## ONR BAA #07-028 Undersea Cooperative Cueing and Intervention Amendment 1

The purpose of this amendment is to post answers to general questions received by ONR regarding the subject Broad Agency Announcement.

- **Q1**. Are UUV and/or USV vehicles available as GFE for the First Field Demonstration in September 2009? If yes, what type (REMUS 100, 200, Bluefin, etc.), how many of each type, and with what sensors installed?
- A. Regarding the GFE UUVs for the Sept '09 demonstration, ONR does not have specific information for distribution at the moment, but believes there will be two REMUS platforms and two Bluefin platforms. Each participant will have access to the same (actual) set of vehicles, swapping in their autonomy and communications algorithms. ONR is not ruling out that a participant use their own platform/sensors, only that the BAA will not provide additional funds for platforms. If a participant were to use BAA funds for hardware, it would come at the expense of funds they could dedicate otherwise.
- **Q2**. For the First Field Demonstration in September 2009, do the "USVs" have to be actual USVs or can manned boats of representative size be used as surrogate USVs?
- A. For the Sept '09 demonstration, manned vehicles may act as surrogates for the USVs.
- Q3. The BAA mentions (Section 6, second paragraph) "UUV deployment may be triggered from the USV autonomously or through a communications link to the LCS." How much human monitoring and control do you see in your vision of the Undersea Cooperative Cueing and Intervention Capability? How much in the first field demonstration?
- A. Regarding monitoring and control. ONR wants a system that operates under the assumption that there may be \*no\* monitoring and control from a human, the "cues" coming from cooperating autonomous platforms to each other. However, it is important that the autonomy solutions are indeed able to exploit scenarios where communication and monitoring from a human may be available if circumstances permit. Even in the first demonstration where USVs may be manned, the cues for deploying and re-directing UUVs should not come from humans.
- **Q4**. Can ONR provide assistance in matching prime offerors with potential subcontractors?
- A. At this time, ONR has no plans to offer this service.
- **Q5**. Are FFRDC's eligible to serve as prime offerors?

A. FFRDC's are ineligible to serve as prime offerors.

**Q6**. Is there a preferred launch\_and\_recovery system for the UUV's from the USV, or is this part of the development effort?

A. Currently there is no identified preferred system for launch and recovery. Metrics of utility are probably what you would infer - max reliability, minimum time to operate, minimum restrictions on environment / sea-state and so on.

**Q7**. Is ONR going to provide the vehicles or pre-select the set of potential vehicles that can be used?

A. The plan is indeed that ONR will provide UUV test platforms for the demonstrations. More detail on exactly which ones, with what sensors will be described at a later date before full proposals are due. It is not mandatory to use such systems, but no additional funds outside the BAA will be allocated for procuring additional platforms for use by the participants.