Defense Threat Reduction Agency
Amendment 2 of the Basic Research Broad Agency Announcement
Webinar Briefing to Potential Proposers
Questions and Answers

Thursday, 06 December 2012, 1400-1600

On December 6, 2012 the Defense Threat Reduction Agency conducted a webinar to promote Amendment 2 of the Basic Research for Combating Weapons of Mass Destruction Broad Agency Announcement and the Service Call to the research community. The briefing slides and audio recording from this webinar are posted at the following link:

http://center.ncet2.org/index.php?option=com_content&view=article&id=588

The questions below were asked during the webinar session. The Defense Threat Reduction Agency answered most of the questions in brief as part of the question and answer portion of the webinar. The Defense Threat Reduction Agency is providing this written follow-up for all of those who attended the webinar and to the greater at large community.

Question 1: BAA - how can a Young Investigator be incorporated into a multidisciplinary award? Should the YIP just be included in the large award as one of the participants, or should the YIP submit a separate proposal?

Answer 1: The intent of the Young Investigator Program (YIP) is to provide awards for individuals within five (5) years of their PhD (or an equivalent degree). Young investigators may apply directly to special topics within the BAA (and in the Service Call) that are denoted with the three (3)-letter "YIP" designation. Period C YIP-Topics 1-9 are currently posted in Amendment 2 of the BAA and the Service Call. Please refer to the BAA and Service Call for a complete description of the topics and review the definition of what constitutes a young investigator.

Young investigators are not precluded to submitting to topics that are not YIP-specific topics; however, these topics generally receive a greater number of white papers/proposals and the competition is greater. Also note, young investigators may apply as part of a team for a multidisciplinary award.

Question 2: BAA - Did I understand this correctly: ONLY military academies will be allowed? "only from the following: DoD degree granting academic institutions that are Federal government organizations" So NO other universities can apply?

Answer 2: There are two separate solicitations. One is the Basic Research for Combating Weapons of Mass Destruction Broad Agency Announcement published at grants.gov. The eligibility criteria for the BAA are in Section III and are restated below:

"Pre-application white papers and proposals submitted for this BAA will be considered from the following U.S. and foreign-based equivalents:

- Accredited degree-granting colleges and universities.

- Industrial/commercial basic research centers, including small businesses with a portfolio predominantly in basic research proposing a project with significant participation (minimum 30% of total effort value on the proposed project) by one or more accredited degree-granting colleges and/or universities. Note: Not eligible for Young Investigator Awards.
- Not-for-profit organizations/basic research centers with a portfolio predominantly in basic research proposing a project with significant participation (minimum 30% of total effort value on the proposed project) by one or more accredited degree-granting colleges and/or universities. Proof of 501(c)(3) status from the Internal Revenue Service may be required. For foreign-based establishments entirely based outside the U.S. and/or its territories, proof of not-for-profit status may be required. Note: Not eligible for Young Investigator Awards."

The second is the Basic Research for Combating Weapons of Mass Destruction Service Call for DoD Degree-Granting Academic Institutions which is a solicitation published both at www.dtra.mil and https://www.dtrasubmission.net/portal/. The eligibility criteria for the Service Call is in Section 4.1 of the document and is restated: "DoD degree-granting academic institutions that are Federal government organizations, e.g. United States Military Academy at West Point, The Air Force Institute of Technology, etc., are eligible to submit white papers and proposals in response to this intramural Service Call."

Question 3: BAA - Are the $75K/YR Seed Awards mentioned in the BAA also 3 Yrs + 2 Yr option?

Answer 3: As stated in Section II.1.2 of the BAA, "The POP for the Seed Awards will be for one (1) year or less. Seed Awards may not include option years." Please note that there are no seed topics available in Period C of the BAA.

Question 4: BAA: Can you define the difference between single scope and multidisciplinary efforts? How multi is multi?

Answer 4: Single Scope Awards are defined as research projects that focus on exploratory aspects of a unique problem, a high-risk approach, or innovative research in subjects with potential for high impact to C-WMD science. Research must support undergraduate, and/or graduate students, and/or postgraduate students. Single Scope Awards may have Co-Principal Investigators (Co-PIs) and subawards (grants and/or contracts). Single Scope Awards are lower dollar values commiserate with the limited scope of the research.

Multidisciplinary Awards are defined as research projects that involve a comprehensive program of innovative research in an interdisciplinary area with potential for high impact. The proposed research must involve fundamental contributions in research by multiple investigators from diverse disciplines (proposal must be multidisciplinary). Investigators may be from a single institution or multiple institutions. Research must support multiple undergraduate, and/or graduate students, and/or postgraduate students. Multidisciplinary awards are generally of higher dollar values commiserate with the scope of the research. Applicants must take great care to clearly outline the impact to C-WMD science that is to be gained from the higher dollar amount investment and justify the scientific contribution from each investigator.

Any topic that is not otherwise designated as a YIP (or SEED) Topic, is eligible for either Single Scope and/or Multidisciplinary Awards. The specific dollar value for each award type is designated in each

topic. It is at the discretion of the applicant to determine the best approach; however, it should be noted that the BAA (and the Service Call) specifically state that the predominance of awards will be Single Scope Awards.

Question 5: BAA - How many projects will be funded?

Answer 5: As stated in Section II.2 of the BAA, "The final number of grants and the amount of funds allocated for each period will be determined after all pre-application white papers and invited proposals are received and evaluated. On average DTRA expects to award 50-75 grants annually for a total grant value of approximately $66M." Thus, the projects funded will be a function of funding monies appropriated by congress and by the number of white papers/proposals received.

