



## **BROAD AGENCY ANNOUNCEMENT (BAA) NUMBER 13-015**

### **MULTI-DOMAIN, OPTICAL , NON-UNIFORM ADAPTIVE IMAGING TECHNOLOGY ORIENTED RESEARCH (MONITOR)**

#### **Table of Content**

**The following information presents the basic organization of this document as well as the location of significant information:**

- I. General Information
  1. Agency Name
  2. Research Opportunity Title
  3. Program Name
  4. Research Opportunity Number
  5. Response Date
  6. Research Opportunity Description
  7. Point(s) of Contact
  8. Instrument Type(s)
  9. Catalog of Federal Domestic Assistance (CFDA) Number
  10. Catalog of Federal Domestic Assistance (CFDA) Titles
  11. Other Information
- II. Award Information
  1. Amount and Period of Performance
  2. Peer Reviews
  3. Production and Testing of Prototypes
- III. Eligibility Information
- IV. Application and Submission Information
  1. Application and Submission Process
  2. Content and Format of White Papers/Full Proposals
    - a. White Papers
    - b. Full Proposals
      - i. Contracts
      - ii. Grants
  3. Significant Dates and Times
  4. Submission of Late Proposals
  5. Submission of Grant Proposals through Grants.gov
  6. Address for the Submission of White Papers and Full Proposals for Contracts
- V. Evaluation Information

1. Evaluation Criteria
  2. Commitment to Small Business (For Contract Awards Only)
  3. Options (Options will not be utilized.)
  4. Evaluation Panel
- VI. Award Administration Information
1. Administrative Requirements
- VII. Other Information
1. Government Property/Government Furnished Equipment (GFE) and Facilities
  2. Security Classification
  3. Use of Animals and Human Subjects in Research
  4. Recombinant DNA
  5. Use of Arms, Ammunition and Explosives
  6. Department of Defense High Performance Computing Program
  7. Organizational Conflicts of Interest
  8. Project Meetings and Reviews
  9. Reporting Executive Compensation and First-Tier Subcontract Awards
  10. Military Recruiting On Campus (APPLIES ONLY TO GRANTS)
  11. Combating Trafficking in Persons
  12. Updates of Information regarding Responsibility Matters
  13. Employment Eligibility Verification
  14. System for Award Management

## **INTRODUCTION:**

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

The Office of Naval Research (ONR) will not issue paper copies of this announcement. The ONR reserves the right to fund all, some or none of the proposals received under this BAA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this BAA will not be returned. It is the policy of ONR to treat all proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

### **I. GENERAL INFORMATION:**

**1. Agency Name** - Office of Naval Research

**2. Research Opportunity Title** - Multi-Domain, Optical, Non-Uniform Adaptive Imaging Technology Oriented Research (MONITOR)

**3. Program Name** - Electro Optic and Infra Red Sensing Technologies Discovery and Invention (D&I) Portfolio

**4. Research Opportunity Number** - 13-015

**5. Response Date** -

White Papers: 7/11/2013

Full Proposals: 9/12/2013

**6. Research Opportunity Description** -

The Office of Naval Research (ONR-312) seeks innovative proposals for electro-optic and infrared (EO/IR) sensors for use in a wide-area persistent surveillance and targeting applications. These sensors are deployed on surface ships, submarines, airborne platforms or could be man-portable. Each use provides a unique set of performance requirements and resource (size, weight, power, latency) constraints. These scenarios are listed to indicate the breadth of potential applications and not single out a specific one as the focus of this announcement.

#### Problem Statement:

The past decade has seen an explosive growth in the capabilities of imaging sensors operating in visible and infrared bands of the electromagnetic spectrum. Cameras embedded in smart phones are approaching space-bandwidth-products of sixteen (16) megapixels. Recent research programs from Defense Advanced Research Projects Agency (DARPA) have led to imaging systems that are capable of capturing images with over a billion pixels (Autonomous Real-Time Ground Ubiquitous Surveillance Imaging Sensor (ARGUS-IS), Advanced Wide FOV

Architecture for Image Reconstruction (AWARE)). Mid wave and long wave infrared imaging systems have not achieved comparable performance yet but, spurred by detector array developments under tri-service Vital Infrared Sensor Technology Acceleration (VISTA) program, systems that can capture several hundred megapixel imagery are being attempted, such as Autonomous Real-Time Ground Ubiquitous Surveillance Infra Red (ARGUS-IR). Hyperspectral imaging systems were initially developed for imaging earth from satellites and collected images in over 100 spectral bands in order to gather spectral signatures of different materials. Recent developments have reduced the size and weight of these systems such that they are being considered for tactical use on small to medium size unmanned air vehicles (UAVs). It is also known that, upon reflection, the state of polarization from man-made and a natural material is different, which can be used for target detection and identification. Indeed sensor systems have been designed and built to gather information in spatial, temporal, spectral and polarization domains.

One consequence of these advances in imaging sensors has been an explosion in data that needs to be stored, processed and disseminated. A single mission can routinely generate multiple terabytes of data thereby severely taxing resources. One way to attack this problem has been to employ powerful on-board processing to compress the data and perform early image processing to identify regions of interest within the wide field of regard.

