INTRODUCTION:

This publication constitutes a Broad Agency Announcement (BAA) 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.

1. GENERAL INFORMATION

1. Agency Name
   Office of Naval Research

2. Research Opportunity Title
   Low Cost Swimmer Detection

3. Program Name
   N/A

4. Research Opportunity Number
   BAA 07-024

5. Response Date
   White Papers: 08 MAY 2007 2 p.m. (Washington, DC Local Time)
   Full Proposals: 10 JUL 2007 2 p.m. (Washington, DC Local Time)
6. Research Opportunity Description

Synopsis:

The Office of Naval Research (ONR) is soliciting white papers and full proposals describing innovative technology concepts to provide Low Cost Swimmer Detection and Identification. Concepts are required that will detect and initially classify a swimmer or diver who has entered a specific zone around an asset to be protected. The environment of interest is primarily expeditionary, focusing on the waters surrounding and approaches to individual Navy ships that are temporarily berthed at ports and anchorages in worldwide locations. The targets include free swimmers, open and closed circuit divers, and divers aided by Diver Propulsion Vehicles (DPVs). Concepts may range from short range sensor technologies suitable for barriers to longer range active systems, but should be novel or clearly competitive in terms of the size, weight, and cost considerations that may be associated with future organic or expeditionary concepts of operation for swimmer detection. The effort will include basic concept investigations and experiments leading to the development of hardware for a demonstration of the concepts in a realistic environment. The intention is to initiate new research efforts in FY 2008 with candidate concepts demonstrated in FY 2010 or earlier.

ONR encourages teaming of academia, industry, University Affiliated Research Centers (UARCs), and government laboratories with a view toward speeding the transition of new science and technology into fielded systems.

White papers are initially sought to preclude unwarranted effort on the part of the offeror in preparing full technical and cost proposals with an initial assessment of the operational, technical and logistical feasibility of the concept. Offerors submitting the most promising white papers will be encouraged to submit a full technical and cost proposal on all or part of their white paper submission. However, any such encouragement does not assure a subsequent award. Any offeror may submit a full proposal even if its white paper was not identified as most promising or if no white paper was submitted.

Approximately $6,000,000.00 of Applied Research and Advanced Technology (Budget Category 6.2/6.3) funds are anticipated to be available over a three year period beginning October 2007 to conduct this effort.
7. Point(s) of Contact
Questions of a technical nature shall be directed to the cognizant Technical Point of Contact, as specified below:

Dr. Robert Headrick
Code ONR 321 OA
Office of Naval Research
One Liberty Center, Room 1082
875 North Randolph Street
Arlington, VA 22203-1995
Telephone: (703) 696-4135
Email: headrir@onr.navy.mil

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

Ms. Jennifer Williams
Contract Specialist
Contract and Grant Awards Management
ONR 252
Office of Naval Research, Suite 1425
One Liberty Center Room W1269F
875 North Randolph Street
Arlington, VA 22203-1995
Telephone: (703) 588-2432
Fax: (703) 696-3365
Email: williaje@onr.navy.mil

8. Instrument Type(s)
Awards will be in the form of cost plus fixed fee completion contracts.

9. Other Information
For additional programmatic information or to submit a question, see the following URL “http://www.onr.navy.mil/02/baa/”

II. AWARD INFORMATION
The Office of Naval Research (ONR) plans to award contracts to the offerors whose proposals represent the best value to the Government in accordance with the evaluation criteria.

The period of performance of the awards will typically range from two to three years. It is anticipated that 2-4 awards will be made, and the value of each award should be in the range of $750,000 to $2,000,000. The anticipated start date for awards is on or about 25 October 2007, subject to the availability of funds.
If offerors are enhancing work performed under other ONR or DoD projects, they must clearly identify the point of departure and what existing work will be brought forward and what new work will be performed under this BAA.

III. ELIGIBILITY INFORMATION
All responsible sources submitting a responsive proposal will be considered by the Government. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals.

Some proposals submitted may require the exchange of export-sensitive data. In those cases U.S. export control rules would apply, and the performer would be limited to using U.S. persons to do the work.

IV. APPLICATION AND SUBMISSION INFORMATION

1. White Paper Application and Submission Process

Submission of White Papers: The due date for receipt of White Papers is 2 p.m. (Washington, DC Local time) on 08 MAY 2007. White Papers received after the exact time specified for receipt of white papers are considered “late” and may not be evaluated.

A. Format of White Papers:
   - Paper Size – 8.5 x 11 inch paper
   - Margins – 1” inch
   - Spacing – single or double-spaced
   - Font – Times New Roman, 12 point
   - Number of Pages – White papers are limited to no more than 7 pages The cover page and the curriculum vitae for the principal investigator and key personnel are excluded from the page limitations. White papers exceeding the page limit may not be evaluated.

