

Amendment 0001
Solicitation Number: ONRBAA11-019
“Department of Defense Explosive Ordnance Disposal (EOD) (previously referred to as Joint Service EOD)”

The purpose of Amendment 0001 is to amend the BAA and to provide answers to the following questions.

1. BAA 11-019 is hereby amended as follows:

Section IV, paragraph 1 has been deleted and replaced with the following:

“1. Application and Submission Process -

White Papers: White papers are to be submitted as a pdf file to the following drop site:

<http://onroutside.onr.navy.mil/aspprocessor/annual321oe/>

If an Offeror does not submit a white paper before the specified due date and time, it is not eligible to participate in the remaining Full Proposal submission process and is not eligible for funding. Each white paper should state that it is submitted in response to this BAA and cite the particular sub-section of the Research Opportunity Description that the white paper is primarily addressing.

White Paper Evaluation/Notification:

Each White Paper should state that it is submitted in response to this announcement. 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. The submitters of White Papers judged to be of "particular value" to the Navy will be so identified in the initial response provided by ONR and encouraged to submit Full Proposals. The submitter of any White Paper not judged by the ONR reviewers as being of "particular value" to the Navy is ineligible to submit a Full Proposal under this solicitation.

It is anticipated that final selections will be made within 6 weeks after full proposal submission. As soon as the final full proposal evaluation process is completed, PI's will be notified via email of their project's selection or non-selection for FY12 funding. Full proposals received after the published due date and time will not be considered for funding in FY12.”

Section IV, paragraph 2, and subparagraph a, has been deleted and replaced with the following:

a. WHITE PAPERS

White Paper Format

- Paper Size – 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing – single-spaced
- Font – Times New Roman, 12 point
- Number of Pages – No more than seven (7) single-sided pages (excluding cover page, resumes, and quad chart). White Papers exceeding the page limit may not be evaluated.
- Copies – Unclassified submissions are to be sent through the drop site:

<http://onroutside.onr.navy.mil/aspprocessor/annual321oe/>

NOTE: 1) Do not send hardcopies of White Papers (including facsimiles) as only drop site submissions will be accepted and reviewed; 2) Do not send .ZIP files; 3) Do not send password protected files.

White Paper Content

- Cover Page – The Cover Page shall be labeled “WHITE PAPER”, and shall include the BAA number, proposed title, Offeror’s administrative and technical points of contact, with telephone numbers, facsimile numbers, and Internet addresses, and shall be signed by an authorized officer.
- Technical Section – The Technical section shall state which areas and topics are being addressed and shall consist of clear descriptions of objectives, technical issues and risks which must be resolved to accomplish objectives, approach to resolving these issues, particular prior experience of offeror in the targeted technology area, and a clear description of and schedule for demonstration of the significant aspects of the concept.
- Operational EOD Concept – A description of the project operational objectives, how the new capability to be delivered is envisioned to be utilized by EOD forces, and the expected EOD operational performance improvements.
- Operational Utility Assessment Plan – 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.
- Quad Chart – A one page quad chart will be included in the white paper. (See attachment for completion and submission.)

2. Questions and Answers are provided as follows:

Question 1: In the case that topics are closely related and we can propose to both, do you have any guidance as to whether we can respond to both as a two step process in the same white paper or whether ONR prefers that we break them out into two separate white papers?

Answer 1: Interested parties should submit a separate white paper per individual topic. (See BAA Section IV, paragraph 1.)

Question 2: Could you please provide some clarification regarding the submission instructions in Section IV. Application and Submission Information of BAA 11-019?

IV. 1. Application and Submission Process (p. 9) states White Papers are to be submitted as a pdf file via electronic mail (email) only to: then it provides a website?

On Page 10 under White Paper Evaluation/Notification it states White Papers shall be submitted directly to the Technical Point of Contact (TPOC) identified in Paragraph 7 above. On Page 11, Section a. White Papers, White Paper Format, it states Copies - Unclassified submissions are to be sent through the drop site: then it provides the website address again. Should we be emailing our White Paper submission to Brian Almquist, uploading to the drop site, or both?

Answer 2: Submissions should be uploaded as pdf files to the following drop site. See Amendment number 1 above.

This should be edited so it reads as: “White papers are to be submitted as a pdf file to:

<http://onroutside.onr.navy.mil/aspprocessor/annual321oe/>

Question 3: Regarding the new ONR EOD BAA, do you know if there is funding applied against it or are they looking for topic ideas with the possibility of future funding if there is interest in a particular technology? I couldn't tell by the announcement.

Answer 3: Funds are available. See Section 1 paragraph 11.

Question 4: 1) In regards to non-contact robot control, I have the following questions: a) is the focus of this topic non-contact robot control methods in general or specifically gesture-based control? b) Are verbal commands included in non-contact control? c) In regards to gesture-based approaches, though the BAA seeks methods that do not require sensors on the operator, are sensors on the OCU (e.g., if the OCU were a laptop) acceptable? d) Is the UGV itself intended to be the platform for observing gestures?

Answer 4:

a) This topic seeks intuitive, alternate ways to control an EOD robotic platform. Any approach that allows the operator to control the EOD platform without using traditional controllers such as those specified in the BAA will be considered.

- b) Verbal commands are an acceptable alternate control method; however control via this approach has been demonstrated and documented at the applied research level.
- c) For gesture based approaches, the intent is to free the operator of wearing sensors or being tethered to the platform. Utilizing or implementing sensors on the OCU is acceptable.
- d) The UGV is intended to receive the commands from the OCU over its standard communication protocol. The conversion of the users control input into standard commands will occur at the OCU location as the UGV may not be in proximity to the user during a mission.

Question 5: The requirements for sensing, transmission and display are different for manipulation (lower framerate sufficient, but higher spatial resolution desired) vs. driving (higher framerate needed, but lower spatial resolution may be ok). Can you comment on what the primary application of 3D data transmission and display is? Is it for manipulation? Or for better situational awareness during long range or non line of sight driving? Both?

Answer 5: The primary application of 3D data transmission is better situational awareness for teleoperation of the robotic platform. There are situations where lower frame-rate and higher resolution are needed and others where higher frame-rate and lower resolution are acceptable, given that the bandwidth limitation is 1.5Mb/s. A system that is flexible for all aspects of tele-operation is sought. Manipulation, platform mobility at full speed, and remote reconnaissance are all examples of functions performed during tele-operation of a robotic platform.

Question 6: Are you seeking 3D display technologies or is a mouse/touch based exploration of a 3D model sufficient?

Answer 6: ONR seeks Mouse/touch based exploration of a 3D model. Both technologies are acceptable.

Question 7: What types of EOD Disrupters are available with regards to this BAA?

Answer 7: A pdf file entitled, "Disrupters (JSEOD Mission Overview)", is provided as an attachment below.

JSEOD Mission Overview

Current Tools (Disrupters)

