HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

VAYL OXFORD

DIRECTOR DEFENSE THREAT REDUCTION AGENCY

TESTIMONY BEFORE THE

SUBCOMMITTEE ON INTELLIGENCE AND EMERGING THREATS AND CAPABILITIES HOUSE ARMED SERVICES COMMITTEE APRIL 3, 2019

Embargoed until April 3, 2019 at 2:30pm

HOUSE ARMED SERVICES COMMITTEE

Chairman Langevin, Ranking Member Stefanik, and distinguished members of the committee, thank you for your continued support of the Defense Threat Reduction Agency (DTRA). I am proud to represent DTRA, an adaptive, integrated, and agile agency with a uniquely skilled workforce. Our personnel have a strong foundation in specialized science, technology, engineering, mathematics, linguistics, and operational expertise with a focus on strategic deterrence, weapons of mass destruction, and improvised threats and their associated networks. Our whole-of-government approach and trans-regional focus enable DoD, and its interagency, and international partners to compete below the level of armed conflict as we work together to detect, deter, and defeat these threats.

DTRA is DoD's specialized agency focused on countering weapons of mass destruction (CWMD), improvised threats, and their facilitation networks. Our relationship with U.S. Special Operations Command (USSOCOM), focuses on identifying WMD threats and WMD-defeat options to support USSOCOM in its combatant command role. For example, we apply unique expertise and advanced subject matter expertise to inform CCMDs of emerging improvised threats and to provide material and non-material solutions to defeat those threats. DTRA's future insight and collaborative approach allows for quickly adapting to new and emerging threats and warfighter requirements. DTRA strives to be the "go-to" organization providing CWMD and improvised threat capabilities. We work in partnership with the Office of the Secretary of Defense, the Joint Staff, the CCMDs, and the Military Services and in close coordination with interagency and international partners.

Strategic Environment: We are facing the most complex, dynamic, and dangerous geopolitical

environment that we have seen as a nation. DTRA plays a significant role in ensuring the United States maintains a strategic advantage against its adversaries. An accelerated rate of technological change is increasingly leveraged by highly adaptable threat actors. Our adversaries remain intent on increasing the probability of strategic surprise from new improvised threats, catastrophic WMD incidents, and attacks on or attempts to undermine strategic deterrence. To decrease risk, we enable our partners with rapid, agile, and adaptive solutions to outpace competitors and maintain the U.S. competitive advantage.

Posture Review (NPR) guidance to compete below the level of armed conflict. Our strategy and mission-driven Fiscal Year 2020 budget request prioritizes CCMD requirements. We assessed trade-offs and delayed or reduced lower priority activities to realign investments and close some gaps. Our investments will allow continued provision of integrated and tailored solutions to prevent expansion of global threat networks by State and non-State actors. DTRA is uniquely positioned to support CCMDs to compete against adversaries short of armed conflict and to counter malign foreign influence where it is detrimental to U.S. interests. We also reduce risk in the conventional fight and strengthen and enable the U.S. nuclear deterrent. For these investments, my priorities remain: Enhance combat support, expand relationships with international and interagency partners, develop capabilities through innovation, rapidly provide new solutions, and empower the workforce.

DTRA enhances lethality by investing in combat support. We plan to fund multiple assessments at key nuclear and nuclear mission support sites, and have invested to enable National Nuclear

Security Administration connectivity with our nuclear stockpile management system. We are investing in technology applications allowing U.S. forces to operate in a nuclear-contaminated environment, in the event deterrence fails. In support of conventional lethality, we fortified our Technical Reachback support to advise CCMDs. We boosted our support to meet CCMD technology requirements to see, stop, and defeat adversary capabilities with material and nonmaterial solutions. We are enhancing and accelerating technology transitions for mature technologies and facilitating prototypes and demonstrations. Further, we realigned funding to sustain knowledge management and situational awareness tools that influence how CCMDs and others plan for operations. All investments increase our agility to respond to new or changing requirements.

DTRA is expanding and strengthening relationships with current partners and building new partnerships. We have strategic long-term partnerships with countries in the Indo-Pacific, Europe, and the Middle East region. Those partnerships counter Chinese, Russian, and Iranian malign influence abroad. We also enable our South Korean counterparts to defend against North Korea's most lethal weapons.

