

**ONR Funding Opportunity
Announcement Number 10-023
Revision A
Date: 7 October 2010**



**Science, Technology, Engineering & Mathematics
(STEM)
for
K-12 & Institutions of Higher Education**

INTRODUCTION:

This publication constitutes a Funding Opportunity Announcement (FOA) as contemplated in the Department of Defense Grants and Agreements regulations (DoDGARS) 22.315. 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. ONR reserves the right to fund all, some or none of the proposals received under this FOA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this FOA 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. Funding Opportunity Title –

Annual Funding Opportunity Announcement (FOA) for Navy and Marine Corps Science, Technology, Engineering & Mathematics (STEM) Programs

3. Program Name –

STEM

4. Funding Opportunity Number –

ONR FOA 10-023

5. Response Date –

This announcement will remain open until 30 September 2011 or until replaced by a successor FOA, whichever first occurs. Proposals may be submitted at any time during this period.

6. Funding Opportunity Description –

The Office of Naval Research (ONR) seeks proposals as provided under the authority set forth in subdivision (1) of subsection 2192 (b) of title 10 in support of education programs in science, technology, engineering and mathematics (STEM). The ONR mission of STEM is to: foster an interest in, knowledge of, and study in science, technology, engineering and mathematics nationwide to ensure an educated and well-prepared workforce, which meets the naval and national competitive needs. In support of this mission, the following five goals have been identified:

- ***Inspire*** the next generation of scientists and engineers. [Grades K-10]
- ***Engage*** students in STEM-related hands-on learning activities using Navy content. [Grades 3-12]
- ***Educate*** students to be well-prepared for employment in STEM disciplines in the Navy or in supporting academic institutions or the Naval contractor community. [Higher Education]
- ***Employ***, retain and develop Naval STEM professionals. [Higher Education, Professional Development, Faculty]
- ***Collaborate*** across Naval STEM programs to maximize benefits to participants and the Navy.

The purpose of this announcement is to receive proposals in support of the Office of Naval Research's mission of scientific outreach and education in working to develop the next generation of scientists capable of providing support to the continued

development of critical technologies in support of the Department of Defense. The objective of these activities will be to:

1. Establish and ensure successful, sustainable, and affordable long-term Navy wide programs targeted at elementary and secondary schools and institutions of higher learning.
2. Establish and maintain a pipeline of students, particularly women and members of minority groups, who will apply for and participate in Navy education and outreach programs.
3. Increase the number of domestic students (particularly students from under-represented groups) completing STEM degrees through enhancing student interest and attitudes toward science, technology, engineering, and mathematics.
4. Strengthen peer, family, and school support for such interests.
5. Ensure long-term inclusiveness of women and minorities in science and technology programs.
6. Increase the number of students taking college-prep science and mathematics courses.
7. Demonstrate appropriate curricular connections with the applicable state and national standards of learning for science, technology, engineering, and mathematics (STEM).

Additional activities supported may include providing financial assistance to organizations supporting STEM activities, providing funding and support for national competitions by arranging for DoD personnel to participate as judges and presenters, providing support for STEM education and outreach conferences and supporting teacher STEM education and training initiatives. Stipends for teachers undertaking professional training in connection with these activities may be supported as well as funding for the acquisition of materials and resources needed to launch, implement, assess, and improve the program. Additionally, evaluations of existing Navy/DoD program efforts and strategies to maximize marketing program opportunities to affected populations may be supported.

ONR encourages the project results to be published in appropriate academic journals at the end of the period of performance.

Examples of STEM Education & Outreach Projects

Offerors are encouraged to develop innovative approaches that utilize their unique assets, capabilities, locations, and personnel. Proposals should identify programs and methods that will be used to foster and develop students in STEM fields that are relevant to the DoD mission.

The list below is provided as a guide in assisting with the development of STEM related programs and outreach projects.

K – 12 Projects:

Science Projects: Science projects encourage children to pursue in-depth study of natural phenomena through scientific research and acknowledge the positive accomplishments of those youth. Assisted by dedicated teachers and supportive families, each year children in grades 4 - 12 develop projects in research categories ranging from biology and chemistry to physics.

