

**ONR BAA Announcement # 11-032**

**Amendment 0002**



**The purpose of Amendment 0002 to BAA 11-032 is to make the following changes:**

- 1) Revise the Response Date in Section I.5, White Paper Cutoff now 7 Nov 2011;**
- 2) Add Naval Operational Challenge Areas and JUONs Challenge Areas with a Navy/Marine Corps application in Sections I.6 and III;**
- 3) Modify the Application and Submission information in Section IV to include white paper due date, evaluation notification date, reference to the items in number 2 above, and the anticipated schedule of events table , and;**
- 4) Clarify the Evaluation Information in Section V.**

**Amendment 0002 replaces in their entirety all previous postings of BAA 11-032. Answers to submitted Questions that are not related to the Navy's Needs Statements will be addressed via the next BAA amendment.**

**Department of the Navy Rapid Innovation Fund**

**INTRODUCTION:**

This publication constitutes a Broad Agency Announcement (BAA) issued pursuant to Section 1073 of the National Defense Authorization Act for FY 2011, Public Law 111-383, and as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2). A formal Request for Proposals (RFP), solicitation, and/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 select for award all, some or none of the proposals in response to 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,  
One Liberty Center  
875 N. Randolph Street  
Arlington, VA 22203-1995

### **2. Research Opportunity Title -**

Department of the Navy Rapid Innovation Fund

### **3. Program Name -**

N/A

### **4. Research Opportunity Number –**

11-032

### **5. Response Date –**

White Papers Cutoff Date:	7 November 2011
Full Proposals:	30 Days after Invitation

### **6. Research Opportunity Description -**

This BAA is primarily for the validation and transition through the Rapid Innovation Fund (RIF) of technologies developed by small businesses (less than 500 employees) including those developed under Small Business Innovation Research (SBIR) Phase II awards and under DoD reimbursed Independent Research and Development (IR&D) that directly support Department of Navy (DoN) needs and programs.

RIF intends to fund projects that have already been through the early stages of R&D (primarily through SBIR or IR&D funding). The proposed RIF effort must advance the technology by validating and demonstrating the capability in a realistic environment (Technology Readiness levels 6 and 7, respectively). The R&D efforts to be funded under this BAA will consist of Advanced Component Development and Prototypes, and the funds available to support awards are Budget Activity 4.

"Independent Research and Development" is defined as R&D initiated and conducted by defense contractors independent of DoD control and without direct DoD funding. IR&D includes: (1) basic research, (2) applied research, (3) development, and (4) systems and other concept formulation studies. IR&D does not include R&D performed under grant or contract from the Government or third parties and does not include technical effort specifically to support bid or proposal activities. (IR&D is defined in Federal Acquisition Regulation (FAR) 31.205-18(a).)

Those selected for award may receive up to \$3M in RIF funding; developmental efforts should be completed within 24 months, with fielding scheduled for not more than 36 months after contract award. Funds available for awards are \$24 million, contingent upon acceptable proposals. The Government may provide additional funds, but there is no commitment by the Government that the total amount of awards will exceed \$24 million.

The goals of the DoN Rapid Innovation Fund (RIF) are to enhance and accelerate delivery of military capability, reduce the cost of weapons systems either fielded or under development, or improve the quality of life for service personnel, by meeting urgent operational needs or other critical national security needs. Technologies of interest will be able to clearly identify and define how they satisfy a Joint Urgent Operational Need (JUON), Navy Urgent Operational Need (UON), Marine Corps Urgent Universal Need (UUN), Naval Operational Challenge Area (see below), JUONs Challenge Area with a Navy/Marine Corps application (see **Attachment 1**), critical National Security Need as cited in a Presidential Executive Order or equivalent document, and/or support rapid insertion into a Department of Navy (DoN) Program of Record (PoR) or other acquisition program. In order to be considered, technologies proposed must show a clear transition path into a DoN PoR or as a fielded DoN prototype system.