To support priorities in innovation and to empower the workforce to facilitate greater performance and affordability, we developed a quick-reaction capability to bridge the gap between technology development and demonstration to accelerate the operational evaluation of low-volume and high-impact CWMD capabilities needed to succeed on the battlefield. We also combined, took on, or moved efforts to ensure efficiency. I will discuss specifics of these efforts to implement greater performance and affordability later in this statement.

National Defense Strategy (NDS) Implementation. In support of a decisive conventional force, DTRA maintains capability to support conventional capabilities to prevent and defeat proliferation. We are expanding efforts to enable a secure and effective nuclear deterrent. Last, but certainly not least, we are enhancing our analytical capabilities to enable DoD and our interagency and international partners to counter and deter WMD, improvised threats, and their associated facilitation networks.

NDS Line of Effort (LOE) 1: Build a More Lethal Force

We have a wealth of mission capabilities to support the warfighter for the planning and conduct of military operations. We anticipate, understand, and counter current and future threats, their associated facilitation networks, and pathways that lead to their development. This ensures we rapidly provide innovative capabilities and approaches to the warfighter at the right time to prevent battlefield surprise involving weapons of strategic influence. Further, we enable a safe, secure, reliable, and effective strategic deterrent.

DTRA Enables the U.S. Strategic Deterrent. To enhance a strong strategic deterrent, we work closely with DoD stakeholders, such as U.S. Strategic Command (USSTRATCOM), U.S. European Command (USEUCOM), the Military Services and the National Nuclear Security Administration. For example, we execute more than ten independent oversight inspections, certify 100 percent of nuclear weapons readiness data, and track all nuclear weapons to ensure positive control. In support of USSTRATCOM, U.S. Northern Command (USNORTHCOM),

and USEUCOM, we enable interagency nuclear weapons accident/incident response by executing annual large-scale exercises. DTRA assesses nuclear weapons effects, ensures survivability, and supports attribution through technology development. Further, our Joint Mission Assurance Assessment teams assess potential vulnerabilities, including cyber and unmanned aircraft systems (UAS), to Defense Critical Infrastructure and key assets for risk mitigation options. To improve force posture, we execute multiple assessments annually. Lastly, we enhanced consequence analysis capability for USSTRATCOM's mission planning and analysis system requirements.

Additionally, DTRA is a voting member of the Nuclear Weapons Council (NWC) Standing and Safety Committee and participates in the NWC principals meetings. In support of the NPR, we work closely with USSTRATCOM and other partners on modernizing our Nuclear Command, Control, and Communications (NC3) and are also intimately involved in modernizing NATO's NC3, and we provide DoD and NATO with nuclear security requirements through our experts.

Lethality through Technology. Through anticipatory, rapid solution development, we are on target to develop and transition more than 20 new technologies to USSOCOM for detecting, stopping, and destroying State and terrorist emergent threat networks. Using capabilities that detect, track, and stop signatures associated with nuclear threats and material, we find, fix, analyze, and defeat WMD proliferators.

Due to the demand from USSOCOM and USCENTCOM, we increased our research and development funds for CWMD and counterterrorism technologies to counter specific threat

networks. Through prototyping and demonstrations, we are enhancing and accelerating transitions for mature technologies, enabling a competitive technological advantage against our adversaries.

Battlefield Situational Awareness and Responsiveness. DTRA enhances warfighter agility and lethality against operational threats with research and development, quick-reaction capability and expert personnel. For example, in support of U.S. Indo-Pacific Command (USINDOPACOM), we enable integrated battlefield effects with advanced WMD sensors, surveillance, and target defeat planning technologies. DTRA provides the CCMDs on-demand Chemical, Biological, Radiological, Nuclear, and high-yield Explosives (CBRNE) crisis response and support via our consequence management support teams. We also provide the CCMDs with capability and expertise to search, locate, and identify CBRNE threats. As a result of greater CCMD demand for skilled expertise, we increased funding for 24/7 technical reachback capacity and operations support. To increase our CWMD effectiveness, we are also revamping CWMD modeling and simulation as well as expanding CWMD information sharing and data analysis to meet CCMD and interagency needs.