Girls S&T Initiatives: The girls S&T initiatives consist of free, hands-on activities for middle school girls and their parents. Typically they consist of 5 half-day events per year at a local college campus. The events normally feature a woman STEM keynote speaker, campus/lab tours and hands-on activity stations. Female college and high school students provide team leadership throughout the half-day event. A typical Girls S&T event might attract 40-60 middle and high school girls, 15-20 STEM professionals including local industry, and 20-40 students from the university.

SeaPerch: SeaPerch is a hands-on activity for students, which gets kids excited about science. Students build an underwater robot from a kit composed of low-cost, easily accessible parts, following a curriculum that teaches basic engineering and science concepts with a marine engineering theme. Students follow steps to completely assemble the underwater robot, test it, and then participate in launching their vehicles. With one project, schools are able to teach many of the concepts required for their grade level: an efficient use of time, and a fun, hands-on activity for students.

SeaPerch + For Teachers: The teacher development workshops provide professional development training for teachers to encourage teaching methods of STEM topics. The workshops teach teachers to build a SeaPerch underwater robot and develop activity ideas and curriculum approaches to utilize in their classrooms.

FIRST Robotics: The mission of FIRST (For Inspiration Into Research, Science, and Technology) Robotics is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership. FIRST Robotics competitions target high school students, while First LEGO League targets elementary and middle schools students..

SEAP: The Science and Engineering Apprentice Program (SEAP) provides an opportunity for high school students to gain a hands-on experience at a Department of Navy (DoN) laboratory during the summer. The goals of the SEAP are to encourage participating high school students to pursue science and engineering careers, to further education via mentoring of students by laboratory personnel and their participation in research, and to make them aware of DoN research and technology efforts. Participating students typically spend ten weeks during the summer working with scientists and engineers at one of approximately 12 DoN Laboratories. To participate, the high school students should be either in the junior and senior years.

MATHCOUNTS: MATHCOUNTS is a national middle school math after-school enrichment program with both a club and a competition component that promotes mathematics achievement through grassroots involvement. Students participate in fun and challenging math programs and games that further improve their foundational understanding of science, math, and engineering.

STEP: The Science Technology Education Partnership (STEP) was established to bridge the skills gap between our K-12 students and high-technology industry needs. STEP produces its flagship science and technology education event every year, the STEP Conference. This conference serves to ignite the imagination of thousands of students, so that they might pursue promising careers in high-technology fields. It also provides hands-on training to hundreds of K-12 teachers, ensuring they have the latest tools to keep our students competitive in the global marketplace.

Community College and Undergraduate Programs:

NREIP: The Naval Research Enterprise Intern Program (NREIP) provides an opportunity for students to participate in research at a Department of Navy (DoN) laboratory during the summer. The goals of the NREIP are to encourage participating students to pursue science and engineering careers, to further education via mentoring by laboratory personnel and student participation in research, and to make them aware of DoN research and technology efforts, which can lead to employment within the DoN. Participating students typically spend ten weeks during the summer conducting research at one of approximately 12 DoN laboratories. To participate, a student must be enrolled at an accredited college/university and have completed at least his/her sophomore year before beginning the internship.

SMART: The Science, Mathematics and Research for Transformation (SMART) Scholarship for Service Program has been established by the Department of Defense (DoD) to support undergraduate and graduate students pursuing degrees in STEM disciplines. The program aims to increase the number of civilian scientists and engineers working at DoD laboratories. After graduation, the student is required to work at a DOD lab for a period equivalent to the time that the scholarship was received. SMART scholars spend summers at sponsoring organization to be groomed for employment.

Space Grant Internships: The Space Grants Internships are summer internships for college aged girls in engineering programs. In partnership with the Maryland Space Grant Consortium, we are able to provide short term opportunities as instructional assistants in our summer programs and as research assistants in our ongoing engineering programs. The students are exposed to the educational aspects and ownership of scientific concepts provided by our summer camps, have ample opportunities to interact with practicing engineers (male and female) from many different disciplines (aerospace, mechanical, systems, electrical, and ocean) and experience hands-on research with engineering faculty. **Graduate Programs:**

NREIP: Similar to the Undergraduate program but with a higher stipend and greater responsibilities.

SMART: Similar to the Undergraduate program.

Doctoral Programs:

SMART: Similar to the Graduate program.