   White papers shall be submitted as a singular pdf formatted file through the following URL: “https://onrouside.onr.navy.mil/aspprocessor/032_baa07024/”

B. Content of White Papers:
   The White Papers submitted in response to this BAA are expected to be unclassified. Although not anticipated, confidential/classified white papers are not prohibited. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

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

   Content of White Papers
   White papers are limited to seven pages and should include the following items:
1) Cover page, clearly labeled “White Paper”, including BAA title, number and date, title of white paper, administrative and technical points of contact along with telephone, fax numbers, and e-mail addresses. The cover page will not count toward the seven-page limit.

2) Technical Description, to consist of clear discussion of the scientific concept and associated technologies being proposed, development objectives of the proposed effort, a clear statement of the major scientific issues to be resolved to accomplish objectives, approaches to resolving these science issues, and a clear description of and schedule for demonstration of the significant aspects of the concept.

3) Managerial Description, to include partnering arrangements, if any, list of key personnel, specific prior experience of the offeror in the scientific areas addressed, facilities, and a plan of action with milestones.

4) Cost Description, to be a one page cost estimate on a yearly basis partitioned by major tasks.

5) One-page curriculum vitae for the principal investigator and key personnel should be submitted. One page limit per person. The vitae will not count toward the seven-page limit.

D. Evaluation/Notification of White Papers: Evaluations of the white papers will be issued via E-mail notification on or about 29 MAY 2007. Offerors submitting the most promising white papers will be encouraged to submit full technical and cost proposals via the above-referenced E-mail. However, any such encouragement does not assure a subsequent award.

2. Full Proposals Application and Submission Process

A. Submission of Full Proposals: The due date for full proposal submissions is 2 p.m. (Washington, DC local time) on 10 JUL 2007. Failure to submit a white paper does not preclude the offeror from submitting a full proposal. Any offeror may submit a full proposal even if its white paper was not identified as being “promising”. However, the Navy's initial evaluation of the white papers should give potential offerors some indication of whether a full proposal would likely result in an award.

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

B. Format of Full Proposals: Volume 1 (Technical Proposal) and Volume 2 (Cost Proposal)
• Paper Size – 8.5 x 11 inch paper
• Margins – 1” inch
• Spacing – single or double-spaced
• Font – Times New Roman, 12 point
• Number of Pages – Volume 1 is limited to no more than 24 pages and subject to the limitations described below. Volume 2 has no page limit. The cover page, table of contents, and resumes are excluded from the page limitations. Full Proposals exceeding the page limit may not be evaluated.
• Copies – one (1) original, 5 copies and one electronic copy on CD-ROM, (in Microsoft® Word or Excel 97 compatible or .PDF format).

C. **Content of Full Proposals:** The Full Proposals submitted in response to this BAA are expected to be unclassified. Although not anticipated, confidential/classified proposals are not prohibited. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

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

**Content of Volumes 1 and 2**

**Volume 1: Technical Proposal**

Volume 1 of the Full Proposal shall include the following sections, each starting on a new page. Please pay attention to the page limitations for each section as specified below.

1) **Cover Page:** (Not included in page limitations.) This should include the words “Technical Proposal” and the following:
   (a) BAA number;
   (b) Title of Proposal;
   (c) Identity of prime Offeror and complete list of subcontractors, if applicable;
   (d) Technical/Principal Investigator (PI) contact (name, address, phone/fax, electronic mail address);
   (e) Business contact (name, address, phone/fax, electronic mail address); and
   (f) Duration of effort.

2) **Table of Contents:** (Not included in page limitations.)

3) **Statement of Work:** (5 pages) A Statement of Work (SOW) clearly detailing the scope and objectives of the effort and the technical approach. It is anticipated that the proposed SOW will be incorporated as an attachment to the resultant award instrument. To this end, such proposals must include a severable self-standing SOW without any proprietary restrictions, which can be attached to the award. Include a detailed listing of the technical tasks/subtasks organized by year.
4) **Project Schedule and Milestones**: (1 page) A summary of the schedule of events and milestones.

5) **Assertion of Data Rights**: (1 page). Include here a summary of any proprietary rights to pre-existing results, prototypes, or systems supporting or necessary for the use of the research, results, or prototype. Any rights assertion made in other parts of the proposal that would impact the rights in this section must be cross-referenced. If there are proprietary rights asserted, the Offeror must explain how these affect its ability to deliver subsystems and toolkits for integration. Additionally, Offerors must explain how the program goals are achievable in light of these proprietary or restrictive limitations. If there are no claims of proprietary rights in pre-existing data, this section shall consist of a statement to that effect.

6) **Technical Approach and Deliverables**: (Not To Exceed 9 pages) A detailed description of the approach planned, results targeted and reports to be delivered.