### **Naval Operational Challenge Areas**

- IED detection improvements (see also Attachment 1 JUONs list).
- Ambush and sniper detection and protection enhancements including armor improvements (see also Attachment 1 JUONs list).
- Surveillance enhancements for miniature, small and full-sized unmanned air vehicles (see also Attachment 1 JUONs list).
- Information dominance as a warfighting domain, including operations in anti-access, communications-denied field environments.
- Network security in communications-degraded or denied environments.
- High frequency and other satellites security from cyber attacks and intrusions.

- Anti-corrosion for aluminum, composites and other advanced materials, including intersections of these materials in warfighting platforms.
- Continuous non-destruction evaluation of critical platform components and sub-systems.
- Advanced radar enhancements for surface operations.
- Integrated air and missile defense enhancements.
- Human social and cultural behavior training and operational tools.
- Automated testing and retesting to ensure software and middleware integrity throughout the provider enterprise.
- Improved thermal management in key subsystems and systems of high-performing platforms.
- Littoral battlespace security management improvements in communications and anti-mine operations.
- Power generation and storage improvements for miniature and small unmanned underwater vehicles, aligned with safety and endurance requirements.
- Power generation and storage improvements for expeditionary field operations.
- Energy efficiency improvements in key warfighter components and installations for expeditionary field operations.
- Land-based mine detection and removal improvements.
- Anti-missile systems for detection, avoidance and destruction.
- Renewable Energy: Lightweight, cost-effective and efficient, man-portable and man-wearable capabilities to harvest energy from the sun, battlefield waste, vehicles, and personnel. Technologies must be embarkable aboard naval shipping and transportable aboard ground and air assault transportation.
- Expeditionary Energy Storage: Lightweight, high energy density (W/kg) and high energy volume (W/L) approaches to store harvested energy (e.g. on individuals, vehicles, fixed sites, weapon systems, etc.). Technology must support expeditionary operations that facilitate energy self-sufficiency by bridging the gap between on-site energy harvesting and demand. Technology must emphasize energy storage commonality across weapon systems. Technologies must meet all applicable safety standards for air and naval shipping and storage.
- Expeditionary Water Production and Cooling: Robust, lightweight technologies that enable man-portable water harvesting and purification by dismounted individuals and mounted small units (rifle company and below). Additionally, in order to encourage consumption of bulk water produced as close to the point of use as practical and to avoid unnecessary heat casualties, innovative, low energy approaches are needed to cool purified water drawn from bulk storage equipment. Technologies must meet military drinking water standards consistent with system concept of employment, be transportable via air and naval shipping, and require no fossil fuel to operate.
- Efficient Electronics: Innovative approaches that decrease the electric demand of existing and future command, control, communications, intelligence, surveillance, reconnaissance and weapon systems.

## 7. Point(s) of Contact -

Questions of a technical nature shall be directed to the cognizant Technical Point of Contact, as specified below:

Douglas Schaefer  
Program Manager  
Office of Naval Research  
ONR Code: 03TSB  
Address: Office of Naval Research, 875 N. Randolph Street, Arlington VA 22203-1995  
Email Address: [douglas.schaefer@navy.mil](mailto:douglas.schaefer@navy.mil)

Questions of a business nature shall be directed to the cognizant Contract Specialist, as specified below:

Business Point of Contact:

Sean Palmer  
Contracting Officer  
Office of Naval Research  
ONR Code: BD 254  
Address: Office of Naval Research, 875 N. Randolph Street, Arlington VA 22203-1995  
Email Address: [sean.m.palmer@navy.mil](mailto:sean.m.palmer@navy.mil)

Questions of a security nature should be submitted to:

Diana Pacheco  
Industrial Security Specialist  
Office of Naval Research  
Security Department, Code 43  
Address: Office of Naval Research, 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. All questions of an UNCLASSIFIED nature to the Technical Point of Contract (POC) shall be sent via e-mail with a copy to the designated Business POC.

CLASSIFIED questions shall be handled through the ONR Security POC. Specifically, any entity wanting to ask a CLASSIFIED question shall send an email to the ONR Security POC with a copy to both the Technical POC and the Business POC stating that the entity would like to

ask a CLASSIFIED question. DO NOT EMAIL ANY CLASSIFIED QUESTIONS. The Security POC will contact the entity and arrange for the CLASSIFIED question to be asked through a secure method of communication.

