

BAA Call N00014-23-S-BC05
Special Program Announcement for Office of Naval Research
Research Opportunity:
Physical and Networking Layer Prototype (PNLP)

I. INTRODUCTION

This announcement describes an Ocean Battlespace Mine Warfare and Ocean Engineering Systems Science and Technology (S&T) effort entitled “Physical and Networking Layer Prototype” under the effort N00014-23-S-B001, FY23 Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology which can be found at <https://www.nre.navy.mil/work-with-us/funding-opportunities/announcements>. The submission of proposals, their evaluation and the placement of research grants and contracts will be carried out as described in the above BAA.

The purpose of this announcement is to focus attention of the scientific community on (1) the area to be studied, (2) a classified Industry Day 10 FEB 2023 for dialogue amongst those interested in this arena, and (3) the planned timetable for the submission of white papers and full proposals.

II. TOPIC DESCRIPTION

The proposed topic will explore and exploit undersea multimodal communications paradigms for a number of air, surface, and subsurface systems. The PNLN program will pursue both hardware (modems and test frames) and software (to include novel waveforms) development to support undersea multimodal communications from both manned and unmanned vehicles.

Background:

The ability to optimize and tailor communication between undersea assets has long been a paradigm of environment first. Assets, both manned and unmanned, drive the communication paradigm, and can exploit the environment for collective gain. This effort represents the evolution in technological development for undersea multimodal communications for persistence and tailored environmental gain for specific environments.

Objective:

The Office of Naval Research (ONR) is interested in receiving proposals on technologies supporting maritime communications hardware and software technologies. This effort desires to provide assured, optimized communication between assets, both within the undersea environment, and through the air-water interface. Both hardware and software technical solutions should address the ability to ingest and translate distinct communication modalities, and optimize them for the environment in which they are presented.

III. Industry Day

ONR will hold an Industry Day on February 10th, 2023 at Naval Surface Warfare Center, Panama City Detachment in Panama City Beach, FL. There is no registration fee for participation. The Industry Day will serve to provide specific information that will be required knowledge when submitting white papers. The following content will be provided at the PNLN Industry Day:

- Project Description, Goals and Schedule
- Relevant concepts of operation and employment
- Functional Description of Architecture (OV-2)
- White Paper Submission Requirements

Who should attend: Contracting firms operating within the S&T enterprise who have experience designing maritime communications technologies and multimodal hardware technologies are encouraged to attend. Further technical questions should be addressed to Emily Medina, ONR Program Officer, at emily.w.medina2.civ@us.navy.mil.

Note: This announcement is neither a contract, nor a request for proposal, nor a promise to contract, nor a commitment of any kind. The Government assumes no liability for costs incurred by any participant for travel or participation.

ADVANCED REGISTRATION IS REQUIRED.

The PNLN Industry Day will be held on February 10, 2023, at the following location:

Naval Surface Warfare Center Panama City Division
110 Vernon Panama City FL 32407

Please submit your SECRET visit request via DISS no later than 1600 Eastern Standard Time (EST) 03 FEB 2023:

Please follow the below instructions to send clearance information to ensure your eligibility to attend.

1. Send Clearance info via DISS SMO: NSWC PCD-VR-110

Meeting Name (Please use this name exactly in request): UMST Industry Day

Date: 2/10/2023

Point of Contact: Dr. Matthew Bays, matthew.j.bays2.civ@us.navy.mil

Degree of Access: SECRET

Security Contact: Leslie Carothers-Womble, mary.l.carotherswomble.civ@us.navy.mil

2. NON-CAC holders must fill out a SECNAV 5512 form and bring Photo-ID.

NO CLEARANCES WILL BE VERIFIED ON THE DAY OF THE MEETING. IF YOU HAVE NOT BEEN CONFIRMED THAT YOUR CLEARANCE HAS BEEN VERIFIED YOU WILL NOT BE PERMITTED INTO THE ROOM.

Check-in will begin at 0730 AM Central Standard Time (CST) and the meeting will begin at 0830 CST.

All briefings will be classified SECRET. All participants must be U.S. citizens holding a valid security clearance at the time of the meeting. A formal agenda will be provided to confirmed attendees. No time will be allocated for industry briefings at this venue; however, there will be time allocated for questions and answers. Questions of a technical nature submitted in advance of the Industry Day will be answered at this event and made available to all participants.

The review is classified at the SECRET level. Cameras, tablets, laptops, cell phones/blackberry, smart phones, portable electronic devices, Wi-Fi or Mi-Fi devices, personal digital assistants (PDA), electronic books or readers, voice recorders, pagers, radios, scanners, global positioning satellite devices (GPS), thumb drives, or any electronic device that has the ability to transmit or receive, such as a Bluetooth enabled watch or Bluetooth hands free earpiece are not permitted in the classified session. A plastic bin for small electronics will be provided for storage outside the meeting room. Briefcases and backpacks must also remain outside the meeting room. Space will be available for storage outside the meeting room.

IV. WHITE PAPER SUBMISSION

Although not required, white papers are strongly encouraged for all offerors seeking funding. Each white paper will be evaluated by the Government to determine whether the technology advancement proposed appears to be of particular value to the Department of the Navy. Initial Government feedback will be issued via e-mail notification from the Technical Point of Contact. The initial white paper appraisal is intended to give entities a sense of whether their concepts are likely to be funded.

