Special Notice N00014-22-S-C005  
Special Program Announcement for Office of Naval Research  
Research Opportunity:  
Low-Cost S-Band Radar Transmitter

I. INTRODUCTION

This announcement describes a technology area, entitled “Low-Cost S-Band Radar Transmitter” under the N00014-22-S-B001, Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology which can be found at https://www.onr.navy.mil/work-with-us/funding-opportunities/announcements. The submission of proposals, their evaluation and the placement of contracts will be carried out as described in the above Long Range Broad Agency Announcement.

The purpose of this announcement is to focus attention of the scientific community on (1) specifics of the area of interest, (2) the structure of the Special Program, and (3) the planned timetable for the submission of white papers and full proposals.

II. DESCRIPTION

The Office of Naval Research (ONR) is interested in receiving white papers and proposals describing approaches to develop a low-cost S-band RF transmitter (hereo referred to as “the demo transmitter”) with agile beamforming and agile waveform generation. To demonstrate a new Future Naval Capability (FNC), the demo transmitter will operate aboard a maritime surface vessel. Offerors with potential solutions should provide white papers and proposals applicable to the design, build, integration, and test of the demo transmitter.

This Special Notice concerns a two-phase program for the design, fabrication, and test of the demo transmitter. In Phase I, competing Offerors will conduct conceptual development and preliminary design for the demo transmitter. Phase I is to be completed 6 months after contract award. In Phase II, Offerors will fabricate and test their demo transmitter design. Phase II is to be completed approximately 39 months after contract award and includes delivery of the demo transmitter to the Government approximately 24 months after contract award.

While the primary purpose of this demo transmitter is to enable testing of new naval capabilities, a secondary purpose is to provide risk-reduction to future production efforts, which the Navy expects to pursue upon successful completion of this FNC demonstration. Relative to requirements for the demo transmitter, the performance requirements of production units (hereby referred to as “production transmitters”) may expand or contract. As such, it is desirable for the architecture of the demo transmitter to be scalable.

This Special Notice covers export-controlled technologies. Specific information on the program structure and technical specifications of greatest near term interest will be made available as a Government Furnished Information (GFI) package to DoD agencies, DoD contractors, and FFRDCs only (see the Long Range BAA for eligibility rules). ONR anticipates that at the end of BAA Call Number N00014-22-S-C005
the program, the transmitter will be validated with performance, form-factor, and cost commensurate with the goals outlined in the GFI package.

Copies of the GFI package describing the program structure and requirements of greatest near term interest to ONR will be made available to DoD agencies and contractors only (in accordance with Standard Distribution D and export controlled restrictions) on request to Stephen Hughes at stephen.t.hughes.civ@us.navy.mil, with trevor.m.snow3.civ@us.navy.mil and david.r.starkston.ctr@us.navy.mil copied. The request on company letterhead shall include the company name, company cage code, company classified mailing address, a current DoD contract number along with the government POC for that contract and the contact information for your Joint Certification Program POC. ONR will use this information to verify eligibility to receive Distribution D, export controlled information, and classified information. Requests for exceptions to these requirements may also be submitted to Mr. Hughes.

ONR expects to make multiple awards for this effort. Given the likely complexity of potential demo transmitter and availability of funding, ONR anticipates that only one effort, perhaps two efforts, will proceed into Phase II for fabrication. Approximately $7M of total funding is anticipated for the awarded efforts.

III. Industry Day Briefing

ONR will hold an Industry Day Brief on 20 May, 2022 at Johns Hopkins University Applied Physics Laboratory. There is no registration fee for participation.

ADVANCED REGISTRATION IS REQUIRED. Please visit the website below for registration details:

https://secwww.jhuapl.edu/EventLink/Event/132

IV. WHITE PAPER SUBMISSION PROCESS

Interested Offerors shall submit white papers and only those that satisfy the criteria set forth in N00014-22-S-B001 will be encouraged to submit a subsequent full proposal, which may be selected for a potential contract or other transaction agreement award. In addition to the instructions in N00014-22-S-B001 for constructing and sending the white paper, please address the following information:

- Describe a program for the demo transmitter, scalable to production transmitters, aligned with the government’s goals, and include the following sections:
  - Technical concept:
    - A description of the proposed architecture
    - Critical technology elements for the proposed architecture (e.g. high power amplifier).
    - Technical risk areas.
  - Cost and schedule:

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- Provide a preliminary proposed development schedule that includes relevant quantitative milestones.
- Rough order of magnitude (ROM) on program cost for the design, build, integration, and test of the demo transmitter.
- ROM cost for production transmitters, based on five units per year.

