

**NOT FOR PUBLICATION
UNTIL RELEASED BY
SENATE ARMED SERVICES COMMITTEE**

**STATEMENT OF
DR. JAMES TEGNELIA
DIRECTOR,
DEFENSE THREAT REDUCTION AGENCY**

**BEFORE THE
SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES
COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE**

12 March 2008

**NOT FOR PUBLICATION
UNTIL RELEASED BY
SENATE ARMED SERVICES COMMITTEE**

Introduction

Mr. Chairman and members of the subcommittee, it is an honor to be here today to address the technology being developed by the Defense Threat Reduction Agency (DTRA) to combat the threat of Weapons of Mass Destruction (WMD). This year, we in DTRA are celebrating the agency's tenth anniversary. DTRA was created in 1998 to consolidate into a single agency Department of Defense (DoD) elements that had a role in responding to threats posed by WMD. Three overarching national imperatives drove that decision: countering terrorism, sustaining the nation's nuclear deterrent, and strengthening the Department's WMD nonproliferation, counterproliferation and consequence management capabilities. Ten years later, events demonstrate these imperatives are even more demanding and critical.

I am pleased to report that, in partnership with other U.S. Government (USG) organizations, industry, academia, non-governmental organizations, and allies and friendly nations, DTRA has expanded the nation's ability to reduce and, where possible, eliminate or minimize the threats posed by traditional chemical, biological, radiological, nuclear, and large-scale conventional explosive (CBRNE) weapons.

This progress could not have occurred without the strong support of the Congress, and I wish to thank this committee for your approval of our budget request and of the legal authorities we have sought over the years. I am particularly appreciative of your approval of the full DTRA Fiscal Year 2008 budget request, which represented the most significant change in the agency since its establishment. Your extension of and revisions to the Counterproliferation Program Review Committee (CPRC) statute last year will also strengthen the interagency partnerships that are essential to focusing the full national capability against WMD threats.

My remarks today focus on the progress we have made in developing advanced technologies for the Combating WMD (CWMD) mission. I will address our Research, Development, Test and Evaluation (RDT&E) projects in the context of the broader DTRA CWMD mission, which also includes our Combat Support Agency, other operational mission support, and Nunn-Lugar Cooperative Threat Reduction (CTR)

Program responsibilities. I will begin with a review of CWMD mission accomplishments and describe the agency today. My discussion of our nuclear-related technology will take place in the context of a “loose nuclear weapon;” that is, a nuclear weapon in terrorist hands with its ultimate target being a city in America. I will tie that discussion to the items that DTRA has displayed in the back of this room as part of the technology demonstration. I will conclude with a description of the future for DTRA.

Combating WMD Mission Accomplishments

DTRA was an organization ahead of its time when it was created because today’s comprehensively defined and structured CWMD mission did not yet exist. The idea of consolidating a loose confederation of entities that worked in the WMD arena – the Defense Special Weapons Agency, the On-Site Inspection Agency, the Defense Technology Security Administration (DTSA), and the CTR Program Office in the Office of the Secretary of Defense (OSD) – was something quite new. At the time of its establishment, the agency was also designated as a Combat Support Agency and charged with expanding the level of WMD-related support being provided to the Combatant Commanders (COCOMs). The new agency was also assigned responsibility for executing the Science and Technology (S&T) portion of the Chemical/Biological Defense Program (CBDP) and was given responsibility for funds management of all CBDP activities. An important new feature of DTRA was the Advanced Systems and Concepts Office, charged with looking at the toughest questions and issues related to current and over-the-horizon WMD threats, and encouraging new thinking about how we respond to these threats.

Despite ambiguity on what it meant to “reduce the threat” and in the absence of a comprehensive high level guiding strategy that linked nonproliferation, counterproliferation, and consequence management with the deterrence missions of the COCOMS, the new agency came together and executed its combined responsibilities with greater efficiency. Over time, changes were made to the original concept for DTRA. The most notable was an early decision by OSD and Congress that the broad

technology security mission of DTSA more properly resided in the Office of the Under Secretary of Defense for Policy.