Questions submitted within two 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 web pages:

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

**8. Instrument Type(s) –**

Awards will take the form of contracts.

The Department of the Navy reserves the right to award a different instrument type if deemed to be in the best interest of the Government.

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

N/A

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

N/A

**11. Other Information –**

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

**II. AWARD INFORMATION**

Those selected for award may receive up to \$3M in RIF funding; developmental efforts should be completed within 24 months, with a preference for fielding the technology scheduled for not more than 36 months after contract award. The initial funding available for these efforts is \$24 million; however, additional funding may be made available to the DoN after successful initiation of this program.

### 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. As with FFRDCs, these types of federal organizations may team with other responsible sources from academia and industry that are submitting proposals under this BAA.

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

Teams are also encouraged and may submit proposals in any and all areas. However, Offerors must be willing to cooperate and exchange software, data and other information in an integrated program with other contractors, as well as with system integrators, selected by the Government. Some topics may cover export controlled technologies. Research in these areas is limited to "U.S. persons" as defined in the International Traffic in Arms Regulation (ITAR) – 22 CFR § 1201.1 et seq.

Source selection authorities will use the following selection preferences, listed in order of priority:

- (1) Small business projects, including those developed by SBIR Phase II or IR&D suppliers that accelerate the deployment of military capability to resolve operational challenges characterized by JUONs, UONs, UUNs, Naval Operational Challenge Area, JUONs Challenge Area with a Navy/Marine Corps application, or other critical national security needs as cited in a Presidential Executive Order or equivalent document.
- (2) Small business projects, including those developed by SBIR Phase II or IR&D suppliers that show a clear transition path to fielding the technology into existing ACAT I–IA, II, III, IV and other defense acquisition programs.

- (3) Projects from other than small businesses that accelerate the deployment of military capability to resolve operational challenges characterized by JUONs, UONs, UUNs, Naval Operational Challenge Area, JUONs Challenge Area with a Navy/Marine Corps application, or other critical national security needs as cited in a Presidential Executive Order or equivalent document,.
- (4) Projects from other than small businesses that show a clear transition path to fielding the technology into existing ACAT I-IA, II, III, IV and other defense acquisition programs.
  - Projects recommended for award that simultaneously satisfy both priority areas 1 and 2 shall be selected before projects that satisfy only priority 1.
  - Projects recommended for award that simultaneously satisfy both priority areas 3 and 4 shall be selected before projects that satisfy only priority 3.

#### IV. APPLICATION AND SUBMISSION INFORMATION

##### **1. Application and Submission Process –**

White Papers: The final due date for white papers to be considered under this BAA is no later than 3:00 PM (EST) on Friday, **7 November 2011**. White papers are to be submitted as a pdf file via the internet only at [www.navysbirprogram.com/NavyRIF](http://www.navysbirprogram.com/NavyRIF). 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 should reference the Navy Systems Command (SYSCOM) and Program Executive Office (PEO) or Direct Reporting Program Manager responsible for fielding/insertion of the military capability or technology under development, and if applicable the ACAT program.

White Paper Evaluation/Notification: DON evaluations of the white papers will be issued via email notification on or about Friday, 6 January 2012. Any Offeror whose white paper technology is assessed as “not of particular value” to the Department is ineligible to submit a full proposal under this BAA.

Full Proposals: The anticipated due date for receipt of Full Proposals is 3:00 PM (EDT) 30 days after invitation. It is anticipated that final selections will be made within four weeks after full proposal submission. As soon as the final full proposal evaluation process is completed, firms will be notified via email of their project’s selection or non-selection for funding. Full proposals received after the published due date and time may not be considered for funding.

## 2. Format and Content of White Papers

The White papers submitted under this BAA are required to be unclassified. Confidential/classified white papers are not permitted.

### White Paper Format

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

Copies – Electronic submissions will be made at [www.navysbirprogram.com/NavyRIF](http://www.navysbirprogram.com/NavyRIF). The white paper must be a .PDF format attachment to the submission.