NDSEG: The National Defense Science and Engineering Graduate (NDSEG) Fellowship is a highly competitive, portable fellowship that is awarded to U.S. citizens and nationals who intend to pursue graduate study in one of the 15 supported disciplines. An NDSEG fellowship confers high honors upon its recipients and allows them to attend whichever U.S. institution they gain admission to. NDSEG Fellowships last for three years and pay for full tuition and all mandatory fees, a monthly stipend, and up to \$1,000 a year in medical insurance.

7. Point(s) of Contact -

Questions of a technical nature should be submitted to:

Primary Point of Contact:

Dr. Kam Ng
ONR Code: 03R
Office of Naval Research
875 North Randolph Street - Suite 1410
Arlington, VA 22203-1995
Email Address: kam.ng1@navy.mil

Secondary Point of Contact:

Dr. Anthony Junior
ONR Code: 03R
Office of Naval Research
875 North Randolph Street – Suite 1414
Arlington, VA 22203-1995
Email Address: anthony.junior@navy.mil

Questions of a business nature should be submitted to:

Primary Point of Contact:

Tracie Simmons
ONR Code: 253
Office of Naval Research
875 N. Randolph Street – Suite W1247G
Arlington, VA 22203-1995
Email Address: tracie.simmons@navy.mil

Any questions regarding this solicitation must be provided to the Technical Points of contact and Business Point of Contact listed in this solicitation. All questions shall be submitted in writing by electronic mail.

Answers to questions submitted in response to this FOA will be addressed in the form of an Amendment and will be posted to one or more of the following webpage's:

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

8. Instrument Type(s) -

Awards may take the form of Grants and Cooperative Agreements, as appropriate.

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

12.300

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

Department of Defense (DoD) Basic & Applied Scientific Research

11. Other Information -

This FOA is intended for proposals related to educational programs and outreach projects in science, technology, engineering and mathematics (STEM).

For Research & Development proposals related to basic research, applied research, or advanced technology development, refer to the Long Range ONR BAA, which can be found at ONR Broad Agency Announcement (BAA) Webpage - <http://www.onr.navy.mil/en/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx>

II. AWARD INFORMATION

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

The Office of Naval Research (ONR) plans to make multiple awards under this FOA, which represent the best value to the Government in accordance with the evaluation criteria. ONR is seeking participants for this program that are capable of supporting the goals and desired outcomes as described in this announcement. Offerors have the opportunity to be creative in the selection of the technical and management processes and approaches to address the areas of interest described above.

The period of performance of the awards will typically range from twelve (12) months to thirty-six (36) months. ONR anticipates a budget of approximately \$10 million per year for the STEM program.

ONR plans to fund individual awards up to \$200,000 per year. However, cost proposals for larger amounts will be considered when appropriate.

Awards funded with Fiscal Year 2010 basic research appropriations are currently subject to the reimbursement limit on indirect costs set forth in Section 8101 of the Department of Defense Appropriations Act, 2010 (P.L. 111-118). Under this act, payment of indirect costs for basic research (Budget Activity 6.1) may not exceed 35% of the total funds provided.

For the past three years Congress has placed limits on the percentage of indirect costs that can be paid by the government using basic research (6.1) funds. Currently indirect costs paid under contracts and grants for the performance of basic research may not exceed 35 percent. It is unknown at present whether a similar indirect cost restriction will apply to 6.1 funds in FY 2011 or thereafter.

III. ELIGIBILITY INFORMATION

All responsible sources from academia (colleges and universities), middle and high schools, non-profit organizations, and industry may submit proposals under this FOA. 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 FOA 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 FOA. 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 FOA and should not directly submit full proposals in response to this FOA. 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 FOA.

ONR highly encourages partnering among industry and Government. Proposals that utilize industry-Government partnering which enhances the development of novel educational programs are highly encouraged.

For Grant applications:

The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252, requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR 170.110. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or other transaction agreements) as either a prime or sub-recipient under this FOA 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 170.220. 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

Prospective offerors are encouraged to submit white papers to minimize the labor and cost associated with the production of detailed full proposals that have very little chance of being selected for funding. Each white paper should state that it is submitted in response to this FOA and should be submitted via e-mail to the two (2) technical POC's in Section 7 of this announcement. Do not submit "White Papers" through Grants.gov.