A Detailed Full Proposal (Technical and Cost volumes) may be subsequently encouraged from those white papers that proposed technologies have been identified through the above referenced e-mail as being of “particular value” to the Government. However, any such feedback does not assure a subsequent award. Full Proposals may also be submitted by any offeror whose white paper was not identified as being of particular value to the Government or any offeror who did not submit a white paper.

For white papers that propose efforts that are considered of particular value to the Navy but either exceed available budgets or contain certain tasks or applications that are not desired by the Navy, ONR may suggest a full proposal with reduced effort to fit within expected available budgets or an effort that refocuses the tasks or application of the technology to maximize the benefit to the Navy.

White papers should not exceed 5 single-sided pages, exclusive of cover page, references, and resume of principal investigator, and should be in 12-point Times New Roman font with margins not less than one inch. White papers shall be in Adobe PDF format (preferred) or in Microsoft Word format compatible with at least Microsoft Word 2016.

The Cover Page can be found at

<https://www.nre.navy.mil/work-with-us/how-to-apply/submit-contract-proposal> for contract submissions and at <https://www.nre.navy.mil/work-with-us/how-to-apply/submit-grant-application> for grant submissions.

The 5-page body of the white paper should include the following information:

- Technical Concept: A description of the technology innovation and technical risk areas.
- Future Naval Relevance (where applicable): A description of potential Naval relevance and contributions of the effort to the agency's specific mission.
- Operational Naval Concept (where applicable): A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.
- Operational Utility Assessment Plan (where applicable): A plan for demonstrating and evaluating the operational effectiveness of the Offeror's proposed products or processes in field experiments and/or tests in a simulated environment.
- Rough Order of Magnitude (ROM) cost estimate.

A resume of the principal investigator, not to exceed 1 page, should also be included after the 5-page body of the white paper.

White papers must be submitted through FedConnect at www.fedconnect.net in accordance with Section D.2.d of the BAA. In addition, white papers should also be submitted through the email address listed on the research area page of the website for "Ocean Engineering and Marine Systems" (<https://www.nre.navy.mil/organization/departments/code-32/division-321/ocean-engineering-and-marine-systems/ocean>). The subject line of the email shall read: "N00014-23-S-BC05 White Paper Submission". Do not send ZIP files. Password protected files are discouraged.

To ensure full, timely consideration, white papers should be submitted **no later than 16 MAR 2023**. White papers received after that date will be considered as time and availability of funding permit.

The planned date for completing the review of white papers is **15 APR 2023**.

V. FULL PROPOSAL SUBMISSION AND AWARD INFORMATION

Full proposals should be submitted under the BAA (N00014-23-S-B001) by **12 MAY 2023**. Full Proposals received after that date will be considered as time and availability of funding permit.

ONR anticipates that both grants and contracts will be issued for this effort.

Full proposals for contracts should be submitted in accordance with the Appendix 2 of the BAA. Full proposals for grants should be submitted via Grants.gov in accordance with Appendix 1 of N00014-23-S-B001.

ONR plans to fund 4 individual awards with a value of \$1.5M per year, using research funds. However, lower and higher cost proposals will be considered.

The period of performance for projects may be 3 to 5 years.

Although ONR expects the above described program plan to be executed, ONR reserve the right to make changes.

Funding decisions should be made by 26 MAY 2023. Selected projects will have an estimated award date of 4 OCT 2023.

VI. SIGNIFICANT DATES AND TIMES

Event	Date	Time
Visit Request Deadline	03 FEB 2023	1700 EST
PNLP Industry Day Check In	10 FEB 2023	0730 - 0800 CST
PNLP Industry Day	10 FEB 2023	0800 - 1130 CST
Recommended White Paper Submission Date*	16 MAR 2023	2359 EST
Notification of White Paper Evaluation*	15 APR 2023	1630 EDT
Recommended Full Proposal Submission	12 MAY 2023	2359 EDT
Notification of Selection: Full Proposals *	26 MAY 2023	1630 EDT
Awards *	4 OCT 2023	1630 EDT

Note: * These are approximate dates.

VII. Small Business Subcontracting

As indicated in the BAA, 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@navy.mil with the subject line, “SN N00014-23-S-BC05”. Provide this information:

- 1) Company Name and Website
- 2) Individual (POC) name and POC email address
- 3) Business Size and socio-economic category
- 4) Brief Technology Description (no more than 3 sentences)
- 5) 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 be available to the public.

VIII. POINTS OF CONTACT

In addition to the points of contact listed in N00014-23-S-B001 the specific points of contact for this announcement are listed below:

Technical Point of Contact:

Emily Medina
Program Officer
703-696-4025
emily.w.medina2.civ@navy.mil

Business Point of Contact/Contracting Officer:

Matthew Murray
Contracting Officer
703-696-4257
matthew.murray18.civ@us.navy.mil

VIII. SUBMISSION OF QUESTIONS

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

Answers to questions submitted in response to this BAA Call will be addressed in the form of an Amendment and will be posted to the following web pages:

- Beta.sam.gov Webpage –Contract Opportunities – <https://beta.sam.gov/>
- Grants.gov Webpage – <http://www.grants.gov/>

- ONR BAAs, FOAs and Special Program Announcements Webpage - <https://www.nre.navy.mil/work-with-us/funding-opportunities/announcements>

Questions regarding **White Papers or Full Proposals** should be submitted no later than two weeks before the dates recommended for receipt of White Papers and/or Full Proposals. Questions after this date may not be answered.