

Statement for the Record

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INTRODUCTION

Good afternoon, Chairmen King and Saxton, Congressmen Pascrell and Meehan, and distinguished members of both of these Subcommittee. I am pleased to appear before you today to discuss the role of the Department of Homeland Security (DHS) and in particular the Science and Technology Directorate in ensuring that we leverage military technology to enhance homeland security through technology transfer.

One of the primary missions of the Science and Technology (S&T) Directorate is to facilitate the development of cutting-edge homeland security technologies. The S&T Directorate facilitates such development through collaboration and research funding arrangements with a network of entities including the DHS laboratories, other Government agencies' laboratories, university-based Homeland Security Centers for Excellence, and the private sector. The capstone of the S&T Directorate's mission, however, is the successful technology transition of these sponsored technologies to end users within the Department, other Federal agencies, State and local government entities, and the private sector. Military technology transfer for homeland security purposes is therefore only one component of the S&T Directorate's technology transfer initiative.

Technology developed for one purpose, such as a military application, cannot always be transferred in a straightforward manner to civil operations. The requirements for operations, maintenance and support, for performance, and for total cost of ownership often impact such transfers. Although the basic scientific principles that underpin a particular technology may be leveraged, significant re-engineering may be required to make the technology suitable for homeland security purposes.

Other issues associated with transferring technologies to the homeland security operating environment include the need for ease of operations, life-cycle affordability, providing liability relief, providing incentives for non-federal actors to purchase useful technologies, developing and promulgating standards and providing technical assistance to aid those purchasers in their procurement decisions. While the Department has made substantial progress in all these areas, much remains to be done.

In some cases, the users of homeland security technology are Federal entities: for example, the Coast Guard, the Secret Service or the Border Patrol. In these cases the transition is relatively straight-forward to a captive user base inside DHS that can regularly communicate their needs, be directly involved in the development process and fund deployment, operations, and maintenance when development is complete. In other cases, the end users of homeland security technology are not Federal entities: for example, first responder technologies that benefit state and local governments or cyber-security and infrastructure protection technologies that benefit private companies. In these cases, combining the ingredients that make for a successful transition can be more complicated and can include elements of commercialization such as market development, venture capital stimulation, or public-private partnerships. Additionally, there is a legal and intellectual property framework required for successful technology transition to non-Federal entities, which may include Cooperative Research and Development Agreements

(CRADAs) and licensing agreements. Finally, facilitating acquisition of homeland security technologies by state and local entities may include grant and direct assistance programs, which requires the S&T Directorate to closely coordinate with the DHS Office of Domestic Preparedness.

TECHNOLOGY TRANSITION IS FUNDAMENTAL TO THE S&T DIRECTORATE’S RDT&E PROCESS

We recognize the challenges inherent in the S&T Directorate’s mission and have introduced the Research, Development, Testing and Evaluation (RDT&E) process that requires early consideration of transition issues. The RDT&E process seeks to enable successful transition by providing a series of well-defined transition paths and programmatic check points where each technology’s progress toward a successful transition is enabled, tracked, and evaluated. We have identified the organizational and programmatic characteristics that are known enablers of transition, and through this process are seeking to embed them in all of our technology development efforts.

In addition, the S&T Directorate is working with the DHS laboratories and the DOE national laboratories to identify federally-funded technology that may be transitioned to non-Federal entities, and to provide the legal and procedural framework to transition such technology out of the laboratory and into the field.

Standards developed by the S&T Standards Program are also an enabler of technology transition. Consensus driven performance specifications for equipment provide critical information to all the providers in the supply chain - from components to systems – to ensure that suppliers can accurately assess production costs as part of their business strategy. The SAFETY Act, administered by the S&T Directorate, is essential to technology transition in that it addresses liability issues for manufacturers whose products are deployed during an act of terrorism. Manufacturers seek to limit their exposure to law suits following terrorists’ attacks, and the SAFETY Act serves to mitigate their exposure.

TECHNOLOGY TRANSFER OF MILITARY TECHNOLOGIES: SECTION 1401

The transfer of technologies between Departments, specifically between DHS and DoD, is critically important to meeting the DHS mission. The S&T Directorate actively pursues opportunities available through technology transfer.

Our most effective method to accomplish transfer of military technologies is to use what is commonly referred to as the “Section 1401” provision.

Pursuant to Public Law 107-314 (FY 2003 DOD Authorization Act), Section 1401, DOD is working with DHS and DOJ to identify and transfer military technology relevant to Federal, State, and local responders. In this provision, the Department of Defense is given the authority to “identify, evaluate, deploy and transfer to Federal, State, and local first responder’s technology items and equipment of homeland security.” Development of

a technology transfer process, or “Blueprint,” to enhance the transfer of technology from DoD to the public safety community has been accomplished through a series of interagency meetings between representatives from the Departments of Defense, Homeland Security and Justice. These meetings culminated in an agreement on December 8, 2004, on the importance of firm commitment to this process, a nominal timeline for technology-related events, initiation of work on the design of the transfer process (e.g., that it must be two-tracked, one for research and development, the other for technology items already developed and in production), and most importantly, an outline of the major features of a compliant technology transfer process. The representatives initially assigned responsibilities for process ownership, and a Memorandum of Agreement (MOA) formalizing the important steps of this process is currently being negotiated. The MOA is expected to be in the signature cycle by the fall of 2005.

S&T TECHNOLOGY CLEARINGHOUSE

To ensure that the S&T Directorate could leverage a robust information clearinghouse to facilitate technology transition, Section 313 of the Homeland Security Act required the S&T Directorate to establish a technology clearinghouse that would provide a number of information services to first responders. The S&T Directorate has awarded a contract to the Public Safety and Security Institute for Technology (PSITEC) to provide these services which will all be available through a Knowledge Portal.

By capitalizing on existing capabilities (commercial-off-the-shelf and government-off-the-shelf technology), rather than reinventing them, this Knowledge Portal will augment the S&T Directorate’s technology transfer and commercialization capability. The existing Responder Knowledge Base (RKB) and the Lessons Learned Information Sharing (LLIS) created by the Memorial Institute for the Prevention of Terrorism, under sponsorship from ODP, already provide excellent resources for responders. RKB is used to evaluate various equipment specifications to determine a possible fit to their needs and the LLIS is the national network of Lessons Learned and Best Practices for emergency response providers and homeland security officials. These and other resources will be accessible through the Knowledge Portal.

When complete, the Knowledge Portal will provide a “One Stop Shop” for access to relevant information from a wide variety of sources. Its architecture will be open, interoperable, and non-proprietary to facilitate cost effective, long-term operations, maintenance and upgrades.

CONCLUSION

The S&T Directorate will continue to leverage technologies from other Federal agencies, including the Department of Defense, as we strive towards providing the Nation’s first responders with the tools, equipment, and systems that enable them to secure our Nation.

We see the end state of a technology transition function that provides better technology tracking, user collaboration, market scanning, intellectual property management and

commercialization-enabling resources, all at a faster pace of equipping responders with their most critical needs. We will continue to work with the Departments of Defense and Justice under the Section 1401 provisions, and we will use PSITEC and the SAFETY Act to continue to provide innovative capabilities to the Nation's first responders and others on the front lines of homeland security.

This concludes my prepared statement. With the Committee's permission, I request my formal statement be submitted for the record. Chairmen King and Saxton, Congressmen Pascrell and Meehan, and distinguished members of both of these Subcommittees, I thank you for the opportunity to appear before you, and I will be happy to answer any questions that you may have.