AMENDMENT 0003 to Distributed Systems Processing BAA

Questions and Answers from Distributed Systems Processing Industry Day April 2, 2007 (continued)

(Updated April 9, 2007)

The purpose of this amendment to BAA 07-020 is to revise the answer of question 15 that was provided in Amendment 0002 and to add additional questions and answers.

Revision -

15. Please verify that contractors cannot propose or develop anything related to a specific system.

Under a BAA we are not allowed to solicit awards/proposals for specific systems. For this BAA we seek techniques that apply to general types of passive and active acoustic distributed systems; however, they must be robust enough to meet the specific goals of this project. ONR will not fund projects unless they have the ability to meet the needs of the customers.

Additional Q&A -

21. Will the data include examples of clutter and threat signals?

Yes, data will include examples of clutter and threat signals.

22. Will the data be labeled or will part of our task be to discover classifications?

Data will be labeled.

23. Are you more interested in a completely decentralized approach in which all nodes equally share computing and logic responsibility, or one in which some of the logic is centralized (i.e. in one or more nodes or perhaps a computer on/off shore)? Or does this depend on the proposed solution?

The signal and information processing architecture must be compatible with the operational systems that are the transition targets:

- (a) In the Fixed Surveillance System, element level acoustic data from each node are telemetered back to a central shore-based processing facility.
- (b) In the multistatic active sonar application, acoustic data are processed in each buoy. Detections are radioed back to the tactical support center.
- 24. Could you describe again what you mean by "ad hoc" classification?

"Ad hoc classifiers" are incremental improvements to algorithms, such as statistical learning machines, that are proposed as generic solutions to sonar signal classification problems with insufficient justification or without an understanding of the unique constraints imposed by underwater environments.