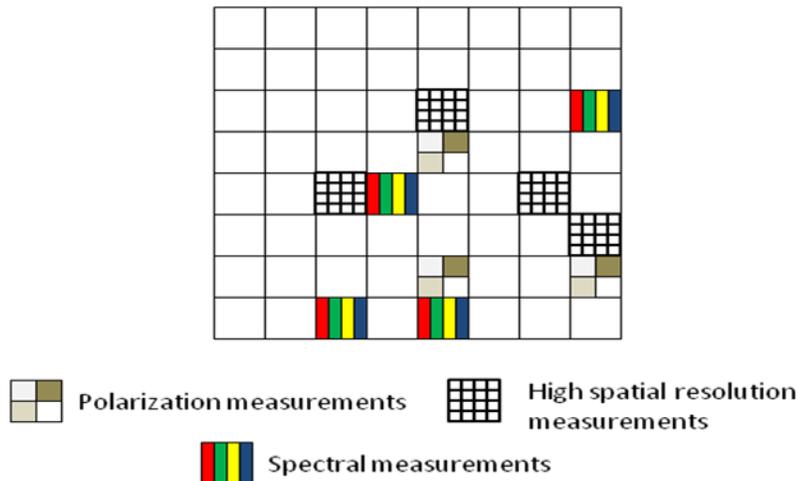
It should be noted that in a wide area sensor, most of the image data does not contain information of any significance or relevance. For example, wide stretches of sky, ocean or grassy areas do not contain potential targets of interest and hence do not need to be sampled at the same spatio-temporal resolution required for target identification and tracking. Therefore, novel systems have been designed to sample the scene at variable resolution thereby reducing the total data volume. Only those regions that have been determined to contain potential targets of interest are sampled at fine resolution and read out at high frame rates while rest of the areas are monitored at relatively coarse spatio-temporal sampling. However, a similar strategy of space-variant measurements has not been extended to multi-domain sensing involving spectral or polarization measurements. The main objective of this research program is to explore the design and development of sensing systems which make adaptive space variant measurements in multiple domains (space, time, spectrum, polarization).

A numerical example is now outlined to illustrate space-variant multi-domain measurement and its impact on total data volume generated. Consider a conventional multi-domain imaging sensor that captures 1000x1000 spatial samples. Furthermore, at each spatial sample, 16 spectral bands and four Stokes parameters (completely specifying state of polarization) are measured. Assume that the measurements are gathered at temporal update rates of 100 frames/sec in order to track fast moving targets. This hypothetical sensor generates data at 6.4 Gigasamples per second. Now consider two specific values for Ground Resolved Distance (GRD) of 1 meter or 0.1 meter over the entire field of view covered by 1000X1000 spatial samples. At the lower resolution (1 meter), the sensor is capable of detecting and tracking vehicles over 1 sq. km area. At higher resolution (0.1 meter), the sensor is capable of detecting and tracking activities of dismounts. So a sensor system that can only handle 6.4 Gigasamples/sec can either monitor wider area for vehicles or a 100 meter x 100 meter area for dismount activities but not both.

Now consider a situation where one is interested in monitoring 1 sq. km area for vehicular movement, dismount activity in ten (10) separate regions of 10x10 meters, make 16 spectral band measurements for chemical identification at ten (10) spatial locations (1 meter sample) and acquire polarization signatures at 10,000 spatially dispersed locations with 0.1 meter

spatial sampling. Total number of measurements in this case corresponds to approximately 115 Megasamples/sec. This is a reduction of over 50X in data volume generated without any loss of actionable information.

This scenario is illustrated in the figure below. In the figure, fine spatial sampling is 4X coarse sampling, four (4) spectral measurements and four measurements for polarization are indicated.



**Schematic diagram showing space variant, multi-modal measurements**

Such a system would lead to significant saving in power dissipation, cost, complexity and bandwidth of subsequent Processing Exploitation and Dissemination (PED) activity. Specific scenario presented above regarding number of regions of interest and details on spatial and sampling is meant to be illustrative and in practical applications it would be different and time dependent.

In reality, regions of interest for dismount detection and tracking and chemical detection are going to be dynamic and will be cued by results of sensing in other domains or by wide area sensing systems. So an ideal sensor system would possess the ability to dynamically select regions of interest for each domain under top-down control. This will allow the sensing system to track moving dismounts at high resolution over wider areas by dynamically steering regions of higher spatial resolution. It will also allow spectral measurements to be performed on regions that are changing either due to target motion or platform motion. Design and development of an adaptive, space variant, multi-domain sensing system is the primary focus of this research announcement.

Current State of the Art:

The conventional approach to building such a sensor system is to design multiple optical systems, each dedicated to making measurements on specific domains with some desired performance. For example, space variant resolution can be obtained by a combination of wide field, lower spatial resolution imaging system augmented by a narrow field of view, and high spatial resolution imaging system equipped with a fast steering mechanism. The latter system is sequentially steered to regions of interest as directed by the wide field system or other cues (so called "slew-to-cue" operation). Such systems are indeed widely deployed. Another method to implement variable spatial resolution uses custom Read-Out Integrated Circuits

(ROICs) that aggregate signals from detector pixels in regions where high resolution is not needed. It also reads out signals from different regions at different rates thereby achieving faster update rates in regions of interest while limiting total bandwidth. It is easy to imagine such "slew-to-cue" strategy deployed to gathering spectral and polarimetric data over selected regions of interest.

While these systems will indeed reduce total data volume collected, it will come at the expense of size, weight and power consumption of the added optical systems and fast steering mechanisms. Furthermore, the sequential nature of these subsystems will lead to significant latency since different regions of interest are acquired sequentially.

#### Program Objective:

The Office of Naval Research (ONR) solicit innovative ideas in adaptive, space variant, multi-domain sensor architectures, and technology that can meet the stated objectives while providing substantial improvements over the current state of the art as described above. More specifically, we seek the following characteristics from unified sensor architecture:

- Small size, weight, complexity and cost;
- Zero latency - all modalities acquired simultaneously;
- High photon utilization efficiency. Maximum fraction of light incident on common entrance aperture going towards task-relevant measurements;
- Scalable - the architecture should scale gracefully as one changes range, field of view, and spatial/spectral resolution; and
- Amenable to operating in different bands (visible, near infrared (NIR), short wave infrared (SWIR), midwave infrared (MWIR), long wave infrared (LWIR)) with appropriate selection of hardware.

As described before, adaptivity is the central concept of this solicitation. It implies that within the wide field of view that is sampled at coarse spatial resolution, regions of interest for high resolution spatial, spectral and polarization measurements will be dynamically selected in response to control signals. Processing algorithms and hardware required to generate these control signals from subsequent exploitation stage is outside the scope of this solicitation. However, the proposed sensor architecture must provide requisite interfaces for accepting these control signals. The desired rate of adaptation is dependent on specific applications and scenarios and hence is not specified in this research announcement. However, proposals should provide an analysis of factors that limit the rate of adaptation and state a target rate to be achieved.