7) **Management Approach**: (8 pages) A discussion of the overall approach to the management of this effort, including brief discussions of the total organization; use of personnel; project/function/subcontractor relationships; government research interfaces; and planning, scheduling and control practice. Identify which personnel and subcontractors (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any.

8) **Subcontracting Plan**: Offers proposed as contracts by non-small businesses should include a small business subcontracting plan in accordance with FAR Part 19.
**VOLUME II: Cost Proposal**

The Cost Proposal shall consist of a cover page and two parts, Part 1 and Part 2. Part 1 will provide a detailed cost breakdown of all costs by cost category by calendar or Government fiscal year, and Part 2 will provide a cost breakdown by task/sub-task corresponding to the task numbers in the proposed Statement of Work. Options must be separately priced.

1) **Cover Page**: The use of the SF 1411 is optional. The words “Cost Proposal” should appear on the cover page in addition to the following information:
   a) BAA number;
   b) Title of Proposal;
   c) Identity of prime Offeror and complete list of subcontractors, if applicable;
   d) Technical contact (name, address, phone/fax, electronic mail address);
   e) Administrative/business contact (name, address, phone/fax, electronic mail address);
   f) Duration of effort (separately identify basic effort and any proposed options)

2) **Part 1**: Detailed breakdown of all costs by cost category by calendar/fiscal year:
   a) Direct Labor - Individual labor category or person, with associated labor hours and unburdened direct labor rates;
   b) Indirect Costs - Fringe Benefits, Overhead, G&A, COM, etc. (Must show base amount and rate);
   c) Travel - Number of trips, number of days per trip, departure and arrival destinations, number of people, etc;
   d) Subcontract - A cost proposal as detailed as the Offeror’s cost proposal will be required to be submitted by the subcontractor. The subcontractor’s cost proposal can be provided in a sealed envelope with the Offeror’s cost proposal or will be obtained from the subcontractor prior to award;
   e) Consultant - Provide consultant agreement or other document which verifies the proposed loaded daily/hourly rate;
   f) **Materials** should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Please include a brief description of the Offeror's procurement method to be used (Competition, engineering estimate, market survey, etc.);
   g) **Other Directs Costs**, particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the contractor/recipient. (Justifications must be provided when Government funding for such items is sought.) Include a brief description of the Offeror’s procurement method to be used (Competition, engineering estimate, market survey, etc.)
h) Fee/Profit including fee percentage.

3) **Part 2**: Cost breakdown by task/sub-task using the same task numbers in the Statement of Work.

D. **Evaluation/Notification of Full Proposals**: It is anticipated that final selections will be made within 30 days after full proposal submission. After final proposal evaluation is completed, the offeror will be notified via e-mail of its selection or nonselection for an award. Detailed information regarding the evaluation criteria is listed in the following sections.

3. **Submission of Late Proposals**

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

(a) If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(b) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of white papers and was under the Government’s control prior to the time set for receipt of white papers; 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.
4. Significant Dates and Times

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time (Local Eastern Time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Paper Due Date (Page Limit: 7)</td>
<td>08 MAY 2007</td>
<td>2 p.m.</td>
</tr>
<tr>
<td>Notification of Navy Evaluations of White Papers *</td>
<td>29 MAY 2007</td>
<td>-</td>
</tr>
<tr>
<td>Full Proposals Due Date (Page Limit: 25)</td>
<td>10 JUL 2007</td>
<td>2 p.m.</td>
</tr>
<tr>
<td>Notification of Selection for Award*</td>
<td>24 JUL 2007</td>
<td>-</td>
</tr>
<tr>
<td>Awards *</td>
<td>25 OCT 2007</td>
<td>N/A</td>
</tr>
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*These dates and times are estimates as of the date of this announcement

NOTE: Due to changes in security procedures since September 11, 2001, the time required for hard-copy written materials to be received at the Office of Naval Research has increased. Thus it is recommended that any hard-copy proposal be mailed several days before the deadline established in the solicitation so that it will not be received late and thus be ineligible for award.
5. Address for the Submission of White Papers and Full Proposals

URL for the Submission of White Papers
White papers shall be uploaded to:
“https://onrountside.onr.navy.mil/aspprocessor/032_baa07024/”

Address for the Submission of Full Proposals
Ms. Jennifer Williams
Code: 0252 Room: W1269F
Office of Naval Research
875 N. Randolph Street, Suite 1425
Arlington, VA 22203-1995

Telephone: (703) 588-2432

V. EVALUATION INFORMATION

1. Evaluation Criteria
The following evaluation criteria apply to both the White Papers and the Full Proposals. These submissions will be evaluated through a technical/scientific/cost decision process with technical and scientific considerations being more important than cost. Even though cost is of less importance than all the technical factors combined, it will not be ignored. The degree of its importance will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly high as to diminish the value of the technical superiority to the Government. Criteria A-F are listed in descending order of priority.