In support of USNORTHCOM's role to protect and defend the homeland, we leverage unique authorities to provide military and civilian incident first responders with chemical, biological, radiological, and nuclear (CBRN) training, analysis, and equipment. We are prepared to provide first responders across the United States with real-world hazard analysis, within 30 minutes of receipt of a request, for domestic emergencies involving significant hazardous atmospheric releases.

Our counter unmanned aircraft systems (C-UAS) mission began a few years ago and demand for our support has grown apace with the threat. In 2017, then-Deputy Secretary of Defense Shanahan assigned DTRA, through the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), the responsibility to support C-UAS efforts in the USCENTCOM Area of Responsibility (AOR) operationally along three lines of effort: 1) Counter threat networks; 2) Protect the force; 3) Build Partner Capacity. Recognizing the operational importance of timely responsiveness to warfighter needs, we established a C-UAS Coordination Cell responsible for synchronizing efforts with the Military Services, the CCMDs, and the Joint Staff, as well as an operational framework and knowledge base. Our role increased when, in July 2018, Deputy Secretary of Defense Shanahan assigned the USD(A&S) to integrate and accelerate the DoD research, development, testing, evaluation, and deployment of C-UAS capabilities within the homeland. USD (A&S) delegated these responsibilities to DTRA. In support of DoD, we oversee a community of action consisting of more than 30 organizations from across DoD, the intelligence community, and interagency partners to coordinate and synchronize support to the CCMDs. This team coordinates and synchronizes C-UAS community of action efforts regularly to integrate and accelerate research, development, testing, and evaluation of C-UAS capability. Further, we enable a range of rapid capability delivery solutions for countering improvised explosive device (C-IED) and UAS threats, including sensor integration, signatures collection, and initiatives to detect, identify, and defeat UAS threats. This is just one example of fusing our operational and intelligence expertise for true operational impact to the warfighter.

DTRA Informs Through Network Illumination. DTRA identifies gaps and seams in WMD and improvised threat collection and facilitates intelligence analysis dissemination. By illuminating critical links and vulnerabilities within these networks, we inform operations and develop opportunities to counter those networks and enable CCMDs and interagency and international partners to disrupt the proliferation of expertise, supply chains, and infrastructure critical to our adversaries' ability to develop, proliferate, or employ these weapons. This is critical to our ability to get as far ahead of our adversaries as possible short of armed conflict.

DTRA's forward-deployed and embedded personnel are vital to the safety and effectiveness of our warfighters providing critical WMD and improvised threat subject matter expertise to national-level assets. These embedded resources are bolstered by reach-back to national-level assets and interagency, industry, and academic communities of action to provide WMD and improvised threat analysis and solutions rapidly. Leveraging our operational presence, intelligence analysts, and specific subject matter expertise meaningfully enhances Joint Force lethality. For example, we embedded dozens of subject matter experts forward in U.S. formations to enable rapid development and proliferation of tactics, techniques, and procedures for defeating improvised threats, which enhanced the Joint Force's ability to reduce the ISIS physical caliphate.

In 2019, due to CCMD demand, we are increasing our Joint Expeditionary Team (JET), Data Science Team (DST), and CBRN personnel to advise and assist U.S. Forces. These teams exemplify the value of DTRA expertise in combat support. We blend data scientists, engineers, information technology, intelligence, improvised threat expertise, and operational experience to

assist CCMD-specific needs. DSTs build repeatable data science tools and methodologies that answer CCMD priority intelligence requirements while JETs provide a critical link to our material, non-material, and training solutions in order to increase warfighter survivability. These one-of-a-kind teams increase the warfighter's operational efficiency and effectiveness in an improvised explosive device (IED)-laden or high-threat environment.

Additionally, DTRA provides intelligence and operational research products to CCMD-deployed forces to support the improvised threat fight. In 2018, we provided intelligence-informed responses supporting more than 1,400 operations resulting in more than 800 strikes for Combined Joint Task Force - Operation Inherent Resolve (CJTF-OIR) alone, and more than 570 raids. These actions resulted in the removal of high-value targets from the battlefield.

Lethality through Threat Prediction. DTRA also provides threat pattern analysis and prediction for dynamic targeting of enemy UAS teams. In 2018, per Combatant Commanders' demand, DTRA's cross-trained linguists, data scientists, and operators analyzed more than 200,000 foreign language documents in order to identify more than ten enemy tactical patterns. Their predictive analysis had real-world implications for how the Joint Force is postured on the ground, resulting in more than 25 next-event predictions with a 93 percent accuracy rate. Using predictive analysis to drive operational success is particularly important in today's resource-constrained environment.