#### Program Structure:

Specific research outcomes are described below:

- Detailed conceptual design of overall system architecture validated by analysis and simulations.
- Detailed specifications for component technologies needed to realize dynamic space-variant multi-modal operation with appropriate interfaces to lead to fully adaptive operation. It is understood that different materials and devices will be needed for operation in different spectral regions (visible or any other infra red bands). If the proposal requires component technologies not currently available but technologies that could be developed using conventional processes and effects, a conceptual design of necessary dynamic components and potential approaches to fabricate them must be included in the final report.

- Scaling analysis of system resource requirements (size, weight, power) as a function of performance (field of view, highest spatial resolution, number of spectral measurements, number of regions of interest).
- Experimental validation of proposed system architecture with a fixed space variant multi-modal sensing mode in a spectral band of contractor's choosing. This preliminary system will not be required to demonstrate dynamic operation. Operational specifications of this system are outlined in the numerical example described before.

A separately funded effort (to be executed at Department of Defense (DoD) laboratories or Federally Funded Research and Development Centers (FFRDcs)) will develop a baseline system that follows a conventional approach to system design. Results of this ancillary effort will provide benchmarks against which resource requirements and performance of the sensor systems developed by performers will be measured.

A follow-on research program to design and build an adaptive space variant multi-mode sensor system with functional feedback loop is anticipated. However, the objective and program plan for the subsequent program will be informed by the outcome of this research program and hence is separate from this first phase research effort.

## **7. Point(s) of Contact -**

Questions of a technical nature should be submitted to:

Primary Point of Contact:

Dr. Ravindra Athale  
Office of Naval Research  
ONR Code 312 - Communications and Networking Science and Technology  
Office of Naval Research  
875 North Randolph Street, Suite 1121  
Arlington, VA 22203-1995  
Email: [ravindra.athale@navy.mil](mailto:ravindra.athale@navy.mil)

Secondary Point of Contact:

Dr. Michael Duncan  
Office of Naval Research  
ONR Code 312 - Communications and Networking Science and Technology  
Office of Naval Research  
875 North Randolph Street, Suite W1116D  
Arlington, VA 22203-1995  
Email: [michael.d.duncan2@navy.mil](mailto:michael.d.duncan2@navy.mil)

Questions of a business nature should be submitted to:

Primary Point of Contact:

Rebecca Foster  
Office of Naval Research  
ONR Code BD251  
875 North Randolph Street, Suite W1272D  
Arlington, VA 22203-1995  
Email: [rebecca.d.foster@navy.mil](mailto:rebecca.d.foster@navy.mil)

Secondary Point of Contact:  
Vera M. Carroll  
Office of Naval Research  
ONR Code BD251  
875 North Randolph Street, Suite 1279  
Arlington, VA 22203-1995  
Email: [vera.carroll@navy.mil](mailto:vera.carroll@navy.mil)

Questions of a security nature should be submitted to:

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

Note: All UNCLASSIFIED communications shall be submitted via e-mail to the Technical Point of Contact (POC), with a copy to the designated Business POC.

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

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

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

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

### **8. Instrument Type(s) – Contracts, Grants, and Other Assistance Agreements**

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

Any contract awards resulting from this BAA will incorporate the most current FAR, DFARS, NMCARS and ONR clauses.

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](http://www.onr.navy.mil/en/Contracts-Grants/submit-proposal/grants-proposal/model-grant.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>.

## 9. Catalog of Federal Domestic Assistance (CFDA) Numbers –

12.300

## 10. Catalog of Federal Domestic Assistance (CFDA) Titles –

Department of Defense (DoD) Basic and Applied Scientific Research

## 11. Other Information -

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

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

Pursuant to DoD policy, research performed under grants and contracts that are a) funded by Budget Category 6.2 (Applied Research) and NOT performed on-campus at a university or b) funded by Budget Category 6.3 (Advanced Research) does not meet the definition of "contracted fundamental research." In conformance with the USD (AT&L) guidance and National Security Decision Direction 189, ONR will place no restriction on the conduct or reporting of unclassified "contracted fundamental research," except as otherwise required by statute, regulation or Executive Order. For certain research projects, it may be possible that although the research being performed by the prime contractor is restricted research, a subcontractor may be conducting "contracted fundamental research." In those cases, it is the **prime contractor's responsibility** in the proposal to identify and describe the subcontracted unclassified research and include a statement confirming that the work has been scoped, negotiated, and determined to be fundamental research according to the prime contractor and research performer.

Normally, fundamental research is awarded under grants with universities and under contracts with industry. Non-fundamental research is normally awarded under contracts and may require restrictions during the conduct of the research and DoD pre-publication review of such research results due to subject matter sensitivity. Potential Offerors should consult with the appropriate ONR POCs to determine whether the proposed effort would constitute basic research, applied research or advanced research.

As regards to the present BAA, the Research and Development efforts to be funded will consist of applied research and advanced technology development. The funds available to support awards are Budget Activity 2 and 3.

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.

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

## **II. AWARD INFORMATION**

### **1. Amount and Period of Performance-**

The Office of Naval Research (NR) plans to award one (1) to three (3) contract(s) (particularly cost plus fixed fee (CPFF) type contracts), grants, cooperative agreements, and other transaction agreements that represent the best value to the Government in accordance with the Research Opportunity Description and evaluation criteria.

The total funding amount for this for this program is \$3.0M and individual awards could range between \$1.0M - \$3.0M.

The period of performance may be up to twenty-four (24) months with an estimated start date of on or about 31 March 2014, subject to date of final award and availability of new fiscal year funds. It is the offeror's responsibility to determine the performance period for their proposed research effort.

The award(s) will be made for the full performance period requested. Options will not be utilized.

### **2. Peer Reviews-**

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 will 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. Offerors may include travel costs for the Principal Investigator (PI) to attend the peer review.