Question 6: Do DTRA programs have a rate cap on indirect cost rate or do they support the federally negotiated indirect cost rate for the institution?

Answer 6: As detailed in Section IV.5, "Indirect costs may be restricted to less than 35% of the total grant value regardless of previously negotiated rates with the cognizant agency. The 2008 DoD Appropriations Act (Public Law 110-116, Section 8115), 2009 DoD Appropriations Act (Public Law 110-329, Section 8109), and the 2010 DoD Appropriations Act (Public Law 111-118, Section 8101) applied this restriction to awards made using fiscal year 2008, 2009, and 2010 Basic Research funds. This restriction does not apply to awards made using fiscal year 2011 and 2012 Basic Research funds but **may** apply to future awards."

Question 7: BAA - Some of these projects seem to really be at the national lab level. How important is the subcontract with a national lab?

Answer 7: There is no pre-disposition to projects that include a national lab. If a national lab is needed to support the university because a university cannot complete a particular task, then it may be appropriate to partner with a national lab. Otherwise there is no expectation that a national or military lab included in a white paper/proposal. The value of a national lab should be based on the programmatic needs of the applicant.

Question 8: Topic 4: Does a proposal need to address all aspects of the research areas listed in the presentation, or can it focus on only one or a few aspects? For example, does a proposal need to address both the understanding aspect as well as the development of control strategy aspect?

Answer 8: The applicant does not need to address all of the research areas. They may address only one or a few as the applicant so desires.

Question 9: Topic 6 - What is the scale of this topic? Large (atmospheric) or Small (localized)?

Answer 9: The kinetics turbulence topic is aimed not atmospheric, but localized in the sense of post-detonation environment. Traditionally these studies have been studied with shock tubes. The kinetics aspect can be chemistries in high temperature, high pressures, created in the lab. Atmosphere was meant to reflect a local environment.

Question 10: BAA - 1. Can a small business for profit company and university submit a proposal? 2. What if your proposal falls in two topics?

Answer 10: Part 1—As stated in Section III.1 of the BAA, "Industrial/commercial basic research centers, including small businesses with a portfolio predominantly in basic research proposing a project with significant participation (minimum 30% of total effort value on the proposed project) by one or more accredited degree-granting colleges and/or universities. Note: Not eligible for Young Investigator Awards."

Part 2—As detailed in the BAA and the Service Call, DTRA will not review white papers that attempt to address multiple topics. Please note that there is no limit to the number of white papers/proposals that may be submitted by an applicant; however, applicants are strongly encouraged to limit the overlap in scope if multiple projects are submitted for consideration.

Question 11: Topic 4: Following up the previous question, will a single PI and multi-PI proposals be treated differently in terms of the research areas addressed?

Answer 11: Each individual proposal is evaluated on its merit and responsiveness to the topic.

Question 12: Topic 4: can you clarify the difference between multi-layer and multi-dependent network that you have in mind? For instance, multi-layer networks refer to a single network infrastructure that is composed of multiple layers, whereas multi-dependent networks refer to multiple physical infrastructures, where each can be multi-layered?

Answer 12: The intent of the topic is to address the substantial amount of research in what we consider a single layer network. These single layer networks may be comprised of infrastructures that are composed of multiple networks. For example, the communications network and the oil production network and the movement of oil are both single layer networks. Multiple layer networks are different functionalities that are dependent on one another. For example the control system network for various heating and ventilation networks are dependent upon the electric network in order to operate. A cascading failure that may be non-fatal in the electrical network may cause a failure in the control system network that is also non-fatal. However, the two failures continue to cascade back to the original electrical network causing additional failure to that network and this cascading event continues until the networks fail. In this particular topic we are not interested in a cascading failure in a single network, but rather cascading failures in multiple networks.

Question 13: Topic 2 scope: Is topic 2 strictly limited to post detonation debris? Can it be expanded to pre-detonation and detection of materials used in IED type devices?

Answer 13: Yes the topic is limited to post detonation debris, and, No it cannot be expanded to pre-detonation and detection of materials used in IED type devices.

Question 14: BAA - Can post docs at the universities apply?

Answer 14: If the university considers a post-doc as a viable Principal Investigator representing the university, there is no restriction.

Question 15: BAA - Is there a limit to the number of submissions from a single university?

Answer 15: No, there is no limit.

Question 16: BAA/Topic 9 - Is protective materials agents CWA (eg. via polymeric membrane loaded with particles) within topic 9?

Answer 16: It is to be emphasized that this topic is intended to solicit basic research, not applied research. More specifically, the goal of Topic 9 is to address the primary objective: "Develop new predictive understanding of the influence of substrate-mediated mass transport on the kinetics of heterogeneous multicatalyst systems". Please refer to the topic description for specific direction regarding experimental systems of interests, which are defined as "multicatalyst systems". The offeror is encouraged to present his or her unique ideas, provided that they align with the topic.

Some examples of relevant applications that this research might enable are provided within the topic description. This list is not intended to be comprehensive, although it is intended to provide an indication of some of the DTRA priority applied research needs of relevance to this topic. This list is also not intended to imply that applied research should be proposed for this basic research solicitation. However, one could possibly envision exploring mechanisms relevant to novel protective materials and/or other applied research areas such as those listed within the topic description. The most successful proposals will develop understanding that is predictive--that is, it will be generalizable beyond the specific model system(s) that are investigated, and will also be able to communicate both (a) potential to provide revolutionary scientific advancement and (b) relevance to priority DTRA needs.