We have also seen increased demand signal to help CCMDs get ahead of strategic problems spanning from conventional military and irregular warfare tactics employed by a near-peer

competitors, rogue States, and proxy organizations in today's complex security environment. Therefore, we are expanding our opportunity analysis team capacity, which utilizes design thinking approaches to develop operational activities and investments with interagency partners to counter a complex problem through DoD, interagency, and international options short of armed conflict. This enables greater whole-of-government unity of effort for greater effectiveness on CCMD prioritized problem sets.

Lethality through Quick Reaction Tools: DTRA's Quick Reaction Capability and technologyenabled analytics continue to create positive operational impacts for DoD and our interagency
partners. For example, Catapult, a Program-of-Record, enables the Department and U.S.
Government partners to counter threat facilitation networks. Catapult is a fully accredited
advanced data analytics architecture that provides a common information and intelligence
capability to access, ingest, analyze, exploit, and share data rapidly. Currently, it receives data
from more than 1,040 unique data sources with more than 150 million records in support of more
than 250,000 queries per month from across DoD, the interagency, and the Intelligence
Community. To date, in Fiscal Year (FY) 2019, DTRA built and launched 44 new rapid
prototypes and improved the average time to complete software code deployment from 23 days
to 6 hours (92 percent faster).

Lethality through Training: Providing unparalleled expertise to the DoD community is a critical aspect of DTRA's mission. DTRA's nuclear weapons school educated 19,000 U.S. Government and military personnel this past year. The school also houses DoD's only live radiological field training site. Our accredited Joint Improvised Threat Analysis Course (JITAC)

ensures participating intelligence analysts and operations integrators are recognized experts in a specialty area of practice, with a unique, accredited set of skills. In 2019, DTRA experts will also participate in more than 100 CCMD and interagency training and exercises, providing enabling capabilities and expertise to counter and deter WMD, improvised threats, and associated networks.

NDS LOE 2: Strengthen Alliances and Attract New Partners

Through a wide-range of cooperative activities, DTRA strengthens and expands international partnerships and drives interagency actions to counter adversaries' malign global influence. It is very important to deepen and expand partnerships to enable the prevention or defeat of WMD or improvised threats and their associated networks. We recognize how our partnership programs contribute to broaden U.S. national security objectives. To assist us in those efforts, DTRA has unique military linguist and interpreter expertise that is leveraged extensively to support warfighter operations and to build partnership capacity efforts.

DTRA implements fundamental components of U.S. nonproliferation and counterproliferation efforts. The Cooperative Threat Reduction (CTR) Program and the Proliferation Security Initiative (PSI) are examples. Further, DTRA executes verification and inspection activities in support of U.S. treaty obligations. Consistent with the NDS, we are re-examining our partnership programs to ensure we are effectively applying our capabilities to counter the threats posed by Russia, China, Iran, North Korea, and violent extremist organizations. As such, we work closely with counterparts across DoD and interagency and international partners to ensure

these efforts are prioritized effectively to produce measureable impacts in support of the CCMDs. I would like to highlight a few examples of work we are undertaking in support of the NDS LOE 2.

USEUCOM. Though our strategic treaty activities have global impacts, they are particularly critical for USEUCOM. There are many activities we could highlight, but as we are planning to begin the certification process for a new U.S. Open Skies digital sensor, I will focus on a couple of related examples. We led the U.S. team for treaty certification of the new Russian Tu-214 Open Skies aircraft. Following Russia's unprovoked November 25, 2018, attack on three Ukrainian vessels in the Kerch Strait, the United States Government chose to respond via an Open Skies extraordinary mission over Ukraine. On short notice, we completed a flight with the most NATO partners on a single observation mission since the Open Skies Treaty went into effect in 2002. The rapid response reaffirmed U.S. commitment to Ukraine and other partner nations, providing a clear demonstration of how treaty implementation may be applied to achieve strategic effects.