As the nation came to better understand the nature of the emerging WMD threat, particularly the attractiveness of CBRNE weapons to terrorists, the full potential of DTRA became clearer to all. In addition to executing RDT&E programs and providing operational support, DTRA helped shape the development of CWMD policy, strategy, and operational concepts. Within a few years of establishment, DTRA was widely regarded across the department and among many other USG organizations as the “go to” agency on WMD matters.

A defining moment in the agency’s history occurred in December 2002 with the publication of the *National Strategy to Combat WMD*. This strategy provides the framework of three conceptual pillars - WMD nonproliferation, counterproliferation, and consequence management – that defined the CWMD mission. Subsequent strategy documents such as the *National Military Strategy to Combat WMD* (February 2006) provided more substance to the overarching national strategy. Recent DoD direction, including the 2006 Quadrennial Review and biennial planning guidance, has increasingly emphasized the need for expanded nonproliferation capabilities such as “security cooperation and partner activities” and “threat reduction cooperation” that support COCOM “Phase 0” operations to shape more favorable security environments; better means for locating and tracking WMD and related materials; expanded WMD elimination capabilities; improved strike capabilities against hard and deeply buried targets and far more effective nuclear detection, interdiction, and forensics capabilities.

A second defining moment in DTRA’s history was the Secretary of Defense’s decision in January 2005 to designate the Commander, U.S. Strategic Command (CDRUSSTRATCOM) as the lead COCOM for the integration and synchronization of DoD CWMD efforts in support of USG objectives. Shortly afterwards, the CDRUSSTRATCOM established the Strategic Command Center for Combating WMD (SCC-WMD) to integrate and synchronize DoD efforts to combat WMD. The Center is working to develop and maintain global situational awareness of WMD activities,

advocate for CWMD capabilities, and to assist with CWMD-related planning, while shifting emphasis away from DoD-centric approaches toward interagency solutions.

Because DTRA and its predecessor organizations had a long history of providing technical and operational support to the USSTRATCOM nuclear mission, and in recognition of the DTRA responsibility as the Department's Combat Support Agency for providing WMD knowledge, expertise, and capabilities to the COCOMs, the DTRA director was "dual-hatted" as the Director for the SCC-WMD. To better leverage DTRA capabilities and to accelerate the operational stand-up of the SCC-WMD, the Center was co-located with the agency at the new Defense Threat Reduction Center at Fort Belvoir, Virginia, which opened in November 2005. The SCC-WMD achieved Initial Operating Capability (IOC) on 26 January 2006 and Full Operating Capability in December 2006. Thus, there is now a seamless working relationship between the COCOM responsible for the nuclear deterrent and the integration and synchronization of the CWMD mission and the defense agency with technical and operational expertise in both of these missions.

I emphasize this point because it highlights the value of expanded partnerships and collaborative efforts across the DoD, the USG, the private sector, and partner nations. Defeating the WMD threat will require the sharing of situational awareness and the full mobilization of national and international expertise and capabilities. DTRA's relationship with USSTRATCOM and the other COCOMs is a point of departure from which new interagency relationships across the USG are being developed. A successful example is the partnership that has developed between DTRA and the Intelligence Community (IC). Since 2002, DTRA and the Defense Intelligence Agency (DIA) have jointly addressed the Hard Target Defeat problem through the DTRA Hard Target Research and Analysis Center (HTRAC) partnership with DIA's Underground Facility Analysis Center to locate, characterize, and assess the options against tunnels and deeply buried bunkers related to WMD production, storage, delivery systems, and command and control. This concept of teaming DTRA R&D expertise with DIA's intelligence expertise has proven so successful that we have expanded our partnership to

encompass the entire CWMD mission area in the form of the new Counter WMD Analysis Cell.

The private sector – industry, academia, and non-governmental organizations – also offer WMD expertise essential to a national effort. DTRA’s predecessor organizations had well-developed ties with non-government partners that have both expanded and deepened over the years. For example, through the University Strategic Partnership, DTRA has formed a close relationship with university consortia led by the University of New Mexico and Penn State that support our S&T projects to create the next generation of national WMD experts.