### **3. Production and Testing of Prototypes-**

In the case of funded proposals for the production and testing of prototypes, ONR may during the contract period add a contract line item or contract option for the provision of advanced component development or for the delivery of additional prototype units. However, such a

contract addition shall be subject to the limitations contained in Section 819 of the National Defense Authorization Act for Fiscal Year 2010.

### **III. ELIGIBILITY INFORMATION**

All responsible sources from academia and industry may submit proposals under this BAA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this BAA will be set aside for HBCU and MI participation.

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

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

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

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

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

#### **For Grant, Cooperative Agreement and Other Transaction Agreement applications:**

The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252, requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR 33.110. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or other transaction agreements) as either a prime or sub-recipient under this BAA must provide information in its proposal that describes the necessary processes and systems in place to comply with the reporting requirements identified in 2 CFR 33.220. An entity is **exempt** from this requirement **UNLESS** in the preceding fiscal year it received: a) 80 percent or more of its annual gross revenue in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; b) \$25 million or more in annual gross revenue from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and c) the public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities

Exchange Act of 1934 or section 6104 of the Internal Revenue Code of 1986.

#### **IV. APPLICATION AND SUBMISSION INFORMATION**

##### **1. Application and Submission Process - White Papers and Full Proposals**

White Papers: The due date for white papers is no later than 2:00 PM Eastern Daylight Time (EDT) on Thursday, 11 July 2013. White papers received after the published due date will not be considered for funding in FY 2014. White papers are required prior to submitting full proposals. Each white paper should state that it is submitted in response to this BAA. White Papers should be sent by email to [ravindra.athale@navy.mil](mailto:ravindra.athale@navy.mil).

Navy evaluations of the white papers will be issued via email notification on or about Thursday, 01 August 2013. Any offeror whose white paper was not identified as being of "particular value" to the Navy is ineligible to submit a full proposal under the BAA.

Full Proposals: The due date for full proposals is no later than 2:00 PM (EDT) on Thursday, 12 September 2013. Full proposals received after the published due date will not be considered for funding. The only acceptable methods for submission of full proposals for contracts is via the United States Postal Service (USPS) with delivery confirmation, via a commercial carrier (FedEx and UPS) to the attention of Dr. Ravindra Athale or Dr. Michael Duncan at the address provided later in this BAA.

***NOTE: Full Proposals sent by email or fax will not be considered. Delivery of materials by USPS, even when sent as Express Mail, may take a week or more due to current security procedures in place to ensure the safety of U.S. mail to DoD activities.***

Notice of Navy selections based on the full proposal submissions will be issued via email on or about Thursday, 03 October 2013. Proposals received after the published due date and time will not be considered for funding. Proposals exceeding the page limit may not be evaluated.

##### **2. Content and Format of White Papers/Full Proposals –**

White Papers and Full Proposals submitted under the BAA are expected to be unclassified; however, confidential/classified responses are permitted. Contracts or other instruments resulting from a classified proposal will be unclassified.

###### Unclassified Proposal Instructions:

Unclassified White Papers and Full Proposals shall be submitted in accordance with Section IV. entitled "Application and Submission Information".

###### Classified Proposal Instructions:

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

OUTSIDE ENVELOPE (no classification marking):

Office of Naval Research  
Document Control Unit

ONR Code 43  
875 North Randolph Street  
Arlington, VA 22203-1995

The inner wrapper of the classified proposal should be addressed to the attention of Dr. Ravindra Athale (ravindra.athale@navy.mil) Code 312 and marked in the following manner:

INNER ENVELOPE (stamped with the overall classification of the material)  
Program: Electro Optic and Infra Red Sensing Technologies Discovery and Inventions Portfolio  
Attn: Dr. Ravindra Athale  
ONR Code: 312  
875 North Randolph Street  
Arlington, VA 22203-1995

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

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

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

a. **WHITE PAPERS**

**White Paper Format**

- Paper Size - 8.5 x 11 inch paper
- Margins - 1 inch
- Spacing - single spaced
- Font - Times New Roman, 12 point
- Max. Number of Pages permitted: Five (5) pages (excluding cover page, resumes, bibliographies, and table of contents)
- Copies - One (1) electronic copy in Adobe PDF or Word 2007 delivered via email. Electronic (email) submissions should be sent to the attention of the TPOC Dr. Ravindra Athale at ravindra.athale@navy.mil. The subject line of the email shall read "ONR BAA13-015 White Paper Submission."

**NOTE: 1) Do not send .ZIP files; 2) Do not send password protected files.**

In order to provide traceability and evidence of submission, Offerors may wish to use the "Delivery Receipt" option available from Microsoft Outlook and other email programs that will automatically generate a response when the subject email is delivered to the recipient's email system. Consult the User's Manual for your email software for further details on this feature.

**White Paper Content**

- **Cover Page:** The Cover Page shall be labeled "WHITE PAPER", and shall include the BAA number (13-015), proposed title, Offeror's administrative and technical points of contact, with telephone numbers, facsimile numbers, and Internet

addresses, and shall be signed by an authorized officer.

- **Technical Concept:** A description of the technology innovation and technical risk areas. A description of the technology innovation, technical risk areas, and recent technical breakthroughs that will reduce risk. This section should also provide the relevance to BAA research opportunity description.
- **Operational Naval Concept:** A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.
- **Operational Utility Assessment Plan:** A plan for demonstrating and evaluating the operational effectiveness of the Offeror's proposed products or processes in field experiments and/or tests in a simulated environment.
- **Rough Order of Magnitude (ROM):** 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 one (1) page) shall be segregated by both task and year (over the period of performance (i.e., 1, or 2 years).