In December 2018, we reached a milestone for WMD threat reduction efforts in USEUCOM. The DoD CTR Program concluded a project to eliminate SS-24 intercontinental ballistic missiles in Ukraine. This marked the conclusion of DoD CTR's historic elimination of Soviet-era nuclear delivery systems. Though this landmark project is complete, DTRA will continue to strengthen the CWMD network of allies and partners in USEUCOM and build CBRNE preparedness and response capabilities and capacity in the Balkans, the Black Sea, and the South Caucasus regions.

USCENTCOM. In parallel with our WMD-related activities to improve the capabilities of our allies and partners, we conduct a range of counter-improvised threat activities. We are executing C-IED programs with Egypt and Jordan and initiated a C-UAS program with Jordan. We continue to share information on precursor and dual-use material counter-facilitation, including commercial grade explosive marking and supply chain accountability. As an example, we enabled actions against ISIS facilitators of lethal aid materials by providing more than 200 intelligence reports to our DoD, interagency, law enforcement, and international coalition partners. In order to increase threat material exploitation and threat network information collaboration, we are also expanding our coordinating relationship with the FBI Technical Explosive Device Analytical Center and with Immigration and Customs Enforcement.

USINDOPACOM. In order to interrupt illicit WMD networks, DTRA improves the ability of our allies and partners to detect and interdict WMD-related trafficking across borders and through maritime jurisdictions. We have a network of allies and partners committed to disrupting illicit proliferation along key maritime routes. We will build on existing efforts by increasing maritime domain awareness and CBRN interdiction, preparedness, and response capabilities in this area of responsibility. More broadly, to build partner capacity to coordinate response to WMD threats, DTRA is facilitating the development and validation of national and regional CWMD strategies in the Indo-Pacific region.

USAFRICOM. DTRA's partnership activities in Africa reduce threats across the CBRN spectrum and provide an important means to reinforce U.S. relationships across the continent as

a counter to growing malign foreign influence. Recent efforts in Kenya with our Department of Homeland Security counterparts aided Kenya's Port and Airport Authority in developing an organic capability to detect, identify, and deter the transit of radiological materials through Jomo Kenyatta International Airport and Kilindini Harbour. This effort resulted in enabling the U.S. Transportation Security Administration to allow direct flights from Nairobi to New York. We also help contain biological threats by building partner capability to detect and report high threat disease outbreaks rapidly and accurately. Moreover, our team's executed and coordinated medical countermeasure, Ebola Bio-protection systems vesicular stomatitis virus-Ebola Zaire virus vaccine, which was shown in large-scale human studies to be almost 100 percent effective in preventing Ebola infection and disease following the Ebola epidemic in West Africa (2013-2016). This vaccine was used again in 2018 by the World Health Organization in response to an Ebola outbreak in the Democratic Republic of Congo. The well-established utility of the vaccine is a significant step forward in the protection of the warfighter against this deadly pathogen. To address future threats, we are working with the Department of Health and Human Services on the development of an Ebola Marburg therapeutic and vaccine. DTRA deployed counter-IED subject matter experts in support of improvised explosive device defeat training in five African countries. This training enables our African partners to prepare to operate in areas where IEDs are a significant threat. Through such efforts, DTRA enables force lethality and strengthens partnerships in the USAFRICOM AOR.

USSOUTHCOM. We recognize the criticality of enduring relationships with our regional partners in securing the pathways to our homeland as well as counterbalancing malign influence in Central and South America. The Proliferation Security Initiative (PSI) works to enhance the

capability to disrupt the proliferation of WMD, WMD-related materials, and delivery systems and is actively engaged with Argentina. Building on two previous years' successful PSI bilateral engagements, the U.S. and Argentina will co-host a multilateral PSI Workshop and Tabletop exercise in summer 2019, with participation expected from regional PSI Endorsees and Non-Endorsees alike. The CBRN Preparedness Program works to mitigate the impact of WMD incidents, and is actively engaged with Argentina, Dominican Republic, Panama, and Peru. These programs work to enhance the capability to disrupt the proliferation of WMD and to mitigate the impact of WMD incidents. We are working closely with USSOUTHCOM on how DTRA can best support USSOUTHCOM's priorities and partnerships through greater WMD and improvised threat awareness, capacity, and capability as it aligns with the NDS.