There is also much to be gained by expanding partnerships with allies and friendly nations. Examples of such partnerships include structured programs such as the CTR Program to programs with wider venues, such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism. We in DTRA believe that there are many opportunities to build and expand regional partnerships and integrate these as appropriate into global efforts. In addition, DTRA is partnering with other nations on technology development in support of force protection, hard and deeply buried target defeat, chemical/biological defense, and nuclear detection.

Another defining moment in the transformation of our CWMD capabilities was the reassessment and revitalization of our research and development program beginning in 2006. Of particular note, we initiated a systems approach to CWMD which provided greater integration between RDT&E projects and Operations and Maintenance (O&M) activities, and focused these efforts on addressing capability gaps. With the support of Congress, we have added a CWMD Basic Research (6.1) Program that leverages the basic research being performed by the Services, DARPA, and others. Congress also supported the establishment of a WMD Defeat Capabilities RDT&E (6.5) program that will increase our ability to directly support the special needs of the warfighters.

DTRA Today

DTRA is now a “full service” CWMD organization with programs and activities that span threat anticipation; collaboration with and support to the IC; global WMD situational awareness and information sharing across DoD and the USG; research and development in partnership with other USG organizations, academia, industry, other non-governmental organizations, and allies and friends across the globe; technical and operational “reachback” support for an expanding list of customers; WMD-related planning, exercise support, and subject matter augmentation for the COCOMs; arms control; cooperative threat reduction activities; vulnerability assessments and force protection; support to the DoD nuclear mission; and collaborative training, education, and workforce development to maximize the national wealth of WMD expertise.

We are an organization of over 1,900 civilian and military personnel located primarily at Fort Belvoir, Virginia, and Kirtland Air Force Base, New Mexico. Several hundred of our military and civilian personnel are assigned to field offices and military commands across the U.S., the Pacific, Asia, and Europe. Civilians make up about sixty percent of our workforce, with the balance being uniformed personnel provided by the Services. We are also assisted by an extensive contractor base.

Our \$1.2 billion annual direct appropriation includes RDT&E programs, O&M activities, Former Soviet Union Threat Reduction/Cooperative Threat Reduction (FSUTR/CTR) Program funding, and Procurement accounts. DTRA is also responsible for managing the S&T portion of CBDP, which is about \$612 million in the Fiscal Year (FY) 2009 budget request, and serves as the funds manager for the approximately \$911 million in the FY 2009 CBDP acquisition program. This means that we manage an annual budget portfolio of about \$2.8 billion.

Over the past two years, we have been developing the concept of “campaigns” – focused and integrated efforts across the agency and our appropriations accounts designed to focus on specific efforts to expand our CWMD capabilities. In addition to integrating our efforts across the agency, campaigns guide us in supporting departmental and national CWMD goals, direct our current program, and identify capabilities that will

be needed in the future. Our campaigns span the entire CWMD mission spectrum and encompass nonproliferation, counterproliferation, and consequence management. Campaigns directly support the eight underlying CWMD military missions identified in the *National Military Strategy to Combat WMD*: Security Cooperation and Partner Activities, Threat Reduction Cooperation, Interdiction, Elimination, Offensive Operations, Active Defense, Passive Defense, and Consequence Management.

The DTRA campaigns and their recent accomplishments are as follows.

Campaign 1 - Situational Awareness This campaign seeks to develop and sustain global situational awareness of WMD and to support decisive action. Capabilities being sought include: DTRA CWMD Common Operating Picture; a common intelligence picture of WMD; and expansion of partnerships development within the CWMD community of interest. This campaign also provides continuous direct support to the SCC-WMD. Among the products developed by this campaign and now online are the Situational Awareness CWMD Information Portal that supports a common operating picture, and the Interagency CWMD Database of Responsibilities, Authorities, and Capabilities (INDRAC) that provides the CWMD community of interest a comprehensive and accessible accounting of agency responsibilities, legal authorities, and CWMD capabilities. We also established ties with the Department of Homeland Security (DHS), Center for Disease Control, Department of Health and Human Services (DHHS), and Department of State (DOS) to monitor indications and warnings of biological attacks and pandemic diseases.