**NOTE: 1) Do not send hardcopies of White Papers (including facsimiles) as only electronic submissions will be accepted and reviewed; 2) Do not attach .ZIP files; 3) Do not attach password protected files; 4) Perform a virus check before uploading the technical concept file. If a virus is detected, it may cause rejection of the proposal. The technical proposal should be a single file, including Gantt or other work plan charts and attachments/enclosures. Do not lock or encrypt the file you upload.**

### White Paper Content

a. **Cover Sheet.** The cover sheet shall be labeled WHITE PAPER, and shall include the BAA number, firm name, CAGE code, proposed project title, SBIR Topic number (if applicable), IR&D project identification (if applicable), amount of RIF funds requested, Offeror's administrative and technical point of contacts (name/phone and fax numbers/email), SYSCOM and PEO that your project is targeted towards, current and valid JUON, UON, UUN, Naval Operational Challenge Area, JUONs Challenge Area with a Navy/Marine Corps application, critical National Security Need as cited in a Presidential Executive Order or equivalent document (including number and title if not classified), if known, and/or Target ACAT I – IV program or other DoN Program of Record, if known, and the names of and contact information for up to two Navy acquisition community personnel familiar with or supportive of this project. Your cover sheet must also include the following statement: "(Firm Name) hereby affirms that the Project proposed herein has not been proposed to any other DOD-sponsored Rapid Innovation Fund Broad Agency Announcement." Your cover sheet will count as the first page of your White Paper. Do not include classified information in any section of your white paper.

b. **Technical Concept.** Create a single file in Portable Document Format (PDF), including the Cover Sheet that covers the following items in the order given below. Begin your technical proposal on page 2 (since the Cover Sheet is page 1) and put your firm name, short project title, and your firm's proposal number in the header of each page. (The header may be included in the one inch margins.)

Include the following information in not more than 6 pages not including cover page.

- (1) **Project Description/Executive Summary** (300 words or less)
- (2) **Technical Capability** – Describe how your proposed technical approach is innovative, feasible, achievable, complete, and supported by a proposed technical team that has the expertise and experience to accomplish the proposed tasks. (150 words or less)
- (3) **Operational Need** – Describe your proposed technology's contribution to the JUON, UON, UUN, Naval Operational Challenge Area, JUONs Challenge Area with a Navy/Marine Corps application, or acquisition program need. (125 words or less)
- (4) **Cost Reasonableness** – Describe the methods used to ensure that the proposed costs are realistic for the technical approach proposed. (125 words or less)
- (5) **Transition Plan** – Describe how the proposed project will be supported during the RIF effort and during the post-RIF period to transition by the DoN program office, prime systems integrator, or both. Describe how the TRLs will mature and what will be required of the organizations supporting the transition of this technology. The information provided should include details such as the name of the organization and points of contact information for personnel involved in the transition process. (125 words or less)
- (6) **Cost Matching** – Describe the matching funds, if any, to be provided as a part of the project to include the timing, source, amount, and planned use of the funds. (125 words or less)
- (7) **Program Goals** – Describe how your proposed project addresses each of the RIF program goals as applicable. (300 words or less)
  - (a) **Enhances Military Capability** – Describe how your proposed project significantly increases or improves the Department's military capabilities in relationship to the identified JUON, UON, UUN, Naval Operational

Challenge Area, JUONs Challenge Area with a Navy/Marine Corps application, national security need, or Acquisition program.

- (b) **Accelerates Military Development Capability** – Describe how your proposed project accelerates the development and ability to deploy military capabilities required for use by the Department of the Navy.
  - (c) **Acquisition Development Cost Reduction** – Describe how your proposed project reduces the acquisition development and total ownership costs of the identified Acquisition program.
  - (d) **Fielded Systems Sustainment Cost Reduction** – Describe how your proposed project reduces the sustainment costs of the identified fielded system or acquisition program.
- (8) **Project/Management Plan** – Describe your overall project plan to include major project tasks, duration, TRL, and task costs (RIF and matching) using a Gantt chart or similar master planning tool. Focus on the proposed RIF project; but, include funding and efforts required to fully implement the project into a PoR or otherwise transition the technology for field use.

**b. FULL PROPOSALS**

Instructions for the preparation of full proposals will be included in the invitation letter requesting the proposal. Failure to fully comply with the proposal instructions may result in the proposal not being considered for contract award.

