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International Border Management Systems (IBMS) Program: Visions and Strategies

Ashley Nilsen, Michael Mcdaniel, Amir Mohagheghi and United States Central
Command

Prepared by
Sandia National Laboratories
Albuquerque, New Mexico 87185 and Livermore, California 94550

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INTERNATIONAL BORDER MANAGEMENT SYSTEMS (IBMS) PROGRAM VISIONS AND STRATEGIES

Ashley Nilsen, Michael Mcdaniel, and Amir H. Mohagheghi
Global Security Engagement Department
Sandia National Laboratories
P.O. Box 5800
Albuquerque, New Mexico 87185-MS1373

And

United States Central Command
Cooperative Defense Branch
Office of International Military Affairs

Abstract

Sandia National Laboratories (SNL), International Border Management Systems (IBMS) Program is working to establish a long-term border security strategy with United States Central Command (CENTCOM). Efforts are being made to synthesize border security capabilities and technologies maintained at the Laboratories, and coordinate with subject matter expertise from both the New Mexico and California offices. The vision for SNL is to provide science and technology support for international projects and engagements on border security.

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INTRODUCTION

International border security initiatives at Sandia National Laboratories (SNL) first began in the mid-1990's when it was hypothesized that the basic framework taken from Sandia's physical protection philosophies and practices could be applied in a border security context. Historically, SNL has maintained a very strong proficiency in physical protection methodologies, and staff and visiting scholars alike began an attempt to bridge the knowledge across these two fields of study. Since then, international border security proposals, projects, and programs have grown considerably at the Labs. Sandia's role is primarily focused on border security systems development, systems and technologies integration, testing and evaluation, assessment and reassessment, personnel training, and technologies development (based upon requirements of our partner, the host country, and the availability of previously developed technologies).

BORDER SECURITY OVERVIEW

Border security, in essence, means the ability to control movement across national borders. National borders include official ports of entry on land, at sea, and in the air. National borders also include the areas in between the official entry points, known as frontier borders. Movement across these borders can be legal or illegal, and can include: people, goods, drugs, weapons, etc. The U.S. Department of Homeland Security (DHS) has identified five main objectives that a border management system must achieve; objectives that can easily be applied in an international context. These objectives are:

- Protect the Nation from Dangerous People;
- Protect the Nation from Dangerous Goods;
- Protect Critical Infrastructure;
- Strengthen Preparedness and Emergency Response Capabilities; and
- Strengthen and Unify National Border Security Operations and Management Capabilities.

Threat definition is critical to border security operations in a national context, and directly relates to the role of the International Border Management Systems (IBMS) Program at the Lab. Sandia National Laboratories maintains advanced border security expertise in regards to chemical, biological, radiological, and nuclear (CBRN) threats. Regardless of the specific threat a country may face, SNL has developed and continues to maintain numerous tools, technologies, and techniques to identify, respond, and mitigate CBRN threats in a border security context. Specific capabilities of the Labs will be discussed later in the paper.

SNL VISION FOR BORDER SECURITY

The vision for Sandia National Laboratories is to provide science and technology support for international projects on border security.

PARTNER

For Sandia National Laboratories, New Mexico branch, the main partner is **UNITED STATES CENTRAL COMMAND'S (CENTCOM)** Cooperative Defense Branch, Office of International Military Affairs. CENTCOM's Area of Responsibility (AOR) includes:

- Afghanistan, Bahrain*, Egypt, Iran, Iraq, Jordan*, Kazakhstan, Kuwait*, Kyrgyzstan, Lebanon, Oman, Pakistan, Qatar*, Saudi Arabia, Syria, Tajikistan, Turkmenistan, UAE, Uzbekistan, and Yemen.

*Slated for FY11 Engagement

CENTCOM MISSION (AS STATED FROM OFFICIAL CENTCOM LITERATURE)

“The Arabian Peninsula commands significant US attention and focus because of its importance to our interests and the potential for insecurity. These Arab states on the Peninsula are the nations of the AOR most politically and commercially connected to the US and Europe. They are more developed economically and collectively wield defense forces far larger than any of their neighbors, and they are major providers of the world's energy resources. However, many Gulf Arabs suffer from degrees of disenfranchisement and economic inequity, and some areas of the Peninsula contain extremist sentiment and proselytizing. As a result, the Peninsula has been a significant source of funding and manpower for extremist groups and foreign fighters. These internal troubles are often aggravated and intensified by external factors, such as the Iranian regime's destabilizing behavior, instability in the Palestinian territories and southern Lebanon, the conflict in Iraq, and weapons proliferation.