## **b. FULL PROPOSALS**

### **i. INSTRUCTIONS FOR CONTRACTS, COOPERATIVE AGREEMENTS, AND OTHER TRANSACTION AGREEMENTS (Does not include Grants)**

*NOTE: Submission instructions for BAAs issued after FY 2010 have changed significantly from previous requirements. Potential Offerors are advised to carefully read and follow the instructions below. The new format and requirements have been developed to streamline and ease both the submission and the review of proposals.*

*Proposal Package: The following four (4) documents with attachments comprise a complete proposal package:*

- (1) Technical Proposal Template (pdf);
- (2) Technical Content (word);
- (3) Cost Proposal Spreadsheet (excel); and
- (4) Adequacy Checklist for Pre Award Audit (SF 1408) (as applicable).

*These documents can be found at: <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/cost-proposal.aspx>.*

*All have instructions imbedded into them that will assist in completing the documents. Also, both the Technical Proposal Template and the Cost Proposal Spreadsheet require completion of cost-related information. Please note that attachments can be incorporated into the Technical Proposal Template for submission.*

The format requirements for any 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

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

<http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal/cost-proposal.aspx>. Click on the "proposal spreadsheet" link and save a copy of the spreadsheet. Instructions for completion have been embedded into the spreadsheet. Any proposed options that are identified in the Technical Proposal Template or Technical Content documents, but are not fully priced out in the Cost Proposal Spreadsheet, will 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.

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

Offerors should submit one (1) original, plus four (4) hard copies and one (1) electronic copy on CD-ROM as discussed with the cognizant Program Officer, of their proposal package. The electronic copy should be submitted in a secure, pdf-compatible format, except for the electronic file for the Cost Proposal Spreadsheet which should be submitted in a Microsoft Excel 2007 compatible format. All attachments should be submitted in a secure, pdf-compatible format.

The secure pdf-compatible format is intended to prevent unauthorized editing of the proposal prior to any award. A password should not be required for opening the proposal document, but the Government must have the ability to print and copy text, images, and other content. Offerors may also submit their Technical Proposal Template and Technical Content in an electronic file that allows for revision (preferably in Microsoft Word) to facilitate the communication of potential revisions. 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.

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.

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

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

To attach the technical proposal in Grants.gov, download the application package  
Click on "Research and Related Other Project Information"  
Click on "Move form to Submission List"  
Click on "Open Form"

You will see a new PDF document titled "Research & Related Other Project Information"  
Block 7 is the Project Summary/Abstract -> click on "Add attachment" and attach the project summary/abstract. (You will not be able to type in the box, therefore, save the file you want to attach as Project Summary or Abstract).

Block 8 is the Project Narrative -> click on Add attachment and attach the technical proposal. (Save the file as Volume I- Technical Proposal since you will not be able to type in the box).

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

- Paper Size - 8.5 x 11 inch paper
- Margins - 1 inch
- Spacing - single-spaced
- Font - Times New Roman, 12 point
- Number of Pages - Volume (Vol. 1) is limited to no more than twenty (20) pages. Limitations within sections of the proposal, if any, are indicated in the individual descriptions shown below. The cover page, table of contents, resumes and current and pending project and proposal submissions information are excluded from the page limitations. Full Proposals exceeding the page limit may not be evaluated. There are no page limitations to Volume 2.
- Copies - the full proposal should be submitted electronically at <http://www.grants.gov> as delineated in paragraph 5 below.

**Volume 1: Technical Proposal**

- **Cover Page:** This should include the words "Technical Proposal" and the following:
  1. BAA Number 13-010;
  2. Title of Proposal;
  3. Identity of prime Offeror and complete list of subawards, if applicable;
  4. Technical contact (name, address, phone/fax, electronic mail address)
  5. Administrative/business contact (name, address, phone/fax, electronic mail address);
  6. Proposed period of performance (identify both the base period and any options, if included); and
  7. Signature of Authorized Representative.
- **Table of Contents:** An alphabetical/numerical listing of the sections within the

proposal, including corresponding page numbers. *Not included in the page count.*

- **Technical Approach and Justification:** The major portion of the proposal should consist of a clear description of the technical approach being proposed. This discussion should provide the technical foundation / justification for pursuing this particular approach / direction and why one could expect it to enable the objectives of the proposal to be met..
  - **Operational Naval Concept:** A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.
  - **Operational Utility Assessment Plan:** A plan for demonstrating and evaluating the operational effectiveness of the Offeror's proposed products or processes in field experiments and/or tests in a simulated environment.
- **Project Schedule and Milestones:** A summary of the schedule of events and milestones.
- **Reports:** The following are sample reports that are typically required under a research effort:
  - Technical and Financial Progress Reports
  - Presentation Materials
  - Final Report

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

- **Current and Pending Project and Proposal Submissions:** Offerors are required to provide information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing contracts, grants, and other assistance agreements. Offerors shall provide the following information of any related proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations).

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

- 1) Title of Proposal and Summary;
- 2) Source and amount of funding (annual direct costs; provide contract and/or grant numbers for current contracts/grants);
- 3) Percentage effort devoted to each project;
- 4) Identity of prime Offeror and complete list of subawards, if applicable;
- 5) Technical contact (name, address, phone/fax, electronic mail address)
- 6) Administrative/business contact (name, address, phone/fax, electronic mail address);
- 7) Duration of effort (differentiate basic effort);
- 8) The proposed project and all other projects or activities requiring a portion of time of the Principal Investigator (PI) and other senior personnel must be included, even if they receive no salary support from the project(s);

- 9) The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months or labor hours per year to be devoted to the project, regardless of source of support; and
- 10) State how projects are related to the proposed effort and indicate degree of overlap.

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

## **VOLUME 2: Cost Proposal**

The offeror 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 will result in the options not being included in the award. Assume that performance will start no earlier than three (3) months after the date the cost proposal is submitted. A separate Adobe .pdf document should be included in the application that provides appropriate justification and/or supporting documentation for each element of cost proposed.