**3. Significant Dates and Times -**

<b>Anticipated Schedule of Events *</b>		
<b>Event</b>	<b>Date (MM/DD/YEAR)</b>	<b>Time (Local Eastern Time)</b>
BAA Closes for White Paper Submissions	11/7/2011	1500
Full Proposals Due	30 days after invitation	1500
Notification of Selection for Awards	2/23/2012	1500

Contract Awards	4/13/2012	1500
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**\*These dates are estimates as of the date of this announcement.**

**4. Submission of Late Proposals (Applicable to White Papers and Full Proposals)**

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

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

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

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

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

**6. Address for the Submission of White Papers.**

Hard copies of White Papers WILL NOT BE CONSIDERED.

## V. EVALUATION INFORMATION

### 1. Evaluation Criteria (White Papers and Full Proposals)

#### A) Technical and Cost Evaluation Criteria:

Award decisions will be based on a competitive selection of proposals resulting from a technical and cost review. Evaluations will be conducted using the following evaluation criteria. Criterion 1 (inclusive of its three subfactors) is significantly more important than Criteria 2 or 3, which are of equal value. The first three Criteria are significantly more important than Criterion 4.

- (1) Technical Approach including:
  - a. Operational Need - how the Project is relevant to the identified JUON, UON, UUN, Navy Operational Challenge Area, JUONs Challenge Area with a Navy/Marine Corps application, or critical National Security Need as cited in a Presidential Executive Order or equivalent document, and/or acquisition program identified in the white paper/proposal,
  - b. Program Goals - the degree to which it:
    - Enhances military capability, and/or
    - Accelerates the development of military capability, and/or
    - Reduces the development costs of acquisition programs, and/or
    - Reduces the sustainment costs of fielded systems.
  - c. Technical Capability - including the innovation, feasibility, achievability, completeness of the technical approach and the expertise and experience of the proposed technical team.
- (2) Project/Management Approach - including how the Project will be executed and completed within 24 months, the technology readiness level will be, matured and validated, the strategy to fielding planned within 36 months of contract award and how the team, including subcontractors/consultants will be managed.
- (3) Transition Plan – the strategy and probability for the transition of this effort into an acquisition program or DoN fielded prototype to include level of support, knowledge of the steps and factors that would be required to achieve successful transition, availability of transition funds if needed during the RIF pilot project and validity of an insertion funding commitment at the conclusion of the RIF pilot project.
- (4) Cost Effectiveness - including how the project's cost are reasonable and realistic, and the ability to complete the total project for not more than \$3 million in RIF funding; or the ability to obtain cost matching if required to complete the project or transition it to fielded use.

#### B. Commitment to Small Business

The Department of Navy is strongly committed to providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, HUBZone small businesses, veteran-owned small business, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions through its awards.

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

For proposed awards made as contracts to small businesses at any value or to other than Small Businesses that are less than \$650,000, the Offeror shall provide a statement which demonstrates how it intend, to provide meaningful subcontracting opportunities to support this policy.

## **2. 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 Manager 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**

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

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

## **VII. OTHER INFORMATION**

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

Government research facilities and operational military units are available and should be considered as potential government-furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for any one specific program. The use of these facilities and resources will be negotiated as the program unfolds. Offerors submitting proposals should indicate in the Technical and Cost Proposal, 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.

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

If animals are to be utilized in the research effort proposed, the Offeror must complete a DoD Animal Use Protocol with supporting documentation (copies of AAALAC accreditation and/or NIH assurance, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. For assistance with submission of animal research related documents, contact the ONR Animal Use Administrator at (703) 696-4046.

Similarly, for any proposal for research involving human subjects, the Offeror must submit or indicate an intention to submit prior to award: documentation of approval from an Institutional Review Board (IRB); IRB-approved research protocol; IRB-approved informed consent form; proof of completed human research training (e.g., training certificate or institutional verification of training); an application for a DoD-Navy Addendum to the Offeror's DHHS-issued Federal wide Assurance (FWA) or the Offeror's DoD-Navy Addendum. In the event that an exemption criterion under 32 CFR.219.101 (b) is claimed, provide documentation of the determination by the Institutional Review Board (IRB) Chair, IRB vice Chair, designated IRB administrator or official of the human research protection program including the category of exemption and short rationale statement. This documentation must be submitted to the ONR Human Research Protection Official (HRPO), by way of the ONR Program Officer. Information about assurance

applications and forms can be obtained by contacting [ONR\\_343\\_contact@navy.mil](mailto:ONR_343_contact@navy.mil). If the research is determined by the IRB to be greater than minimal risk, the Offeror also must provide the name and contact information for the independent medical monitor. For assistance with submission of human subject research related documentation, contact the ONR Human Research Protection Official at (703) 696-4046.