Campaign 2 - Control WMD Materials and Systems Worldwide DTRA develops technologies, produces concepts of operation, executes operations and programs, and fosters international partnerships to prevent the proliferation of WMD or WMD-related capabilities. Its goals are to improve control over WMD; reduce the size and shape of the WMD threat; build partner capacity to combat WMD; and improve capabilities to perform WMD interdiction and elimination operations. Several significant accomplishments have resulted from this campaign. In 2007, the DoD International

Counterproliferation Program (ICP), for which DTRA is the Executive Agent, provided 44 training missions in 16 countries to improve the capabilities of border guards, customs officials, and law enforcement organizations. DTRA also is promoting regional CWMD collaboration with the goal of establishing a global network that strengthens our defense-in-depth against WMD. We initiated this concept in the Black Sea region by hosting conferences, sponsoring a regional exercise, and developing links to regional organizations. DTRA also supported the establishment of USSTRATCOM's Joint Elimination Coordination Element (JECE) to perform activities and operations necessary to train and prepare joint forces and Command and Control elements to conduct WMD elimination missions. The JECE achieved Interim Operational Capability in August 2007 through its participation in Exercise ULCHI FOCUS LENS 2007 in South Korea.

Campaign 3 - Eliminate WMD as a Threat to Warfighter The focus of this campaign is to develop and manage applicable research investment strategies and coordinate science and technology efforts that provide DoD with operational capabilities, research and development, and technical subject matter expertise for Passive Defense, Installation Protection, Consequence Management and System Survivability. During 2007, DTRA performed mission survivability, vulnerability, and critical infrastructure assessments in support of OSD, the Joint Staff, the COCOMs, the Services, other DoD components, the IC, and DHS at home and overseas. Under joint management with the Department of the Army, the Transformational Medical Technology Initiative should provide capabilities against future genetically engineered biological threat agents for which our present countermeasures might be ineffective. This ambitious initiative holds great promise for not only developing broad spectrum medical countermeasures, but for also paving the way to establishing an enduring capability for DoD and the nation to meet the emergence of a novel biological threat with an accelerated sequence of steps that result in production of medical products within a responsive timeframe. The Chemical and Biological Defense Programs seeks to exploit emerging nanotechnology, biotechnology, information technology, and cognitive science technologies to support detection and individual and

collective protection. We are working with the Army on advanced materials integration for the next generation ground soldier system, and seeking opportunities to coordinate early with Major Defense Acquisition System development programs to determine where more seamless integration of burden-free protection technologies may render our warfighters immune from concerns about biological and chemical agents.

Campaign 4 - Protect the Homeland from WMD This campaign is designed to provide crisis and consequence management support to the DoD and civil authorities to prevent WMD attacks and/or mitigate their consequences on the homeland and also focuses on sharing these capabilities with international partners. It leverages expertise through education, training, and exercises; operating concepts; and technologies and tools to develop CWMD-related homeland defense capabilities. An important element of this campaign is the Defense Threat Reduction University, which we envision becoming a premier national capability to integrate Federal, state, and local CBRNE training and education. DTRA deploys specialized Consequence Management Teams and provides WMD Reachback expertise and decision support tools from its Operations Center to the U.S. Northern Command and the National Guard WMD Civil Support Teams. We share our mission assurance expertise with Federal, state, local, and non-governmental organizations to enhance Critical Infrastructure and Defense Industrial Base protection. DTRA also sponsored the US European Command's Exercise FLEXIBLE RESPONSE 08, a command post consequence management exercise involving multiple CBRNE events. Conducted overseas, this exercise demonstrates the defense-in-depth that is essential to protecting the U.S. homeland and relied upon the same basic consequence management expertise that DTRA could provide in response to WMD events inside our border.