Specific instructions for submission can be found in N00014-22-S-B001. White papers or proposals received after the dates listed in Section VI will be considered as time and availability of funding permit.

The Government will provide responses regarding white papers via email on or about the date listed in Section VI. Any Offeror whose white paper technology was not identified as satisfying the BAA criteria will be discouraged from submitting a full proposal under this Special Notice.

V. FULL PROPOSAL SUBMISSION AND AWARD INFORMATION

Full proposals should be submitted under the FY 22 Long Range BAA (N00014-22-S-B001) by the date listed in Section VI below. Full Proposals received after that date will be considered as time and availability of funding permit. Full proposals shall be submitted in accordance with the requirements of the Long Range BAA.

ONR anticipates that contracts will be issued for this effort. Full proposals for contracts shall be submitted in accordance with the instructions listed in the Long Range BAA. The period of performance for projects should follow the timeline outlined in the GFI package. Although ONR expects the above described program plan to be executed, ONR reserves the right to make changes.

Funding decisions should be made by 24 August 2022. Selected projects will have an estimated award date of 15 December 2022.

VI. SIGNIFICANT DATES AND TIMES

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Last day to register for Industry Day</td>
<td>18 May</td>
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<tr>
<td>Industry Day</td>
<td>20 May</td>
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<tr>
<td>Recommended last day to request GFI</td>
<td>27 May</td>
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<tr>
<td>Recommended White Paper Submission Date</td>
<td>13 Jun</td>
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<tr>
<td>Notification of Request for Oral Discussion on White Paper*</td>
<td>21 Jun</td>
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<tr>
<td>Oral White Paper Discussions and recommendations to submit a Full Proposal*</td>
<td>27 Jun – 8 Jul</td>
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<tr>
<td>Recommended Full Proposal Submission*</td>
<td>8 Aug</td>
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<tr>
<td>Notification of Selection: Full Proposals *</td>
<td>24 Aug</td>
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<td>Awards *</td>
<td>15 Dec</td>
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Note: * These are approximate dates.
VII. Small Business Subcontracting

As indicated in ONR Broad Agency Announcements large businesses and non-profit organizations must submit a subcontracting plan along with their research proposal. While large businesses and non-profits are responsible for making these subcontracting arrangements, ONR will help facilitate prime contractor/small business contracting connections by posting to the ONR external website contact information of small businesses that have indicated their subcontracting interests and technological niche for prime contractor consideration for this program. This is not an endorsement, but an effort by ONR to help bring these parties together to provide superior solutions.

If you are a small business, and your company is interested in subcontracting activities with large businesses and/or non-profits considering your technology for this program, please provide the following information by email, to the ONR Small Business Director at ellen.simonoff.civ@us.navy.mil with the subject line, N00014-22-S-C005. Provide this information:

1) Company Name and Website
2) Individual (POC) name and contact information (email and/or telephone number)
3) Brief Technology Description (no more than 3 sentences)
4) Technology Key Words (no more than 10 words)

Note: Do not include ANY proprietary information. This information will be posted on the ONR website under this BAA call and will available to the public.

VIII. POINTS OF CONTACT

In addition to the points of contact listed in N00014-22-S-B001 the specific points of contact for this announcement are listed below:

Technical Points of Contact:
Dr. Trevor Snow
Program Officer, ONR Code 312
trevor.m.snow3.civ@us.navy.mil
703-696-5054

David Starkston
Support Contractor, ONR Code 312
david.r.starkston.ctr@us.navy.mil
703-696-4307

Business Point of Contact/Contracting Officer:
Stephen Hughes
Contracting Officer, ONR Code 251
stephen.t.hughes.civ@us.navy.mil
703-696-1575

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IX. SUBMISSION OF QUESTIONS

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

- Beta.Sam.gov, Contract Opportunities:
  - https://www.beta.sam.gov
- ONR Special Notice Webpage

Questions regarding **White Papers or Full Proposals** should be submitted NLT two weeks before the dates recommended for receipt of White Papers and/or Full Proposals. Questions after this date may not be answered.