For contracts and orders, the award and execution of the contract, order, or modification to an existing contract or order serves as notification from the Contracting Officer to the Contractor that the HRPO has approved the assurance as appropriate for the research under the Statement of Work and also that the HRPO has reviewed the protocol and accepted the IRB approval or exemption determination for compliance with the DoD Component policies. See, DFARS 252.235-7004.

#### **4. Recombinant DNA**

Proposals which call for experiments using recombinant DNA must include documentation of compliance with Department of Human and Health Services (DHHS) recombinant DNA regulations, approval of the Institutional Biosafety Committee (IBC), and copies of the DHHS Approval of the IBC letter.

#### **5. 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 may be eligible to use HPCMP assets in support of their funded activities if Program Office 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/>.

#### **6. Organizational Conflicts of Interest**

All Offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any DoN technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a research and development performer. Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be

rejected without technical evaluation and withdrawn from further consideration for award. If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue by sending his/her contact information and a summary of the potential conflict by e-mail to the Business Point of Contact identified in the proposal invitation letter, 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 or mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

## **7. Executive Compensation and First-Tier Subcontract Reporting**

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

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

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

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

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

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

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

- (a) In the subcontractor's preceding fiscal year, the subcontractor received –

(i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(ii) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>).

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

## **Joint Urgent Operational Needs (JUON) Challenge Areas**

1. **Stand-Off Detection and Confirmation of Explosives.** The Department of Defense (DoD) seeks capabilities to rapidly and accurately determine the presence of explosives from safe distances. This must be accomplished with a high probability of detection and a low probability of false alarms in an environment that is contaminated with explosives and potential pre-cursors. Capabilities are required for a wide variety of situations, including but not limited to the following: person and vehicle borne Improvised Explosive Devices (IEDs) in complex environments such as marketplaces; buried or hidden IEDs; and IED assembly and/or explosives production facilities. Ideal solutions should encompass determination of all types of potential explosives, both in the detection and confirmation mode. However, the following types are of particular interest: bulk home-made explosives and enclosed or hidden military-grade explosives. In general, detection capability should provide wide area scanning capability and a preliminary indication of where the confirmation sensor should interrogate. The Department seeks technology capabilities and “systems-of-systems” that will markedly improve the capability to determine IEDs and/or homemade explosives from safe distances.
2. **Stand-Off Detection of Person-Borne and Vehicle-Borne IEDs.** The challenge in traditional methods of Person-Borne IED (PBIED) and Vehicle-Borne detection (VBIED) and verification is that it requires fast, multimodal, surreptitious interrogation of each individual and/or vehicle in a moving, unstructured crowd (e.g., in a market square) or traffic from a stand-off distance. Vendors should assume the operational environment is permissive, and the crowds and vehicles are uncooperative. “Stand-off” means the operator is able to perform PBIED/VBIED detection and verification at a distance that substantially mitigates personnel and operational risk should the PBIED/VBIED detonate. The stand-off distance will vary depending on the scenario. DoD seeks components and 'system-of-systems' technologies that will measurably improve DoD's capability to detect PBIEDs or VBIEDs. Proposals can include, for example, multiple sensing modalities, specific and general fusion algorithms, and user-friendly displays.
3. **Buried IED and Pressure Initiation Device Requirements.** The most common initiators for buried IEDs are pressure switches and command wires. DoD requires improved methods for detecting these threats. Buried IEDs and pressure initiation devices are emplaced on or under the ground with the intent to detonate them beneath vehicles and personnel. They are used on roadways, thoroughfares and choke points where intended victims are likely to pass over. Emplacements vary widely, but burial depth often corresponds with the net explosive weight of the device (i.e. larger devices will be emplaced more deeply or in culverts). The explosive charge can be composed of: metallic ordnance, low metal mines or bulk explosives in metal, plastic or fabric containers. Devices are frequently emplaced in or near features that screen their signatures and channel traffic over them such as washouts, culverts, curves and choke points.
4. **Force Protection During Dismounted Operations.** DoD seeks technologies to find, clear and/or defeat victim operated IEDs (VOIEDs), and to better protect service-members from blast effects and traumatic brain injuries during dismounted operations. Improvements are necessary to permit freedom of maneuver over an area of interest or route and eliminate the