Campaign 5 - Transform the Deterrent This campaign is the cornerstone of our continuing support operations to the U.S. strategic deterrent. Our nuclear safety, security, control and reliability programs are all integral parts of our enduring nuclear strategic

support mission. Additionally, this campaign is designed to provide research and development, as well as operational and technical expertise, to support the COCOMs in holding WMD and associated infrastructure and leadership at risk through offensive means. The goals are to provide the COCOMs the capability to identify, characterize, plan, interdict, target, execute, and assess any WMD-related target; and to have all offensive options, to include conventional, unconventional, and nuclear capabilities to dissuade, deter, and defeat potential adversaries. For example, we have several efforts underway to defeat hard and deeply buried targets, beyond the HTRAC which I previously mentioned, including the development of the Massive Ordnance Penetrator (MOP) which will greatly improve our conventional hard target defeat capability; and, target assessment capabilities including expanded reliance upon advanced modeling and simulation. In August 2007, at the request of the U.S. Central Command Air Forces, a team of DTRA personnel was sent to the Tora Bora region of Afghanistan to perform assessments at several cave sites that had been bombed by the U.S. The technical information gained by this team has advanced our understanding of the effectiveness of our weapons against such important targets. DTRA also supports the U.S. nuclear deterrent by providing tools for hardening critical systems against nuclear weapons effects and providing support to the USSTRATCOM nuclear planning mission. We also provide OSD and the Joint Staff with an independent assessment of nuclear weapons capable units, and provide assurance that Personnel Reliability Programs are properly managed at the nuclear-capable COCOMs. Through the Mighty Guardian Force-on-Force test series, we evaluate nuclear security policy. We have developed and fielded the Defense Integration and Management of Nuclear Data Services program that provides a DoD-wide stockpile database system of record for nuclear weapons in DoD custody.

Campaign 6 - Business Excellence Our Business Excellence campaign supports DTRA in its mission through timely, effective, efficient, and productive business processes; globally available secure information 24/7; and a diverse, agile, and highly competent workforce. It is improving, simplifying, and automating business processes,

resulting in greater customer service and increased capabilities; providing state-of-the-art information operations support to accomplish mission execution; and creating robust human capital strategic planning; establishing effective recruiting, retention, and rewards programs; and facilitating dynamic career development. Recent accomplishments include the first successful Agency-wide transition to the National Security Personnel System; implementation of the Defense Travel System which has resulted in employee reimbursement of travel costs in as little as three days; and electronic transaction of invoices between vendors, DTRA, and the Defense Finance and Accounting Service. Through these accomplishments, DTRA has improved business practices enabling realignment of existing resources to support core mission activities, enhanced responsiveness to external seniors, partners, and customers, and improved management visibility and control of agency resources.

Campaign X - Defeat the Threat of Loose Nuclear Weapons This campaign specifically responds to the challenge posed by potential WMD nuclear terrorism as outlined in the *National Security Strategy* and the *National Strategy to Combat Terrorism*. Key elements of this campaign include partnerships with intelligence agencies to advance warfighters' WMD knowledge base; detection of nuclear weapons and fissile material at stand-off ranges; establishment of a post-detonation technical forensics capability that more quickly characterizes fissionable materials; and providing decision makers with a spectrum of elimination options that will secure loose nuclear weapons while eliminating potential consequences. DTRA also performs the DoD mission of providing radiological sampling and analysis capability in support of post-nuclear detonation attribution and forensics as part of the National Technical Nuclear Forensics (NTNF) program. In 2007, DTRA developed forensics tactics, techniques, and procedures and tested these in four exercises; procured, tested, and evaluated equipment; and deepened our relationship with our partners across DoD, and the Departments of Justice (DOJ), DHS, DOS, and Energy (DOE). We continue to refine NTNF post-

detonation TTP and equipment to improve operational capability, and will participate in an end-to-end exercise involving all NTNF partner agencies in October 2008.

I will use Campaign X as the context for highlighting some of our most important advanced CWMD technology development programs. I will review the DTRA role in defeating loose nuclear weapons, address the operational and technical challenges, and describe the broad spectrum approach being taken by DTRA to address this challenge.

DOE provides radiation detection equipment at fixed locations overseas and DHS has the responsibility for radiation detection at points of entry into the United States. As such, DHS is the lead for the “home game.” DoD has responsibility for locating and defeating nuclear weapons in terrorist hands overseas and, therefore, is responsible for the “away game.”