Each white paper will be evaluated by the government to determine whether the technical concept proposed appears to be of particular value to the Department of the Navy. A full proposal will be subsequently encouraged from those offerors whose proposed technical concept has been identified as being of “particular value” to the Navy. However, any such request does not assure a subsequent award. Any offeror whose white paper was not identified as being of “particular value” to the Navy, can still submit a full proposal under the FOA.

Full proposals will be accepted without the submission of a white paper.

Full Proposals

The preferred due date for receipt of full proposals is 2:00 PM (EDT) 30 September 2011. However, proposal can still be considered so long as received prior to the publication of a successor FOA, whichever first occurs.

The only acceptable method for submission of full proposals is via <http://www.grants.gov/>.

Notice of Navy selections based on full proposal submissions will be issued via e-mail.

2. Content and Format of White Papers and Full Proposals -

White Papers and Proposals submitted under this FOA are required to be unclassified.

All proposal submissions will be protected from unauthorized disclosure. Upon receipt, all grant and cooperative agreement proposals shall be safeguarded from unauthorized disclosure throughout the review and selection process. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

IMPORTANT NOTE: Titles given to the White Papers and 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
- Number of Pages – No more than **seven (7) single-sided pages** (excluding cover page). White Papers exceeding the page limit may not be evaluated.
- Copies – Unclassified Electronic (email) submissions should be sent to the attention of the TPOC at: kam.ng1@navy.mil and anthony.junior@navy.mil.

The subject line of the email shall read “ONR FOA 10-023 White Paper Submission.” The white paper must be Microsoft Word or Excel compatible or .pdf format, and attached to the email.

NOTE: 1) Do not send hardcopies of White Papers (including facsimiles) as only electronic submissions will be accepted and reviewed; 2) Do not send .ZIP files; 3) Do not send password protected files.

White Paper Content

- **Cover Page:**
(Not included in page limitations)
The Cover Page shall be labeled “**WHITE PAPER**” and shall include the FOA number, proposed title, administrative and technical points of contact, telephone numbers, facsimile numbers, and e-mail addresses.
- **Technical Concept:**
Provide a clear description of the program, event, conference or activity being proposed. Provide potential naval or defense relevance as it relates to the agency’s STEM mission. Provide information on potential to achieve the educational objectives and impact toward improving science and engineering education in the United States.
- **Cost Estimate:**
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, 2 or 3 years)).

b. INSTRUCTIONS FOR FULL PROPOSALS FOR GRANTS & COOPERATIVE AGREEMENTS

The offeror **must** use the Grants.gov for submission of all Grants and Cooperative Agreements at <http://www.grants.gov/> as delineated in paragraph 4 below.

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

- Paper Size – 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing – single-spaced
- Font – Times New Roman, 12 point
- Number of Pages – Volume 1 is limited to no more than **eighteen (18) single-sided pages**. Limitations within sections of the proposal, if any, are indicated in the individual descriptions shown below. The cover page, table of contents, reports, pending proposal submissions and qualifications are excluded from the

page limitations. Full Proposals exceeding the page limit may not be evaluated. There are no page limitations to Volume 2 – Cost Proposal.

- Copies – the full proposal should be submitted electronically at <http://www.grants.gov/> as delineated in paragraph 4 below.

Volume 1: Technical Proposal

- **Cover Page:**

(Not included in page limitations)

This should include the words “Technical Proposal” and the following:

- 1) FOA number 10-023;
- 2) Title of Proposal;
- 3) Identity of Prime Offeror and complete list of subcontractors/subrecipients, if applicable;
- 4) Technical contact (name, address, phone/fax, electronic mail address)
- 5) Administrative/business contact (name, address, phone/fax, electronic mail address) and;
- 6) Proposed period of performance (identify both the base period and any options, if included).

- **Table of Contents:**

(Not included in page limitations)

An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.

- **Technical Approach and Justification:**

(Nine (9) page limit)

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.

Provide a description of the program, event, conference, or activity being proposed. Include the following: Their potential naval or defense relevance and contributions as they relate to the agency’s specific education and science and engineering (STEM) workforce. Their scientific and technical potential to achieve the educational objectives of the initiative, including the extent to which the proposed effort would enhance multidisciplinary studies relative to current capabilities. Potential outreach initiatives for increasing and maintaining the educational pipeline and the potential of educating future scientists and engineers in STEM disciplines critical to the defense mission. Increased or enhanced opportunities to disseminate information on navy or defense programs and careers. Impact of the initiative toward improving science and engineering education in the United States. Extent to which the initiative engages naval or defense laboratories as active participants in program execution.