**Part 1:** The itemized budget must include the following:

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

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

- **Fringe Benefits and Indirect Costs** - (i.e., F&A, Overhead, G&A, etc) - The proposal should show the rates and calculation of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the rates have not been approved/negotiated, provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. Additional information may be requested, if needed. If composite rates are used, provide the calculations used in deriving the composite rates.
- **Travel** -The proposed travel cost should include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the 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. Offerors 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 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 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. Fee/profit is unallowable on subawards.
- **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 are normally 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 will be used primarily or exclusively for the project. For computer/laptop purchases and other general purpose equipment, if proposed, include a statement indicating how each item of equipment will be integrated into the program or used as an integral part of the research effort.
- **Other Direct Costs** – Provide an itemized list of all other proposed other direct costs such as Graduate Assistant tuition, laboratory fees, report and publication costs, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

**NOTE:** *If the grant proposal is for a conference, workshop, or symposium:*

1. *ONR will not sponsor ONR, Navy, or DoD driven event. Provide a list of other sponsors and the requested amounts to be funded by all sponsors.*
2. *The funds provided by ONR may be used to pay for food or beverages as a direct cost only in exceptional circumstances. The funds will not be used for food or beverages unless*
  - a. *the grant proposal contains a request for such funding that is fully supported factually in accordance with the cost principles of the relevant OMB Circular, and*
  - b. *the grants officer determines that the funding is a reasonable, allocable, allowable expense under the relevant cost principles.*

- Options – Options will not be utilized.
- Fee/Profit - Fee/profit is unallowable under assistance agreements at either the prime or subaward level but may be permitted on any subcontracts issued by the prime awardee.

**Part 2** – Cost breakdown by Government fiscal year and task/sub-task corresponding to the same task breakdown in the proposed Statement of Work. Options will not be utilized.

### 3. Significant Dates and Times -

Event	Date	Time
White Paper Due Date	7/11/2013	2:00 PM Eastern Daylight Time
Notification of White Paper Evaluation*	8/1/2013	
Full Proposal Due Date	9/12/2013	2:00 PM Eastern Daylight Time
Notification of Selection: Full Proposals*	10/3/2013	
Awards*	3/31/2014	

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

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

### 4. Submission of Late Proposals –

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

- If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 P.M. one working day prior to the date specified for receipt of proposals; or
- 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
- It was the only proposal received.

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

Acceptable evidence to establish the time or receipt at the Government installation includes

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

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

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

## **5. Submission of Grant Proposals through Grants.gov -**

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

White Papers should not be submitted through the Grants.gov Apply process, but rather should be sent directly to ONR. White Papers should be sent directly to the Technical Point of Contact. White Paper format requirements are found in Section IV, item 2a above.

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

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

Use the Grants.gov Organization Registration Checklist at [http://www.grants.gov/applicants/register\\_your\\_organization.jsp](http://www.grants.gov/applicants/register_your_organization.jsp) which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called 'MPIN' are important steps in the SAM registration process. Applicants who are not registered with SAM.gov and Grants.gov should allow at least 21 days to complete these requirements. The process should be started as soon as possible. Any questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 (1-606-545-5035 for foreign applicants) or [support@grants.gov](mailto:support@grants.gov).

### **Special Notices Relative to Grant Applications to be submitted through Grants.Gov:**

All attachments to grant applications submitted through [Grants.Gov](http://www.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 will not be considered for award.

Proposal Receipt Notices:

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

Number 1 – The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted.

Number 2 – The applicant will receive an e-mail indicating that the proposal has been validated by Grants.gov within two days of submission (This means that all of the required fields have been completed). After an institution submits an application, Grants.gov generates a submission receipt via email and also sets the application status to "Received." This receipt verifies the Application has been successfully delivered to the Grants.gov system. Next, Grants.gov verifies the submission is valid by ensuring it does not contain viruses, the opportunity is still open, and the applicant login and applicant DUNS number match. If the submission is valid, Grants.gov generates a submission validation receipt via email and sets the application status to "Validated." If the application is not validated, the application status is set to "Rejected." The system sends a rejection email notification to the institution, and the institution must resubmit the application package. Applicants can track the status of their application by logging in to Grants.gov.

Number 3 – The third notice is an acknowledgment of receipt in e-mail form from ONR within ten days from the proposal due date, if applicable. The e-mail is sent to the authorized representative for the institution. The e-mail for proposals notes that the proposal has been received and provides the assigned tracking number.

## 6. Address for the Submission of White Papers and Full Proposals for Contracts -

White Papers must be emailed to Dr. Ravindra Athale at the following email address: [ravindra.athale@navy.mil](mailto:ravindra.athale@navy.mil).

Hard Copies of the Full Proposal and the DVD or CD-ROM of the Full Proposal should be sent to the Office of Naval Research as indicated below. All supporting documentation should be submitted with the DVD or CD-ROM of the Full Proposal.

Primary Contact	Secondary Contact
Office of Naval Research Attn: Dr. Ravindra Athale ONR Department Code: 312 875 North Randolph Street – Suite 1121 Arlington, VA 22203-1995 (703) 588-1916	Office of Naval Research Attn: Dr. Michael Duncan ONR Department Code: 312 875 North Randolph Street – Suite W1116D Arlington, VA 22203-1995

## V. EVALUATION INFORMATION

Awards under this BAA will be made to proposers on the basis of the evaluation criteria listed below, and program balance to provide overall value to the Government. The Government reserves the right to request any additional, necessary documentation once it makes the

award instrument determination. The Government reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time, or the proposer fails to timely provide requested additional information. Evaluations will be conducted using the following evaluation criteria. Criteria 1 - 4 are significantly more important than Criterion 5, and Criteria 1 through 4 are of equal value.

#### **Evaluation Criteria –**

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

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.

The ultimate recommendation for award of proposals is made by ONR's scientific/technical community. Recommended proposals will be forwarded to the ONR contracts department. Any notification received from ONR that indicates that the Offeror's full proposal has been recommended, does not ultimately guarantee an award will be made. This notice indicates that the proposal has been selected in accordance with the evaluation criteria above and has been sent to the contracting department to conduct cost analysis, determine the offeror's responsibility, and take any other relevant steps necessary prior to commencing negotiations with the offeror.

