BAA Call N00014-23-S-BC05
Amendment 0003
Special Program Announcement for Office of Naval Research
Research Opportunity:
Physical and Networking Layer Prototype (PNLP)

Attachment 1 – Questions and Answers received after Amendment 0001

Q: Is there a recommended way to structure the Options to facilitate cost share from the acquisition office? We are trying to sort out the distinction and timing of base and option periods that are requested for the proposal. [From previous amendment responses posted to this Call, and in feedback for the white paper]. . .possible interpretations are:

1. *Year 1 is a base period, years 2 and 3 are option years in the "FNC" and an additional option is requested past the three year proposal.*
2. *Years 1 through 3 are the "FNC" base period of the proposal and an additional option is requested past this three year base period. This is consistent with the manner in which we wrote our white paper which covered the initial three years as a single base period.*
3. *Something else*

Please give us some feedback on the desired base/option structure for the proposal.

A: PoP: ONR plans to let PNLP contracts for a maximum PoP of 5 years. It is understood that the ONR FNC will complete after 3, so including Options which allow acquisition to exercise work in transition of PNLP to the program office, or follow on development with ONR funds, is advised. General integration tasks, or engineering tasks can be offered as Options for future efforts. Offerors have the option of including a Base period for each executing year, or just one large base with a series of options. Preference is to set a cycle/series of tasks which is centered around the technical work, versus annual/serial periods.

Q: Please address final contract deliverables in more detail.

A: A finite, uniform set of CDRLs list should be utilized to the largest extent possible. Please refer to the below list, which comprises a a very specific set common to most contracts. Should your specific deliverables not readily modify into one of these available bins, please contact ONR and we'll discuss. Your full proposal should utilize this list, in part or in full, for CDRLs.

- **Monthly progress reports.**
- **Annual report.**
- **Final report.**
- **Data collection and analysis plans.**
- **Post test reports and analysis.**
- **Initial Approach Description**
- **Technical Interchange Meetings (TIM) briefs.**
- **Algorithm description, source, code, and executable code**
- **List of property acquired or provided.**

Q: We noticed that in Attachment 1 – Questions and Answers from the 10 February 2023 Industry Day, the Answer in Question 2 stated that "…threshold/objective criteria provided if encouraged to submit a full proposal." Since we were encouraged to submit a proposal. . .is there a document or additional information that you can provide us to support our full proposal submittal?

A: T/O. We set T/O values at SECRET, so the program didn't pass them out in white paper feedback. There are both threshold and objectives values, as well as a reliability threshold, as we are planning to iterate the test plan many times over to set a larger sample set from which to draw some of these statistics. This will help bound for the program office what is attainable, and when, and aid in quantifying probabilistic performance over what time period. We are setting metrics for: range, latency, LPI/LPD, and total packet size. Channel models will be provided at program kickoff.

Q: Demo/Experiment Support. Do you envision the annual demos at San Clemente being a coordinated event with all performers or individual events for each performer? What deployment services (ship support and personnel, diver support if needed) and experiment infrastructure (moorings, underwater power and/or acoustic nodes, test range, shore-side wireless communications to deployed AWI asset,…) are available? Will they be GFE/GFS or do we need to budget for them. If we must budget, where can we find the cost information?

A: Annual in-water integration event will be coordinated by a government test director. It is envisioned all PNLP performers will be integrated and tested through the same test plan for apples-apples comparison, or end-to-end network characterization. We anticipate a number of interim checkouts in Year 2 at the test site, and a much longer duration, iterative set of tests in Year 3, once reliability and integration issues have been sufficiently addressed. GFE/GFI. Offerors should scope for adequate material to prove out capability at the bench leading up to in water integration. GFE for PNLP includes 2 large seafloor platforms, and a number of mobile assets (gliders). Physical hardware (modems) will be addressed as part of overall test discussion at program kickoff. Government test director will take care of all ship/diver/logistics support, not including performer travel.

Q: Will the annual UMST Program Review in Panama City be the annual program review for the PNLP program? If not, is there a periodic program review for which we should budget?

A: PNLP performer review will be held separate from UMST. It is wise for offerors to budget for both UMST attendance, and PNLP program review separately.

Q: Will there be government personnel or GFI available for us to get the information on the interface specifications, computer resources and operating system in the [program of record], information on the interface to acoustic sensors/emitters…?

A: We are not issuing a program office interface as part of the PNLP program. All PNLP tests and capabilities developed will be tested from a surrogate node, so program office interfaces are not part of the tasking.

Q: Is it required, desired or not a factor that the hardware be tamper resistant/cyber secure?

A: Cybersecurity is a good thing for an offeror to build out as an option task, if it is not already baked in to the hardware design.

Q: At Industry Day it was mentioned that channel models would be supplied by the ONR. Could the UWA channel model be provided now for use in our simulations for the proposal?

A: At this time, we anticipate needing to wait until kickoff before sharing these models.

Q: At industry day Astranet was mentioned. Can ONR provide info on Astranet and how it will be used in PNLP? Will our solution need to integrate with Astranet?

A: Complementary programs. ASTRAnet completes in FY23, but efforts for real-time virtual reconstruction environment may be available in FY24 to PNLP offerors.

Q: What contract vehicle will be used – FAR or OTA?

A: ONR is an Ech I Navy command, and issues its own RDTE contracts with BA1-BA3 (sometimes BA4) funding.

Q: Is there formal collaboration expected with other PNLP performers? For instance, a hardware platform provider that would host our software?

A: Cross-teaming. We will address specific teaming arrangements and integration as part of the program kickoff; formal collaborations are highly encouraged.