- **Project Schedule and Milestones:**

(One (1) page limit)

Provide a summary of the schedule of events and milestones.

- **Reports:**

(Not included in page limitations)

Provide a detailed list of reports, inclusive of the timeframe in which they will be delivered.

The following are sample data deliverables that are typically required under these efforts:

- Programmatic and Financial Progress Reports
- Final Report

- **Management Approach:**

(Eight (8) page limit)

Identify which personnel and subcontractors/subrecipients (if any) will be involved. Provide past, present or proposed collaborative educational activities with other institutions, such as college/universities. State the degree of partnership between the school system or local education agency, and the naval defense laboratory, or warfare center.

- **Pending Proposal Submissions:**

(Not included in page limitations)

Offerors are required to provide any related or complementary pending proposal submissions, including subsequent funding; to other sources (e.g. ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations).

The following information must be provided:

- 1) Title of Proposal and Brief Summary;
- 2) Amount of Funding
- 3) Agency Proposal was submitted to

- **Qualifications:**

(Not included in page limitations)

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 consultants. The resumes and curricula vitae shall be attached to the proposal..

Volume 2: Cost Proposal

The offeror must use the Grants.gov forms from the application package template associated with the FOA 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 (F&A, Overhead, G&A, etc.) – The proposal should show the rates and calculation of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the rates have not been approved/negotiated, provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. Additional information may be requested, if needed. If composite rates are used, provide the calculations used in deriving the composite rates.
- Travel – The proposed travel cost should include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organization's historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principles.
- Subawards – Provide a description of the work to be performed by the subrecipients. For each subaward, a detailed cost proposal is required to be submitted by the subrecipient(s). Fee/profit is unallowable. The subawardee's or subrecipient's cost proposal can be provided in a sealed envelope with the recipient's cost proposal or via e-mail directly to both the Program Officer and the business point of contact at the same time the

prime proposal is submitted. The e-mail should identify the proposal title, the prime Offeror and that the attached proposal is a subcontract. A proposal and supporting documentation must be received and reviewed before the Government can complete its cost analysis of the proposal and enter negotiations.

- Consultants – Provide a breakdown of the consultant’s hours, the hourly rate proposed, any other proposed consultant costs, a copy of the signed Consulting Agreement or other documentation supporting the proposed consultant rate/cost, and a copy of the consultant’s proposed statement of work if it is not already separately identified in the prime contractor’s proposal.
- Materials & Supplies – Provide an itemized list of all proposed materials and supplies including quantities, unit prices, proposed vendors (if known), and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Other Direct Costs – Provide an itemized list of all other proposed other direct costs such as: equipment rental/user 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, the proposal should include the following statement: “The funds provided by ONR will not be used for food or beverages.”
- Fee/Profit – Fee/profit is unallowable.

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

3. Significant Dates and Times -

This announcement will remain open until 2:00 PM (EDT) 30 September 2011 or until replaced by a successor FOA, whichever first occurs. Proposals may be submitted at any time during this period.

4. Submission of Grant Proposals through Grants.gov -

The offeror must use the Grants.gov forms from the application package template associated with the FOA on the Grants.gov web site. To be considered for award, Applicants must fill out Block 4 of the SF 424 R&R as follows: Block 4a, Federal Identifier, for new awards, enter N00014; if the application is a renewal or expansion of an existing award, enter the previous ONR award number; Block 4b, Agency Routing Number, enter the three (3) digit Program Office Code (i.e., 03R) and, if known, the Program Officer’s name, last name first, in brackets (i.e., [Ng, Kam]). Applicants who fail to provide a Department code identifier may receive a notice that their proposal will be rejected.

Detailed instructions entitled “Grants.gov Electronic Application and Submission Information” on how to submit a grant proposal through Grants.gov may be found at the ONR website listed under the “Acquisition Department – Contracts & Grants Submitting a Proposal” link 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 e-mailed directly to the Technical Points of Contact. White Paper format requirements are found in Section IV, item 2a above.

