systems engineering and technical assistance (SETA) for ONR are considered to have an OCI that may not be susceptible to mitigation. See ONR's Statement of Policy on OCIs, which can be found at the following address: <http://www.onr.navy.mil/en/About-ONR/compliance-protections/Organizational-Conflicts-Interest.aspx>

The nondisclosure or misrepresentation of an interest creating an OCI may result in the disqualification of an offeror for award, or if such nondisclosure or misrepresentation is discovered after award, the Government may terminate the contract for default, recommend that the contractor be disqualified from subsequent related contracts, or be subject to such other remedial actions as may be permitted or provided by law (see 18 U.S.C. § 1001 and 31 U.S.C. § 3802(a)(2)). Therefore, offerors should interpret the requirements of this section broadly.

An offeror who does not provide support services to ONR or concludes no actual or potential OCI exists shall include the following statement in its proposal: "I [NAME] as an authorized negotiator on behalf of [NAME OF OFFEROR] certify that **NO** actual or potential organizational conflict of interest (OCI) exists under [BAA NUMBER]. I understand that the failure to disclose the existence of actual or potential OCI shall result in the offeror not being considered for award."

An offeror who does provide support services to ONR or is aware circumstances exist that may result in the appearance that it may have an unfair competitive advantage shall submit the following with its proposal:

- (i) The name of the entity the offeror, its subcontractors, partners, consultants or affiliates supports.
- (ii) The number of the contract, subcontract, or agreement that creates the actual or potential OCI. If ONR did not award the contract or agreement, provide a copy of the document. If ONR awarded the contract, provide the name of the technical point of contact.
- (iii) A description of the actual or potential OCI. The statement must describe in a concise manner all relevant facts concerning any past, present or currently planned interest (financial, contractual, organizational, or otherwise) relating to the work to be performed hereunder and bearing on whether the offeror has a possible organizational conflict of interest with respect to (1) impartial, technically sound, and unbiased assessments, recommendations, or evaluations, or (2) being given an unfair competitive advantage. If relevant, offerors shall address the personal conflicts of their employees.
- (iv) A Mitigation Plan. Offerors should refer to FAR Subpart 9.5 for policies and procedures for avoiding, neutralizing, or mitigating organizational conflicts of interest.
- (v) A concluding statement as follows: "I [NAME] as an authorized negotiator on behalf of [NAME OF OFFEROR] certify that I have, to the best of my knowledge and belief, disclosed all actual or potential organizational conflicts of interest (OCI) under [BAA NUMBER]. I understand that the failure to disclose the existence of an actual or potential OCI shall result in the offeror not being considered for award."

(b) OCI Mitigation Plan Contents. At a minimum, a Mitigation Plan shall:

- (i) Provide organizational charts showing the offeror's (and, as appropriate, those of its subcontractors, partners, consultants, and affiliates) structure as it relates to performance under the contract awarded under this BAA and all contracts and agreements relevant to the OCI, highlighting those elements that create the actual or apparent OCI.
- (ii) Demonstrate how the elements that create the actual or apparent OCI shall be isolated from the resources that shall perform work under the contract awarded under this BAA.
- (iii) Provide information showing whether the organizational elements that shall perform work under the contract awarded under this BAA shall be geographically or physically separated from the elements that create the actual or apparent OCI.
- (iv) For each contract or agreement relevant to the OCI, describe the process for reassigning personnel, including those belonging to subcontractors, partners, consultants, and affiliates, from one organization to another. Include restrictions that apply.

(v) For each contract or agreement relevant to the OCI, describe the any controls, including nondisclosure agreements, that are exercised over the future employment of departing employees as it relates to the OCI.

(vi) For each contract or agreement relevant to the OCI, describe any OCI training the employees are offered or required to attend, along with the timing (before or after starting work on a government contract), frequency, length, and content of such training.

(vii) Provide evidence of facts and circumstances that the offeror asserts mitigate or address the concerns related to the actual or potential OCI.

(c) Review. The Contracting Officer shall review an offeror’s certifications, statements, and OCI Mitigation Plan (if applicable) submitted and may require additional relevant information from an offeror. All such information and any other relevant information shall be used by the Contracting Officer to determine whether an award to the offeror may create an OCI. If found to exist, the Government may: (1) impose appropriate conditions which avoid such conflict, (2) disqualify the offeror, (3) determine that it is otherwise in the best interest of the Government to award a contract to the offeror and include appropriate conditions mitigating such conflict in the award, or (4) seek a waiver. If the Contracting Officer determines that an actual or significant potential conflict of interest exists that cannot reasonably be avoided, neutralized or mitigated, the offeror shall be ineligible for award. If accepted, the Mitigation Plan shall become part of the contract.

An offeror who has refused to disclose the information or make the certification required by this BAA concerning an actual or potential OCI shall be disqualified from consideration for award.

6. FAR / DFARS Provisions/Clauses: For purposes of illustration and not of limitation, the following provisions and clauses may be applicable to ONR contracts:

#	Provision/Clause
52.204-7	System for Award Management
52.204-13	System for Award Management Maintenance
52.215-16	Facilities Capital Cost of Money
52.215-22	Limitations on Pass Through Charges - Identification of Subcontract Effort
52.216-1	Type of Contract
52.216-27	Single or Multiple
52.217-4	Evaluation of Options Exercised at time of Contract Award
52.217-5	Evaluation of Options
52.217-9	Option to Extend the term of the Contract
52.222-24	Preaward On-Site Equal Opportunity Compliance Evaluation (Applies if exceeds \$10M)
52.226-2	Historically Black College or University and Minority Institution Representation
52.230-7	Proposal Disclosure - Cost Accounting Practice Changes

52.232-15	Progress Payments not included
52.233-2	Service of Protest
52.252-1	Solicitation Provisions Incorporated by Reference
52.252-3	Alterations in
52.252-5	Authorized Deviations in Provisions
252.203-7005	Representation Relating to Compensation of Former DoD Officials
252.204-7004	Alternate A, System for Award Management
252.204-7008	Compliance with Safeguarding Covered Defense Information Controls (DEC 2015)
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting (DEC 2015)
252.215-7003	Requirements for Submission of Data Other than Certified Cost or Pricing Data - Canadian Commercial Corporation
252.219-7000	Advancing Small Business Growth
252.219-7003 (DEVIATION 216-O0009) ALT II	Small Business Subcontracting Plan (DOD CONTRACTS) - BASIC

(a) Combating Trafficking in Persons: FAR Clause 52.222-50 shall be incorporated in all awards.

(b) Certification Regarding Trafficking in Persons Compliance Plan:

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

(c) Updates of Information regarding Responsibility Matters: FAR clause 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matter, shall be included in all contracts valued at \$550,000 where the contractor has current active Federal contracts and grants with total value greater than \$10,000,000.

(7) Production and Testing of Prototypes

ONR may modify a contract awarded under this BAA to add a contract line item or contract option for the provision of advanced component development or for the delivery of initial or additional prototype units. However, such a contract addition shall be subject to the limitations contained in Section 819 of the National Defense Authorization Act (NDAA) for Fiscal Year 2010, as modified in Section 811 of the NDAA for Fiscal Year 2015.

i. Applies to Other Transaction Agreements only:

(1) 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 and expanded by the Digital Accountability and Transparency Act of 2014 (Public Law 113-101), 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 TIA's 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.