A. Overall scientific and technical merits of the proposal
B. Naval relevance, transition potential and anticipated contributions of the proposed scientific research.
C. Management Approach/Plan
D. Offeror’s capabilities, related experience, and past performance, including the qualifications, capabilities and experience of the proposed team (including principal personnel).
E. The realism of the proposed cost.
F. For proposed awards to be made as contracts to large businesses, the socio-economic merits of each proposal will be evaluated based on the extent of the Offeror’s commitment in providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, HUBZone small businesses, veteran-owned small businesses, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions.
2. Evaluation Panel

Government technical experts drawn from the Office of Naval Research and other naval and defense activities/agencies will participate in the evaluation of the White Papers and Full Proposals. All government personnel participating in evaluation will be bound by appropriate non-disclosure agreements to protect proprietary and source-selection information.

The Government may use selected support personnel to assist in providing both technical expertise and administrative support regarding any white papers and full proposals ensuing from this announcement. These support contractors will be bound by appropriate non-disclosure agreements to protect proprietary and source-selection information.

VI. AWARD ADMINISTRATION INFORMATION

1. Administrative Requirements

- The North American Industry Classification System (NAICS) code – The North American Industry Classification System (NAICS) code for this announcement is 541710 with a small business size standard of 500 employees.

- CCR - Successful Offerors not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to award of any grant, contract, cooperative agreement, or other transaction agreement. Information on CCR registration is available at http://www.ccr.gov/.

- Certifications - Proposals should be accompanied by a completed certification package which can be accessed on the ONR Home Page at Contracts and Grants. For contract proposals, the certification package is entitled, “Representations and Certifications and Other Statements of Offerors (R&D Contracts).” The offeror must also complete the Online Representations and Certifications Application (ORCA) at https://orca.bpn.gov.

- Subcontracting Plans - Successful contract proposals that exceed $550,000, submitted by all “but small business concerns”, will be required to submit prior to award a Small Business Subcontracting Plan in accordance with FAR 52.219-9.

2. Reporting

The following is a sample list of reports that could be required under a research effort.

- Detailed Technical Data
- Technical and Financial Progress Reports
- Demonstration results
- Presentation Material(s)
- Other Documentation or Reports as required
- Final Report

However, please note that specific deliverables (that may include software and hardware
deliverables) should be proposed by each Responder and finalized during negotiations.

VII. OTHER INFORMATION

1. Security Classification

All white papers shall be unclassified. Full proposals are expected to be unclassified. Although not anticipated, confidential/classified proposals are not prohibited. In order to facilitate intra-program collaboration and technology transfer, the Government will attempt to enable awardees to work at the unclassified level to the maximum extent possible. If awardees use unclassified data in their deliveries and demonstrations regarding a potential classified project, they should use methods and conventions consistent with those used in classified environments. Such conventions will permit the various subsystems and the final system to be more adaptable in accommodating classified data in the transition system.

2. Project Meetings & Reviews

Individual program reviews between the ONR sponsor and the performer will be held as necessary. Periodic technology and program status reviews may be held to provide a forum for reviews of the latest results from scientific research and to foster interactions among Principal Investigators. These meetings will be held at various sites throughout the country. For costing purposes, Offerors should assume that 60% of these meetings will be at or near ONR, Arlington VA and 40% at the award recipient’s or other government facilities. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or web-based collaboration tools.

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 OLAW Animal Welfare Assurance approval letter, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. Similarly, for any proposal for research involving human subjects the Offeror must submit prior to award: documentation of approval from an Institutional Review Board (IRB); IRB-approved informed consent form; IRB-approved research protocol; an executive summary of planned research (one-half to one page in length); proof of completed human research training (e.g., training certificate, institutional verification of training, etc.); an application for a DoD Navy Addendum to the Offeror’s DHHS-issued Federalwide Assurance (FWA) or the Offeror’s DoD Navy Addendum number. The forms for assurance applications can be found at http://www.onr.navy.mil/sci_tech/34/343/ . 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. [Note: for research involving human subjects that is greater than minimal risk, administrative procedures to protect human subjects from medical expenses (not otherwise provided or reimbursed) that are the direct
result of participation in a research project must be addressed. Documentation describing those procedures may be requested. For additional information on this topic please email 343_contact@onr.navy.mil. For assistance with submission of animal and human subject research related documentation, contact the ONR Animal/Human Use Administrator at (703) 696-4046.

4. Department of Defense High Performance Computing Program

The DoD High Performance Computing Program (HPCMP) furnishes the DoD S & T and DT & E communities with use-access to very powerful high performance computing systems. Awardees of ONR contracts, grants, and assistance instruments may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer approval is obtained and if security/screening requirements are favorably completed. Additional information and an application may be found at http://www.hpcmo.hpc.mil/.