By completing Block 17 of the SF 424, 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, several one-time actions must be completed in order to submit an application through Grants.gov. These include obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registration (CCR), 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 which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called “MPIN” are important steps in the CCR registration process. Applicants who are not registered with CCR and Grant.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 requirement, how an application form works, or the submittal process **must** be directed to Grants.gov at 1-800-518-4726 or 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 (i.e., .pdf files). Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

After proposals are uploaded to Grants.gov, the applicant receives an e-mail indicating the proposal has been submitted and that Grants.gov will take up to two days to validate the proposal. Grants.gov may reject the proposal during the validation process. Therefore, applicants who have registered with Grants.gov are urged to submit their proposals electronically **at least three days before the date and time proposals are due** so that it will not be received late and be ineligible for award consideration.

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

V. EVALUATION INFORMATION

1. Evaluation Criteria –

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

Primary technical evaluation criteria (of equal importance) for STEM Educational Programs are:

- a. Potential naval or defense relevance and contributions of the effort to the agency's specific education and science and engineering workforce. Scientific and technical merit of the proposal and its potential to achieve the educational objectives of the program, including the extent to which the proposed effort would enhance multidisciplinary studies relative to current capabilities. Appropriateness of the metrics used to determine impact and or success of the program. Appropriateness of the methodology for obtaining and validating the metrics.
- b. Outreach initiatives proposed for increasing and maintaining the educational pipeline and the potential of the proposed program to educate future scientists and engineers in STEM disciplines critical to the defense mission. Increased or enhanced opportunities to disseminate information on navy or defense programs and careers. Impact of the initiatives toward improving science and engineering education in the United States. Extent to which the program engages naval or defense laboratories as active participants in program execution.
- c. Potential contributions of the proposed programs to the national defense mission.
- d. Past, present or proposed collaborative educational activities with other institutions, such as colleges/universities. The degree of partnership between the school system or local education agency, and the naval/defense laboratory, or warfare center.

Secondary technical evaluation criteria which are of less importance than primary evaluation criteria but of equal importance to each other are:

- e. Industry-Government Partnering – ONR highly encourages partnering among industry and Government with a view toward speeding the incorporation of new science and technology into fielded systems. Proposals that utilize industry-Government partnering which enhances the development of novel educational programs will be given favorable consideration.
- f. Personnel qualifications, capabilities, availability, and experience. Key personnel must commit time and attention to ensure success of the program.

Cost Criteria -

g. Budgetary realism and cost effectiveness of the program.

The technical factors (a-f) are considered more important than the cost factor (g). Technical factor (a-d) are equally weighted and considered more important than technical factors (e and f); technical factors (e and f) are equally weighted.

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

2. Evaluation Panel -

Technical and cost proposals submitted under this FOA will be protected from unauthorized disclosure. The cognizant Program Officer and other Government scientific experts will perform the evaluation of technical proposals. Cost proposals will be evaluated by Government business professionals. Restrictive notices notwithstanding, one or more support contractors may be utilized as subject-matter-expert technical consultants. Similarly, support contractors may be utilized to evaluate cost proposals. 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 FOA will be required to sign a non-disclosure statement prior to receipt of any proposal submissions.

VI. AWARD ADMINISTRATION INFORMATION

1. Administrative Requirements –

- 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. Information on CCR registration is available at <https://www.bpn.gov/ccr/default.aspx>.
- Certifications –

Grant and Cooperative Agreement awards greater than \$100,000, require a certification of compliance with a national policy mandate concerning lobbying. Grant and Cooperative Agreement applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted

via [Grants.gov](https://www.grants.gov) (complete Block 17 of the SF 424). The following certification applies to each applicant seeking federal assistance funds exceeding \$100,000:

CERTIFICATION REGARDING LOBBYING ACTIVITIES

(1) No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the applicant shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The applicant shall require that the language of this certification be included in the award documents for all 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.

VII. OTHER INFORMATION

1. Organizational Conflicts of Interest

All Offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any ONR technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract numbers.

Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a research and development performer. Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will

be rejected without technical evaluation and withdrawn from further consideration for award. If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with ONR by sending his/her contact information and a summary of the potential conflict by e-mail to the Business Point of Contact in Section I, item 7 above, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be effectively avoided or mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this FOA.

2. 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.