Because of the Peninsula's importance and its numerous common security challenges, the countries of the Arabian Peninsula are key partners in the developing regional security network described above. CENTCOM ground, air, maritime, and special operations forces participate in numerous operations and training events, bilateral and multilateral, with our partners from the Peninsula. We help develop indigenous capabilities for counter terrorism; border, maritime, and critical infrastructure security; and deterring Iranian aggression. As a part of all this, our FMS and FMF programs are helping to improve the capabilities and interoperability of our partners' forces. We are also working toward an integrated air and missile defense network for the Gulf. All of these cooperative efforts are facilitated by the critical base and port facilities that Bahrain, Kuwait, Qatar, the UAE, and others provide for US forces.”¹

BORDER SECURITY CAPABILITIES

Sandia has numerous capabilities to assist border security systems development and personnel training, including the Cooperative Monitoring Center (CMC), the Middle East Scientific Institute for Security (MESIS), the International Border Management Systems Program (IBMS) and the Nuclear Security Center for Excellence (NSCOE). Furthermore, SNL maintains and develops numerous border security technologies.

The **COOPERATIVE MONITORING CENTER (CMC)** in Albuquerque, New Mexico was established in order to provide an open and respected forum for technical and policy experts from around the world to come together and explore how technology (unclassified and shareable) could help implement border security strategies, particularly in the area of confidence building measures, treaties,

¹ CENTCOM Area of Responsibility, <http://www.centcom.mil/en/countries/aor/>

and/or other regional agreements. CMC-Albuquerque was opened in 1994 and has undergone numerous retrofits and expansions as the program has grown. The Center includes a wide range of services and capabilities to help achieve international technical cooperation related to border security missions, including:

- International Programs Building (IPB);
- Technology Training and Demonstration Area (TTD);
- Outdoor Test Facility (OTF);
- Technical Evaluation Assessment Monitor Site (TEAMS);
- Visiting Research Scholars (VRS) Program; and
- Nuclear Security Center for Excellence.²

The **INTERNATIONAL BORDER MANAGEMENT SYSTEMS PROGRAM (IBMS)** was founded under the Global Security Programs at Sandia, and is located in the International Programs Building (IPB). The IBMS Program was created to provide country requirements assessment, training for all levels of border security personnel, and guidance on border management systems development, including border analyses, development of enhancement recommendations, and test of proposed technologies prior to purchase and reinstallation. The IBMS Program provides training in physical security, cooperative monitoring, export control, and overall border security systems. The Program has also developed several process methodologies, including: systems analysis, design process, threat models, event analysis, and testing and evaluation of border management systems.

Recently, Sandia has initiated a **NUCLEAR SECURITY CENTER FOR EXCELLENCE (NSCOE)**, located in Albuquerque, NM. The NSCOE was initially developed to address the need for a system-level, hands-on Physical Protection System (PPS) demonstration, training and operation area. Now, the IBMS Program is collaborating with the NSCOE to develop hands-on border security training opportunities within this initiative. Specific capabilities and facilities within the NSCOE include:

- Tech Area V
 - Perimeter Intrusion Detection & Assessment System (PIDAS)
 - Entry Control Portal (ECP)
 - Central Alarm Station (CAS)
- Tech Area III
 - Exterior Sensor Test and Evaluation Center
- Access Delay Bunker
- Experimental Environment Simulation Climatic Laboratory (EESCL)
- National Training Center (NTC)
 - Campus
 - Live Firing Range
 - Integrated Safety and Security Training and Evaluation Complex (ISSTEC)

² Cooperative Monitoring Center, Sandia National Laboratories, Homepage, September 13, 2010, <http://www.cmc.sandia.gov/index.html>

The **MIDDLE EAST SCIENTIFIC INSTITUTE FOR SECURITY (MESIS)** opened in 2003 and operates as a regional forum committed to building technical capabilities in order to enable security advancements in the region. MESIS focuses its work on nonproliferation, border security, strategic trade controls, public health, and environmental security. Strategically located in Amman, Jordan, the Institute manages regional projects, develops training courses/conferences/workshops, conducts research (through visiting scholars), and operates a technology display area.³

SNL has actively developed and maintained numerous **BORDER SECURITY TECHNOLOGIES**, including:

- Explosion Detection Portals;
- Radiation Detection Portals;
- Intrusion Detection Simulation;
- Miniaturized Intrusion Detection System (MIDS);
- Video Assessment;
- Remote Power Sources;
- Augmented Computer Exercise for Inspection Training (ACE-IT); and
- NATO Bunkers.