International Partners. DTRA collaborates closely with key international organizations and other partners in its worldwide capacity-building activities. DTRA collaborates on countering improvised threats with numerous partners as part of our collective efforts to identify and implement complementary solutions and coordinate counter-threat network actions. In the CWMD realm, DTRA collaborates with international organizations including INTERPOL, the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons, the Comprehensive Nuclear-Test-Ban Treaty Organization, the World Health Organization, and the World Organization for Animal Health. For example, CTR's Chemical Weapons Destruction program began a partnership with INTERPOL to assist North African nations with the security of industrial chemicals that could be used to build an improvised chemical weapon. Such collaborations act as force multipliers.

NDS LOE 3: Reform the Department for Greater Performance and Affordability

Quick-Reaction Capability. To facilitate greater performance and affordability, we developed a quick-reaction capability to bridge the gap between technology development and demonstration to accelerate the operational evaluation of low-volume and high-impact CWMD capabilities needed to succeed on the battlefield. We are implementing a quick-reaction capability framework across DTRA to reduce transition time and meet quick-turn emergent needs.

Acquisition Reform. DTRA is streamlining the acquisition process to accelerate statement of work development timelines and reduce incremental funding and administrative contract modifications by 30 percent. This is supported by flexible contract vehicles to deliver a broad range of services and products in collaboration with our interagency partners.

Research and Development Synergies. I announced this January that we are consolidating research and development functions. The Joint Improvised Threat Defeat Rapid Capability Delivery division is integrating into our Research and Development directorate. Full implementation is expected by September 30, 2019. Consolidation is consistent with congressional intent to integrate the Joint Improvised Threat Defeat Organization more fully into DTRA. Integration will lead to both requirements and resourcing synergies ultimately resulting in increased capability delivery to the warfighter. We will continue to pursue the right balance between technical excellence, expedient delivery, effective operability, and sustainability.

In FY 2020, the Mission Assurance Risk Management (MARMS) program management responsibilities will transfer from the DoD Chief Information Officer to DTRA. This change will heighten management of vulnerability mission assessments. For example, it will allow consolidation of risk assessments from no-fail functions, such as Defense Critical Assets, identify unknown risks, and increase understanding of implications of mission assurance trends. This change directly enables informed risk mitigation decisions on mission-essential functions. To support this effort, in 2020, we will continue improvements by completing a consolidated mission assurance dashboard.

Partnerships for the Future. To ensure DTRA stays ahead of threats, we leverage and advance human capital and financial resource investments by growing next-generational talent. We are working to retain and recruit critical skills that will be needed to anticipate the changes of future threat environments and envision the capabilities required. As such, we are expanding our university and interagency partnerships and blending talents, tools, and disciplines to achieve counter-threat network impacts.

Agile Workforce. DTRA's mix of military, civilian, and contractor personnel are key to our lethality, adaptability, and agility. Their strength, dedication, creativity, and resiliency are important to our mission. I am proud to have had the honor in August 2018 to present the Secretary of Defense Medal for Valor to three members of our workforce, the highest civilian award for valor presented by the Department of Defense. The medal recognizes government employees and private citizens who perform an act of heroism or sacrifice with voluntary risk to their personal safety in face of danger. There have only been 17 Medal for Valor civilian awards

given out since its creation in the aftermath of September 11, 2001. The three teammates, retired Army Master Sgt. William Timothy Nix, retired Army Chief Warrant Officer Michael Anthony Dunne, and retired Army Chief Warrant Officer Brandon Ray Seabolt, each received the Medal for Valor while supporting DTRA's mission. Nix and Dunne subjected themselves to direct enemy fire, hand grenades, suicide vests, and other explosives to suppress insurgents who had breached the camp. Seabolt exposed himself to enemy fire and suppressed the insurgents so Afghan commandos and U.S. Special Forces could move forward. He single-handedly fended off the insurgent onslaught until the return of other team members.

DTRA detects, deters, and defeats. We dynamically respond to the current environment by deterring, detecting, and defeating global threat networks that underpin the gravest threats to our Nation. Our collaborative approach and action enable DoD and interagency and international partners to prevent State adversaries and non-State actors from acquiring, proliferating, or using WMD and improvised threats. The rapidly evolving improvised-threat defeat mission continues to present a broad spectrum of new challenges from weaponized UAS to maritime threats. We remain dedicated to enabling our partners to hold threat networks at risk by addressing WMD and improvised threats and associated networks of competitive powers, rogue States, and transnational organizations.