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

## **2. Commitment to Small Business - (For Contract Awards Only)**

The Office of Naval Research is strongly committed to providing meaningful 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.

a.) Subcontracting Plan - For proposed awards to be made as contracts that exceed \$650,000, large businesses and non-profits (including educational institutions) shall provide a Subcontracting Plan that contains all elements required by FAR 52.219-9, as supplemented by DFARS 252.219-7003. Small businesses are exempt from this requirement.

The Subcontracting Plan should be submitted as an attachment to the "Technical Proposal Template" and will 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 "Technical Proposal Template."

Plans will be reviewed for adequacy, ensuring that the required information, goals, and assurances are included. Zero Percent (0%) for goals, or Zero Dollars (\$0), or Not Applicable (N/A), are unacceptable. If a subcontracting plan is not submitted with the proposal package or the negotiation of an acceptable subcontracting plan is required, there could be a delay in the issuance of an award. In addition, in accordance with FAR 52.219-9, failure to submit and negotiate a subcontracting plan may make an offeror ineligible for contract award.

Offerors shall propose a plan that ensures small businesses (inclusive of SDBs, WOSBs, HUBZone, VOSBs and SDVOSBs, etc.) will have the maximum practicable opportunity to participate in contract performance consistent with its 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 fiscal year subcontracting goals found on the Department of Defense Office of Small Business Program website at: <http://www.acq.osd.mil/osbp/>. If proposed goals are below the statutory requirements, then the offeror should provide a viable written explanation as to why small businesses are unable to be utilized and what attempts have been taken to ensure that small business were given the opportunity to participate in the effort to the maximum extent practicable.

All offerors who become subsequent awardees will submit the Individual Subcontract Report (ISR) (formerly SF294), and the Summary Subcontract Report (SSR) (formerly the SF295) using the Electronic Subcontracting Reporting System (eSRS) at: <http://www.esrs.gov>, following the instructions in the eSRS. In addition subsequent awardees shall adhere to the following;

\* The ISR shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the contracting officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period.

\*The SSR shall be submitted as follows: The report shall be submitted semi-annually for the six months ending March 31 and the twelve months ending September 30. When selecting the appropriate department/agency under "agency to which this report is submitted", choose from the second drop-down menu, which includes Department of the Navy (1700) (Note: do not select from below the departments/agencies (component) listed beyond the second drop-down menu). Include the following email addresses: [OSBP.info@navy.mil](mailto:OSBP.info@navy.mil) which will provide notification to the Navy SSR Program Coordinator regarding the submission of the SSR.

\* Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using the eSRS;

\*Provide its prime contract number, its DUNS number, and the e-mail address of the offeror's official responsible for acknowledging receipt of or rejecting the ISRs to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS

when submitting their ISRs; and

\*Require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

b.) 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, HUB Zones, SDBs, and WOSBs concerns will have to the maximum practicable opportunity to participate in contract performance consistent with its efficient performance.

This assertion will be reviewed to ensure that it supports this policy by providing meaningful subcontracting opportunities. The statement should be submitted as a part of the proposal package and will not be included in the page count.

c.) Subcontracting Resources – Subcontracting to a prime contractor can be a good way to participate in the contracting process. Large businesses with prime contracts exceeding \$650,000 (except for construction, which is \$1.5 million) must provide a plan with subcontracting opportunities for all categories of small business.

In accordance with FAR Subpart 5.206, entities may transmit a notice to a Government Point of Entry (GPE) to seek competition for subcontracts, to increase participation by qualified HUBZone small business, small, small disadvantaged, women-owned small business, veteran-owned small business and service-disabled veteran-owned small business concerns is encouraged, and to meet established subcontracting plan goal as follows:

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

The notices must describe—

- (1) The business opportunity;
- (2) Any prequalification requirements; and
- (3) Where to obtain technical data needed to respond to the requirement.

An example of a GPE is the Small Business Administration's (SBA) SUB-Net database which is a listing of subcontracting solicitations and opportunities posted by large prime contractors and other non-federal agencies. SUB-Net is a place where prime contractors may post solicitations or sources sought notices for small business.

To advertise or to locate potential subcontracting opportunities, go to SUB-Net' at <http://web.sba.gov/subnet/search/index.cfm>, where you will be able to post or review the site to identify subcontracting opportunities that are in your area of expertise. It's easy to search by all solicitations or simply by entering in the NAICS Code of the industry you are interested

in searching for a subcontract.

In addition, the following is a list of potential Subcontracting Resources that may assist in locating potential subcontracting partners/opportunities:

\*Companies Participating in DoD Subcontracting Program Report –  
[www.acq.osd.mil/osbp/docs/primes2010.csv](http://www.acq.osd.mil/osbp/docs/primes2010.csv)

\*DAU Small Business Community of Practice (SB COP) - <https://acc.dau.mil/smallbusiness>

\*DefenseLink ≥ \$5M award notices - [www.defenselink.mil/contracts](http://www.defenselink.mil/contracts)

\*Dynamic Small Business Search (DSBS) - [http://dsbs.sba.gov/dsbs/search/dsp\\_dsbs.cfm](http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm)

\*Electronic Subcontracting Reporting System (eSRS) - [www.esrs.gov](http://www.esrs.gov)

\*FEDBIZOPPS - [www.fbo.gov](http://www.fbo.gov)

\*Procurement Technical Assistance Centers (PTAC) -  
<http://www.dla.mil/SmallBusiness/Pages/ProcurementTechnicalAssistanceCenters.aspx>

\*SBA Subcontracting Opportunities Directory -  
[www.sba.gov/aboutsba/sbaprograms/gc/contacts/index.html](http://www.sba.gov/aboutsba/sbaprograms/gc/contacts/index.html)

\*SBA Subnet - A place where Prime Contractors post "solicitation" or "notice of sources sought" (NSS) for small business -  
<http://web.sba.gov/subnet/search/index.cfm?CFID=24832446&CFTOKEN=e306d5c1e81faf81-657E0799-C277-05F7-9C7FDBE0EDA36451&jsessionid=30305c76a72a19b44e0a33275668261f1239>

\*Subcontracting Opportunities with DoD Major Prime Contractors -  
[www.acq.osd.mil/osbp/sb/dod.shtml](http://www.acq.osd.mil/osbp/sb/dod.shtml)

\*Tips for DoD contractors Submitting Subcontracting Reports -  
[www.acq.osd.mil/osbp/docs/tips\\_for\\_contractors\\_subcontracting.pdf](http://www.acq.osd.mil/osbp/docs/tips_for_contractors_subcontracting.pdf)

### **3. Options -**

Options will not be utilized.