IMPLEMENTATION STRATEGY

The SNL Implementation Strategy depends upon our partners' strategic needs and goals. Generally speaking, Sandia will pursue long-term objectives with our partners.

Sandia National Laboratories has developed and maintained numerous technologies and approaches that work to strengthen a border security system. Yes before a long-term engagement strategy can even be formulated, SNL and CENTCOM must first establish a common vocabulary and definitions for the project. The goals and objectives must be clearly identified and understood by both sides. Then, the available tools, approaches, and expertise should be identified and evaluated – essentially, a gap analysis must be performed (we must determine if all the necessary tools are available in order to reach the stated objectives). After this is complete the team must verify the approach, complete the initial systems design, and begin the implementation process. Assessment and refinement activities will continue if necessary. The visual below helps illustrate the process of developing a border security system.

³ Cooperative Monitoring Center – Amman, Sandia National Laboratories, 2009, <http://www.cmc-amman.gov.jo/index.html>

Based upon a 2004 presentation, "*A Systems Approach to Border Security*", given by Kent Biringer of Sandia National Laboratories

The following section will give a brief introduction to the SNL "Toolbox", a selection of engagement activities that can be carried out in a host country.

THE TOOLBOX

INTERDICTION AND BORDER SECURITY (IBS) WORKSHOP

Lead: SNL

Location: Partner Country

Content: The Interdiction and Border Security (IBS) Workshop provides a high level overview of border security systems and methodologies. This 3-5 day workshop will cover 10 modules in a classroom setting. Modules will include:

- Border Management Constraints and Challenges
- Border Management Systems Model
- National Level Considerations
- Analyzing a Sector
- Sector Equipment Material Capabilities
- Sector Personnel
- Event Analysis
- Determining Sector Enhancements
- Prioritization
- Next Steps/Engagement Opportunities

Goal: Introduce participants to SNL's systems approach to border security and identify members of the Technical Working Group who will participate in subsequent Steps. We need to keep the same group of people for every step. Consistency is essential!

HANDS-ON TRAINING OF BORDER SECURITY TECHNOLOGIES

Lead: SNL and DHS/CBP

Location: USA

Content: International Border Interdiction Training (IBIT I) - IBIT I is designed to provide hands-on training for foreign customs and border guard agencies in the detection, identification, and interdiction of contraband with an emphasis on countering the cross-border proliferation of weapons of mass destruction, conventional arms, and related materials. The course will stress risk targeting, use of low and high-tech tools and equipment, tactical radio communications, sensor usage and placement, hidden compartment detection, seizure of documents, automated targeting systems, hazardous materials, anti-terrorism and behavioral analysis, as well as, a range of inspection and detection techniques applicable to all types of contraband. Practical exercises will include search of vehicles, pedestrians, commercial cargo, and large commercial carriers.

BORDER EXCHANGE WORKSHOP

Lead: SNL and DHS/CBP

Location: Albuquerque, New Mexico and El Paso, Texas or Tucson, Arizona

Content: During this 5-day Border Exchange Workshop, participants will receive an overview of SNL's role in developing technological solutions to the world's most difficult security threats and attend presentations by subject matter experts on border management and WMD-related topics. During tours of Sandia and US Customs and Border Protection (CBP) border facilities, participants will learn about a wide variety of topics, including:

- Open border surveillance
- Intrusion detection technology
 - Buried fiber optic cable
 - Unattended Ground Sensors (UGS)
 - Ground radar systems
- Radiation detection equipment
 - Cargo
 - Hand-held
 - Pager-type
- Contraband detection
- Information management

Participants will take part in a tabletop exercise based on the role of borders during a radiological dispersion device (RDD) detonation event. Participants will be encouraged to discuss border management and WMD-related issues specific to their country in order to facilitate the continuing cooperative engagement with CENTCOM and Sandia National Laboratories.

BORDER SECURITY TECHNOLOGIES IN PARTNER COUNTRY

Lead: SNL and DHS/CBP

Location: Partner Country

Content: International Border Interdiction Training (IBIT II) - IBIT II is designed to refresh skills previously presented at a U.S. Port of Entry during IBIT I by conducting practical exercises at the critical port(s) of entry identified by the host nation. Emphasis will be placed on a multi-layered enforcement approach, as utilized by CBP in its own operating environment. Skills and knowledge required for carrying out effective inspection, detection, cargo and passenger processing, and contraband seizure will be covered. The end goal of the program is to build an internal train-the-trainer capacity and eventually infuse the curriculum into the formal training academy of the host nation.

