

CBD Plan to Implement Executive Order 13329: Encouraging Innovation in Manufacturing

Implementation of EO 13329: The Joint Science and Technology Office for Chemical and Biological Defense (JSTO-CBD), Defense Threat Reduction Agency (DTRA), is the executive agent for the execution of the Science and Technology (S&T) component of the DoD Chemical and Biological Defense Program (CBDP). The CBD Small Business Innovation Research (SBIR) program is one element of the overall Physical Science and Technology/Medical Science and Technology program portfolio managed by the JSTO-CBD.

The Chemical and Biological Defense (CBD) SBIR program is unique among the ten DoD SBIR programs in that technologies are sought to specifically focus on a congressionally mandated program: the Joint DoD Chemical and Biological Defense Program. Technology requirements are identified by the Joint Requirements Office for Chemical and Biological Defense (JRO-CBD). These requirements represent a niche market in the areas of Physical Science and Technology in addition to Medical Science and Technology. Many of the required technologies, necessary to fill identified technology gaps, have specific battlefield applications and some technologies may not be appropriate for dual-use/commercial markets. Further, some of the products are specifically developed for Government use only, and sales are restricted by export control regulations.

The CBD SBIR Program Management Office (PMO) will use the following approach to implement E.O. 13329. Five specific areas are described: 1) Integration of Executive Order initiative into Chemical and Biological Defense program goals; 2) Procedures and mechanisms to be used; 3) Tracking progress of manufacturing-related SBIR awards; 4) Promoting Executive Order activities; and 5) Tracking and publishing success stories:

1) Integration of Executive Order initiative into CBD SBIR goals.

- The Chemical and Biological Defense Science & Technology portfolio currently has eight capability areas (e.g., technology areas) that SBIR projects may be categorized. These capability areas comprise the two Research and Development areas with the Chemical and Biological Defense Program: Physical S&T that includes: detection (point and standoff); decontamination; protection (individual and collective); modeling & simulation; and Threat Agent Science. The Medical S&T capability areas include: pretreatments (e.g., vaccines); therapeutics; and diagnostics. Post prototype development/manufacturing related technologies potentially can be linked to each of these technology areas.
- The CBD SBIR program will encourage participating DoD laboratories and centers to develop manufacturing related topics and/or to emphasize the linkage to manufacturing innovation if a relationship is not readily apparent.
- The CBD SBIR data for number and dollar value of manufacturing related SBIR awards will be submitted to DoD in conjunction with the annual report.

2) Procedures and mechanisms to be used.

- The CBD SBIR PMO has provided a copy of Executive Order 13329 to all SBIR coordinators located at participating DoD laboratories and centers.
- The CBD SBIR program will comply with DoD procedures and mechanisms related to the Executive Order.
- Future SBIR topics will be developed, where appropriate, for the annual CBD SBIR Phase I solicitation (FYxx.1) that address EO 13329 requirements. The intent is to develop, approve, and publish those topics that will likely improve opportunities for future commercialization and manufacturing by incorporating one or more of the following attributes to selected topics:
 - Conduct research for a process or product that has significant manufacturing implications, although not the sole purpose of the topic
 - Include manufacturing issues associated with technology under development
 - Address the affordability, producibility or manufacturability of an innovative technology
 - Introduce the development and application of advanced technologies for manufacturing processes, tools, and equipment
 - Target manufacturers of manufacturing equipment or those entities applicable to the manufacture of many systems or production lines (i.e., equipment deployed and used by individual soldiers in a theater of operations such as badge-type sensors, personal protective masks, or personally administered medical therapeutics)
 - Develop activities/tasks in the SBIR Phase II Work Plan (e.g., Statement of Work) associated with manufacturing or manufacturing-related processes
 - Inclusion of an innovative process or product that has future manufacturing implications
- The CBD SBIR program will attempt to maximize the transition from Phase II to product commercialization by one of the following approaches:
 - Address manufacturing process, technique or innovation as the primary objective of the topic
 - Incorporate the technology into a CBD acquisition program of record through the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD). The JPEO-CBD is responsible for the execution of advanced technology development funds (e.g., '6.4'/'6.5' funding). JPEO-CBD also conducts Advanced Concept Technology Demonstrations (ACTDs) and Advanced Technology Demonstrations (ATDs) to determine the battle-ready status and assess operational capabilities of new technology.
 - Work with the Applied Technology Division of the Joint Science and Technology Office for Chemical and Biological Defense to identify opportunities to conduct test and evaluation (T&E) of mature Phase II projects.

- Incorporate the SBIR-developed technology into the core CBD S&T program to conduct further development (via non-SBIR funds)
 - Initiate a Phase III program as a follow-on to Phase II SBIR funding
- The CBD SBIR program will employ the use of manufacturing as a tie-breaker in the evaluation process to the maximum extent possible without adversely impacting other critical mission areas.

3) Tracking Progress.

- The CBD SBIR PMO will track and report its progress regarding implementation of the Executive Order to DoD.

4) Promoting Executive Order activities.

- The CBD SBIR PMO will post the Executive Order and plan to its SBIR website.
- The CBD SBIR PMO has added a link on its website to the to the “Manufacturing in America” document issued by the Department of Commerce (DOC):
<http://www.ita.doc.gov/media/Publications/pdf/manuam0104final.pdf>
- The CBD SBIR PM and PMO staff will educate small businesses on the Executive Order and plan at local, regional and national conferences and similar venues in conjunction with the overall SBIR outreach activities.

5) Track and publish success stories.

- The CBD program currently tracks the progress and final outcome of all CBD SBIR programs. Where appropriate, success stories related to manufacturing technology and revenue derived by small businesses from fulfilling SBIR program objectives will be presented. The overall benefit to the Chemical and Biological Defense Program will also be addressed.