### **4. Evaluation Panel -**

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

## **VI. AWARD ADMINISTRATION INFORMATION**

## 1. Administrative Requirements -

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

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

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

- Access to your Grant, Cooperative Agreement, Other Transaction and Contract Award:

Effective 01 October 2011, hard copies of award/modification documents are no longer mailed to Offerors. All Office of Naval Research (ONR) award/modification documents will be available via the Department of Defense (DoD) Electronic Document Access System (EDA).

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

If you do not currently have access to EDA, complete a self-registration request as a "Vendor" via <http://eda.ogden.disa.mil> following the steps below:

Click "New User Registration" (from the left Menu)  
Click "Begin VENDOR User Registration Process"  
Click "EDA Registration Form" under Username/Password (enter the appropriate data)  
Complete & Submit Registration form

Allow five (5) business days for your registration to be processed. EDA will notify you by email when your account is approved.

Registration questions may be directed to the EDA help desk toll free at 1-866-618-5988, Commercial at 801-605-7095, or via email at [cscassig@csd.disa.mil](mailto:cscassig@csd.disa.mil) (Subject: EDA Assistance).

- Grants, Cooperative Agreements and Normal Other Transaction Agreements (OTAs) Certification Requirements:
  - i. CERTIFICATION REGARDING RESTRICTIONS ON LOBBYING

Grant and Cooperative Agreement awards greater than \$100,000, as well as OTAs not under Section 845, 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](http://Grants.gov) (complete Block 17). The following certification applies likewise to each cooperating agreement and normal OTA applicant seeking federal assistance funds exceeding \$100,000:

- 1) No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the applicant shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3) The applicant shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

ii. REPRESENTATION REGARDING AN UNPAID DELIQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER ANY FEDERAL LAW – DOD APPROPRIATIONS -

All grant applicants are required to submit the completed "Certification for Tax Delinquency and Criminal Violation" form. This form shall be included as an attachment to the required proposal documents submitted via Grants.gov, and may be found here: <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/~media/Files/Contracts-Grants/Downloadable%20Forms/Tax-Delinquency-Criminal-Violation.ashx>. This form makes the following certification:

(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

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.

## **VII. OTHER INFORMATION**

### **1. Government Property/Government Furnished Equipment (GFE) and Facilities**

Government research facilities and operational military units are available and should be considered as potential government-furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for any one specific program. The use of these facilities and resources will be negotiated as the program unfolds. Offerors should indicate in the Technical Proposal Template, Section II, Blocks 8 and 9, which of these facilities are critical for the project's success.

### **2. Security Classification**

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

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

ONR does not provide access to classified material under grants.

### **3. Use of Animals and Human Subjects in Research**

RESERVED

### **4. Recombinant DNA**

RESERVED

### **5. Use of Arms, Ammunition and Explosives**

RESERVED

## **6. 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 <http://www.hpcmo.hpc.mil/>.

## **7. Organizational Conflicts of Interest**

All Offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any ONR technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a research and development performer. Proposals that fail to fully disclose potential conflicts of interests will be rejected without technical evaluation and withdrawn from further consideration for award. Additional ONR OCI guidance can be found at <http://www.onr.navy.mil/About-ONR/compliance-protections/Organizational-Conflicts-Interest.aspx>. If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with ONR by sending his/her contact information and a summary of the potential conflict by e-mail to the Business Point of Contact in Section I, item 7 above, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Contracting Officer after full consideration of the circumstances, any conflict situation cannot be effectively avoided, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

## **8. Project Meetings and Reviews**

Individual program reviews between the ONR sponsor and the performer may be held as necessary. Program status reviews may also be held to provide a forum for reviews of the latest results from experiments and any other incremental progress towards the major demonstrations. These meetings will be held at various sites throughout the country. For costing purposes, offerors should assume that 40% of these meetings will be at or near ONR, Arlington VA and 60% at other contractor or government facilities. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

## **9. Reporting Executive Compensation and First-Tier Subcontract Awards**

The FAR clause 52.204-10, "Reporting Executive Compensation and First-Tier Subcontract Awards," will be used in all procurement contracts valued at \$25,000 or more. A similar award term will be used in all grants and cooperative agreements.

## **10. Military Recruiting On Campus (APPLIES ONLY TO GRANTS)**

Military Recruiting on Campus (DoDGARS Part 22.520) applies to domestic U. S. colleges and

universities. Appropriate language from 32CFR22.520 Campus access for military recruiting and Reserve Officer Training Corps (ROTC) will be incorporated in all grant awards.

#### **11. Combating Trafficking in Persons**

Appropriate language from FAR Clause 52.222-50 will be incorporated in all awards.

#### **12. Updates of Information regarding Responsibility Matters**

FAR clause 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matter, will be included in all contracts valued at \$500,000 where the contractor has current active Federal contracts and grants with total value greater than \$10,000,000.

#### **13. Employment Eligibility Verification**

As per FAR 22.1802, recipients of FAR-based procurement contracts must enroll as Federal Contractors in E-verify and use E-verify to verify employment eligibility of all employees assigned to the award. All resultant contracts from this solicitation will include FAR 52.222-54, "Employment Eligibility Verification." This clause will not be included in grants, cooperative agreements, or Other Transactions.

#### **14. Central Contractor Registration (CCR)**

FAR 52.204-7 Central Contractor Registration and FAR 52.204-13 Central Contractor Registration Maintenance are incorporated into this BAA, and FAR 52.204-13 will be incorporated in all awards.