VISITING RESEARCH SCHOLAR (VRS) PROGRAM

Lead: SNL

Location: Albuquerque, New Mexico

Content: Individuals who have successfully completed previous border security workshops and trainings will be invited to participate in SNL's Visiting Research Scholar's (VRS) Program. These individuals will explore how technology can support the development and implementation of security policy and agreements in their home country. Participants will live and work in Albuquerque, NM for 3-6 months.

ADDITIONAL TOOLS:

- Integrate DOE/NNSA Export Control trainings in partner country, and correlate to border security methodologies. Available trainings include:
 - *WMD Commodity Identification Training (CIT)*: Raise partner country's awareness of the threat posed by dual-use goods destined for weapons programs.
 - Lead: SNL and DOE/NNSA
 - Location: Host Country
 - The expected result is to strengthen enforcement of export controls of commodities related to weapons of mass destruction by providing training to a country's customs officers, SECDIV officials, and **border security enforcement personnel** on the identification of nuclear, nuclear-related, chemical, biological, and missile dual-use equipment and materials.
 - *Counter-Proliferation Investigations Training (CPIT)*
 - Lead: SNL and DOE/NNSA
 - Location: Host Country
 - *WMD Proliferation Awareness Training (WMD-PAT)*
 - Lead: SNL and DOE/NNSA
 - Location: Host Country
- Incorporate other USG training opportunities.
- Participate in international conferences and events related to border security.

FUTURE OF BORDER SECURITY AT THE LABORATORIES

The most critical element of the IBMS Program at the Sandia National Laboratories is to coordinate and finalize a long-term strategy with our partner; CENTCOM. Once we have a stable foundation of objectives, we can begin to strengthen our core capabilities to help achieve these objectives. For example, the IBMS Program can invest in the continued development of the NUCLEAR SECURITY CENTER OF EXCELLENCE (NSCOE) in Albuquerque, NM. Specifically, incorporating more border security technologies in the pre-existing training facilities in the NSCOE would be a critical asset to the Program, our partner, and our host countries.

Other areas of future growth could include:

- Gap Analysis
 - Team Development
-

- Collaboration with other USG agencies involved in border security – utilizing other training opportunities and subject matter expertise.
- Establish International Border Security Standards/Best Practices
- Specific tools/technologies/capabilities SNL needs to reach the overall vision of CENTCOM?
- Others...

OTHER PARTNERS

In addition to the SNL/CENTCOM partnership, Sandia works directly with the following partners in the area of border security.

- United States Army Central Command (ARCENT)
 - Goal is to help strengthen foreign partner's border security system to eliminate broad security threats, particularly terrorism and WMD-related threats.
 - Department of Energy (DOE)/National Nuclear Security Administration (NNSA) NA-25 Megaports Initiative
 - Goal is to help strengthen foreign partner's port security systems to mitigate the threat from the illegal movement of commodities, specifically WMD-related materials.
 - Department of Energy (DOE)/National Nuclear Security Administration (NNSA) NA-24 International Nonproliferation Export Control Program (INECP)
 - Goal is to help strengthen foreign partner's export control systems to mitigate the threat from the illicit trafficking of WMD-related materials, technologies, and equipment. Works in conjunction with export control and border security personnel.
 - Department of Homeland Security (DHS)/Customs and Border Protection (CBP)
 - Defense Nuclear Detection Office (DNDO)
-

APPENDIX 1. BORDER SECURITY IN THE U.S. GOVERNMENT

The following section provides a brief description of other U.S. agencies that are involved in border security work, both domestically and internationally.

U.S. CENTRAL COMMAND (CENTCOM)