DoD must perform this responsibility in a very stressing environment with unique requirements. For example, while DHS can field large detectors supported by an existing infrastructure where size, weight, and portability are not significant design considerations, DoD may be called upon to look for a terrorist nuclear device anywhere in the world, in environments such as deserts, mountains, and jungle. This means that the detectors and other equipment that we need must be highly portable, self-sustaining light-weight, reliable and accurate, and capable of being rapidly deployed with a minimal supporting “footprint.” Whereas DHS attempts to defeat the threat at chokepoints, DoD has to search large geographical areas to locate and then defeat the threat. Therefore, DoD is far more interested in long-range surveillance, search, and localization, which makes active rather than passive detection much more attractive. Furthermore, if operating in sparsely populated areas, health and safety requirements associated with active detection may be of lesser concern than inside the United States.

While DoD has unique requirements and needs, it is fully integrated into the global nuclear defense architecture of the Domestic Nuclear Defense Organization (DNDO) and we are fully partnered with DNDO and DOE in developing detection technology. The urgency is great and the resources are too limited to permit anything

other than a fully integrated national nuclear defense capability that provides protection in depth from overseas to the homeland.

We see significant operational and technical challenges in defeating the threat posed by loose nuclear weapons. With regard to intelligence, we need to enable greater transparency and cooperation among the players. From the perspectives of detection prior to attack and forensics after attack, materials cannot now be easily detected and characterized. If we are unable to physically gain control of the weapon, our stand-off options for eliminating or neutralizing it while still in terrorist hands are quite limited and must minimize collateral damage.

Campaign X integrates technical and operational approaches to defeating loose nuclear weapons with the goal of fielding “game changing” capabilities that reduce operational constraints, reduce equipment and personnel requirements, meet detection coverage area, increase the probability of detection, and permit more rapid search over a much larger area.

To provide the warfighters an unprecedented level of information regarding loose nuclear weapons, DTRA is partnering with the IC to provide enhanced synergy, collaboration, and fusion capabilities; develop a persistent intelligence, surveillance, and reconnaissance capability for WMD production, storage, and processing facilities; and develop associated battle management concepts.

Our key objective for detection is to provide the capability for locating and tracking nuclear weapons or nuclear materials at stand-off distances. We are emphasizing active detection technology and techniques as the critical enabler. Until we can field active detectors, we are working hard to improve our existing passive detection capabilities.

With regard to elimination, we are investing in non-destructive alternatives and nuclear shut-down devices, as well as improved targeting options for our existing weapons.

Should a terrorist nuclear device be exploded in the U.S., we must do all we can to prevent follow-on nuclear attacks. DTRA has responsibility for gathering the samples

needed for post-detonation forensics so that, with additional information, the national leadership can confidently undertake appropriate responses in a timely manner. In addition, post-detonation forensics could provide important clues that will help us in our efforts to head-off follow-on attacks. Therefore, we are placing a high priority on developing an accurate, rapid, and reliable capability to characterize post-detonation materials and prompt data resulting from nuclear and radiological attacks. Specifically, we are looking at improved personnel protection equipment for manual collections, as well as prompt sample collection and evaluation.

In addition, we are developing and will be exercising a national strategy for loose nuclear weapon scenarios. Our goal is to provide tactics, techniques, and plans supporting national scenarios and capabilities. We are partnering with the warfighters to get additional capabilities integrated into their CWMD plans. In addition, we are integrating DoD CWMD capabilities with other US agencies to develop comprehensive action plans for a variety of scenarios.

DTRA Tomorrow

As we look toward the future, we face several challenges. First, all the forecasts we have suggest that the future for CWMD will be more complex, not less. Second, national CWMD expertise is limited and must be nurtured and revitalized. Third, resources are finite and stretched thin, not only in DTRA, but among our partners as well. Lastly, our relationships with our partners must continue to deepen.

I am confident that our campaigns will be influential in guiding us through these challenges. Our campaigns have already done much to identify capability gaps, provide meaningful ways of assessing our progress in filling those gaps, and maximizing the full potential of the agency and focusing it on achieving enhanced CWMD capabilities.

