Human Systems Integration BAA 07-013 Amendment 5 19 March 2007

This amendment provides answers to new questions.

Question 1: Section 6.1.2 discusses issues pertaining to vision and also issues pertaining to "information" and states that display standards must address both basic perceptual properties as well as higher order cognitive processing of information. Those two domain areas are very distinct and each is very significant in scope. Are proposals that only address basic vision or higher-order cognitive processing being considered? Or must a proposal address both domain areas to be considered?

Answer 1: Proposals should address basic vision and higher-order cognitive processing.

Question 2: Gap 2 focuses on the display for "information with uncertainty". Please explain the phrase "information with uncertainty". Does this address the issue of information being associated with certain levels of confidence based on "age", "number of sources", "noise", etc?

Answer 2: "information with uncertainty" is applicable to all disciplines, however, while this announcement is particularly interested in displays pertaining to undersea warfare, proposals addressing other warfare areas will be considered. The term "information with uncertainty" pertains to the ability to display data so that an operator understands the imperfections in the data and can comprehend how the uncertainty affects the task at hand. The operator must be able to extract meaningful information from a display where the displayed content is ambiguous, incorrect, or correct. There are a number of issues that affect operators' ability to process displayed information. The operator's challenge is to filter ambiguous and incorrect information from the display.

Question 3: Section 6.1.2 states identified the need to "detect, recognize, and identify...targets". Is Target Identification the only human performance issue for Gap 2?

Answer 3: No

Question 4: Section 6.1.2 states identified the need to "detect, recognize, and identify...targets". Please identify the type of target information that is most susceptible to "uncertainty". Please list the sensor data that is most susceptible to "uncertainty".

Answer 4: Target information most susceptible to "uncertainty" is generally that which is obtained passively. All sensors present data with some level of uncertainty, and such uncertainty is task dependent. The offeror's proposal needs to demonstrate an understanding of the problem, explain how the proposed solution will assist Naval operations, provide a science and technology

approach to solve the problem, and explain how the deliverables may be transitioned to Naval operations.

Question 5: Section 6.1.2 states identified the need to "detect, recognize, and identify...targets". Is the primary concern with Target Identification due to sensor capability and sensor data? Or are there other issues that impact Target identification especially?

Answer 5: Sensor capability may contribute to the problem, but target characteristics, operator knowledge, skills, and abilities, display interface, etc. may also contribute to operators' ability to identify targets.

Question 6: Section 6.1.2 Gap 2 discusses the need for vision models. Are proposals that address aspects of Gap 2 without proposing a model being considered?

Answer 6: Yes

Question 7: Is Gap 3 a continuation of Project Nemo, and if so, could he point us to any recent technical reports that would help us target gaps left in previous Project Nemo work.

Answer 7: This BAA is not a continuation of Project Nemo

Question 8: Will ONR look favorably or unfavorably upon a proposal that provides an Ala Carte approach to meeting BAA requirements?

Answer 8: Answer provided in Amendment #4. See Section 3. Answer 1.

Question 9: Can we include with our proposal a version of the BAA with uniquely numbered S&T questions, numbered Outcomes, and numbered Product Goals in order to support our ability to reference the BAA without consuming large amounts of real-estate in our page counts?

Answer 9: The proposal must adhere to BAA format guidance (section IV. application and submission information). Citing sections from the BAA announcement is acceptable.

Question 10: What type of warranty, memo, letter, or assurance is satisfactory to ONR as proof of our assertion that our customers are willing to enter into and ultimate execute TTAs for this work? Is there a standard form you prefer, or is a simple assertion that we've spoken with our customers and in naming them explicitly we assert the potential to execute TTAs?

Answer 10: There is no standard form for demonstrating the level of mutual transition commitment between a proposer and a potential customer. As described on page 17 of the BAA, the information presented must convey an understanding by both proposer and customer of the transition process.

Question 11: We wish to address human factors that are common to all four gaps, and so wish to craft our proposal around those human factors gaps as opposed to how they specifically apply to the submarine or UxV environment. Will ONR look upon a proposal that is not, necessarily gap specific, favorably, unfavorably, or neutrally?

Answer 11: Unfavorably. The proposal must address at least one capability gap.