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effects of all forms of IEDs used against friendly forces and non-combatants. The Department seeks lightweight detection devices that can aid service members operating on foot to spot and/or avoid VOIEDs. Additionally, the Department seeks protective gear, such as helmets and personal protective clothing that will reduce the risk of casualty/injury due to blast.

- 5. Improved Armor Protection.** There is a continuing need to develop lightweight armor solutions for vehicles (transparent and opaque) that are significantly lighter than current expedient designs. These improvements are to protect against anti-armor IED threats and for integration into Mine Resistant Ambush Protected (MRAP) systems and the Medium Mine Protected Vehicles (MMPV).
- 6. Enhanced Intelligence, Surveillance, and Reconnaissance (ISR) Capabilities.** DoD is interested in improving its airborne ISR capabilities to better operate during inclement weather conditions (e.g., low visibility, wind, sand storms, rain, icing, etc.) and provide persistent, reliable and effective near real time imagery while remaining virtually undetected. The Department seeks sensors and platform technology capabilities and “systems-of-systems” that will markedly improve the capability to provide imagery and tracking of vehicles and personnel while remaining unobserved by the targeted object.
- 7. Explosively Formed Penetrator Requirements.** An explosively formed penetrator (EFP) is a class of IED designed to fire a shaped warhead that effectively penetrates armor at stand-off distances. An EFP system has four major components: Arming Switch, Trigger Switch, Explosive Device, and Camouflage. The requirement is to detect an EFP system from a moving vehicle while performing route clearance operations. Detection of the EFP must occur in time to provide a safe stand-off-distance for the vehicle’s crew to react. Goal is to detect multiple EFP components to increase the probability of detection and reduce the false alarm rate.
- 8. Deep Buried IED Requirements.** Deep Buried IED (DBIED) is a class of IEDs that are buried below the surface with a large quantity of explosives (sufficient weight to destroy an armored military vehicle). A DBIED system typically comprises three major components: an arming device, a trigger device and the explosive device. Needed is the ability to detect emplaced DBIEDs with a high probability of detection and a low false alarm rate, and alert operating forces in sufficient time to remain outside the blast zone of the explosive device.
- 9. Blasting Cap Detect and Defeat.** Develop a single-vehicle system capable of detecting and neutralizing blasting caps commonly used in IEDs at a distance. The stand-off capability for detection and neutralization affords personnel adequate reaction time to an identified threat relative to vehicle speed before the vehicle is in the blast seat. System shall be able to detect and engage multiple threats simultaneously. The system will incorporate both visual and audio alerts for the system user. Visual and audio alerts must be able to be used with Personal Protective Equipment while riding in the vehicle. False positive alarm rates must be held to a minimal amount.
- 10. Command Wire Detect and Defeat.** Develop a vehicle-mounted system to simultaneously detect and neutralize Command Wire triggered IEDs from operationally safe standoff

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distances. The system shall rapidly detect command wire, and be able to neutralize the IED system by effectively disrupting electric initiators or inducing a high order detonation of the IED. Detection equipment shall provide geo-spatial location of the IED. The system shall also be able to confirm neutralization and incorporate both visual and audio alerts for the system user. False positive alarm rates must be held to a minimal amount, and the system must distinguish between the threat and the environment.

**11. Other Counter-IED and Force Protection Proposals.** Offerors possessing any additional technology, information, or recommendations that would enhance the detection, identification defeat of IEDs or improve the protection of friendly forces from death or injuries in combat areas are also encouraged to submit proposals to this BAA.