DoD strategic planning guidance and our campaigns have identified several areas requiring increased emphasis in the coming years. These include:

Weapons Effects Since the end of the Cold War, there has been a well-documented reduction in the U.S nuclear weapon effects enterprise including expertise, testing, test facilities, basic nuclear physics knowledge, research and development, modeling and simulation (M&S), and military training for operations in nuclear environments. DTRA programs in these areas similarly have been scaled-back. At the same time, the range of nuclear threat environments and scenarios continues to grow in number and diversity. DTRA believes that it must transform the way we support CWMD by developing deeper understanding of the phenomenology and effects underlying the WMD threat using advance High Performance Computing (HPC)-based M&S tools, and providing decision support and courses of action options for our customers. We are looking at three related focus areas: knowledge development using HPC-based M&S and validation testing; tools, technologies, and expertise to enable the survivability of DoD systems in a nuclear environment; and a comprehensive suite of analytic tools to support warfighter mission planning and operations in a nuclear environment.

Nuclear Forensics We believe that improved capabilities are needed for prompt nuclear effects data collection and analysis, debris sample collection and field screening measurements, debris analysis to develop novel approaches and new technologies for more rapid and precise isotopic measurements, and data evaluation and knowledge management.

Enhanced Combat Support Operations Combat support operations have become more than simply supporting just the COCOMs. Due to the nature of the war on terrorism and the CWMD mission, combat support now requires an interagency approach. In addition, DoD's Security Cooperation Guidance makes daily operations in security cooperation activities a vital element of our nation's security. Such CWMD-related activities, in concert with those made by our allies and friends, help shape the regional security in a manner consistent with our national security objectives. As both a Combat Support Agency and as the DoD CWMD Agency, DTRA has a unique viewpoint

and expertise that could assist with the development of a comprehensive organizational approach for expanding combat support operations, developing regional counterproliferation strategies, expanding the CTR Program beyond the Former Soviet Union, and enhancing homeland security.

Collaboration with the Intelligence Community How can we more effectively support that community in WMD threat anticipation? What more can we do to assist with the identification of proliferation pathways and opportunities for interdicting WMD and related materials and means of delivery?

Hard and Deeply Buried Target Defeat While we have worked hard at developing new non-nuclear means, such as thermobaric warheads and the MOP, for defeating such targets, we have learned from recent combat assessments in the field that we have not progressed as much as we had initially believed. In fact, in this contest, the defense is prevailing and our offensive capabilities are at risk of falling farther behind. DTRA believes that we can find newer and innovative non-nuclear ways of holding such targets at risk. Part of the solution might be through the development of novel weapons based on advanced energetic principles. We also need to significantly improve supporting M&S capabilities.

Additional considerations are also influencing our strategic thinking and planning. For example, do we have the right focus on and presence in Asia and the Pacific? What will be the combat support requirements for the new U.S. African Command? How might future arms control treaties and other such arrangements be different from those of our historical experience? In what ways will CTR Program Expansion beyond the Former Soviet Union evolve? How can we provide expanded assistance for Homeland Defense? How can we develop and retain the next generation CWMD workforce? These are difficult questions, but ones that we must squarely address.

Conclusion

Mr. Chairman and Members of the Committee, what has taken place over the past decade regarding the CWMD mission has been significant. We now have a strategy in place, specific mission direction and guidance, a network of expanding partnerships, focused research and operational support, and a sound investment strategy – all underpinned by the expertise and dedication of our workforce. DTRA and its partners are steadily increasing the nation's CWMD capabilities.

We still face challenges. Foremost among them is that the threat posed by WMD is growing. Second, no single department or organization has an encompassing solution to the problem. Successfully meeting this threat requires the full integration and synchronization of national and international capabilities. This is particularly important since resources and expertise are limited.

DTRA's Fiscal Year 2009 budget request represents a balanced program across all of the agency's mission responsibilities to meet the challenges facing us. It also represents a balance in satisfying near-term combating WMD requirements at a high level of performance within available resources, while identifying and developing capabilities to meet future challenges. I also request your support of the USSTRATCOM mission to Combat WMD. Our strategic vision is to make the world safer from WMD. Our budget and programs are designed with that in mind.

DTRA greatly appreciates the strong support that Congress has steadily provided over the past decade. We hope that you will join us in celebrating our ten years of progress by participating in symposia and other events that we will host during our 10th anniversary year celebration. I look forward to working with you in further reducing the WMD threats facing our nation.