- Overview: Established in 1983, CENTCOM is one of six regional unified combatant commands. There are five subordinate service component commands under CENTCOM, including:
 - U.S. Army Forces Central Command (ARCENT)
 - U.S. Air Forces Central (AFCENT)
 - U.S. Marine Forces Central Command (USMARCENT)
 - U.S. Naval Forces Central Command (USNAVCENT)
 - U.S. Special Operations Command Central (SOCCENT)CENTCOM forces are currently deployed in Iraq and Afghanistan, and have bases in Kuwait, Bahrain, Qatar, UAE, Oman, and Pakistan.
- Mission: “With national and international partners, U.S. Central Command promotes cooperation among nations, responds to crises, and deters or defeats state and non-state aggression, and supports development and, when necessary, reconstruction in order to establish the conditions for regional security, stability, and prosperity.”
- Strategic Objectives: CENTCOM “oversees the U.S. efforts in Afghanistan and Iraq and the assistance to Pakistan, as well as a theater-wide campaign against al-Qaeda. We [CENTCOM] are also, of course, working on numerous contingency plans. And, we continue the effort to build partnerships throughout the area of responsibility (AOR), working in concert with our diplomatic colleagues as part of “Whole of Governments” approaches to help increase the capabilities of partner nations’ security forces.”⁴
- AOR: Afghanistan, Bahrain, Egypt, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tajikistan, Turkmenistan, UAE, Uzbekistan, and Yemen (see map below).
- Border Work: CENTCOM (and ARCENT), through their Cooperative Defense Branch and Office of International Military affairs, work with Sandia National Laboratories to conduct Interdiction and Border Security Workshops for countries within its AOR. CENTCOM also provides military support to AOR countries in the arena of border security. For example, CENTCOM forces work collaboratively with Egyptian security forces to monitor the border with the Gaza Strip. Specifically, CENTCOM supports Egyptian efforts to “interdict illicit arms shipments to extremists in Gaza and to prevent the spread of Gaza’s instability into Egypt and beyond.”⁵

DEPARTMENT OF HOMELAND SECURITY (DHS)/CUSTOMS AND BORDER PROTECTION (CBP)

- Overview: The U.S. Department of Homeland Security (DHS) works to protect domestic borders from illegal movement of people, drugs, cash, and weapons; Customs and Border Security (CBP) is a component within DHS, and is responsible for facilitating legitimate

⁴ CENTCOM, About CENTCOM, Posture Statement - <http://www.centcom.mil/en/about-centcom/posture-statement/>

⁵ CENTCOM, AOR Countries, Egypt - <http://www.centcom.mil/en/egypt/>

trade and travel across domestic borders while enforcing hundreds of U.S. regulations (i.e. drug laws and immigration).

- Mission: “Prevent and deter terrorist attacks and protect against and respond to threats and hazards to the Nation.”⁶
- Strategic Objectives:
 - Protect Our Nation from Dangerous People
 - Protect Our Nation for Dangerous Goods
 - Protect Critical Infrastructure
 - Strengthen Our Nation’s Preparedness and Emergency Response Capabilities
 - Strengthen and Unify DHS Operations and Management
- AOR: Works primarily in the domestic arena; Does provide some support to international border security efforts.
- Border Work: DHS claims responsibility for several border areas within their domain, including: official ports of entry, in between ports, land, sea, and air.

DEPARTMENT OF STATE⁷

- Overview: Created in 1789, the State Department is a federal executive department responsible for international relations for the United States.
- Mission: “Advance freedom for the benefit of the American people and the international community by helping to build and sustain a more democratic, secure, and prosperous world composed of well-governed states that respond to the needs of their people, reduce widespread poverty, and act responsibly within the international system.”
- Strategic Objectives:
 - Achieving Peace and Security;
 - Governing Justly and Democratically;
 - Investing in People;
 - Promoting Economic Growth and Prosperity;
 - Providing Humanitarian Assistance;
 - Promoting International Understanding; and
 - Strengthening Consular and Management Capabilities.
- AOR: The State Department operates internationally, both with foreign governments and international organizations alike.
- Border Work: There are several areas within the State Department that address border security issues, such as: the Bureau of International Security and Nonproliferation/Export Control and Related Border Security (EXBS) Program and the Office to Monitor and Combat Trafficking in Persons.

DEPARTMENT OF ENERGY (DOE)/NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)⁸

- Overview: Established by Congress in 2000 as a semi-autonomous agency within the Department of Energy.

⁶ Department of Homeland Security Strategic Plan 2008-2013 – Page 3

⁷ U.S. Department of State, About State, <http://www.state.gov/aboutstate/>

⁸ Department of Energy, National Nuclear Security Administration, Fact Sheet 2010, <http://nnsa.energy.gov/mediaroom/factsheets/aboutnnsa>

- Mission: “Enhancing U.S. national security through the application of nuclear science and technology.”
- Strategic Objectives:
 - Maintaining the safety, security and effectiveness of the U.S. nuclear weapons stockpile without nuclear testing;
 - Preventing the proliferation of nuclear weapons and securing dangerous nuclear materials;
 - Providing the U.S. Navy with safe and effective nuclear propulsion; and
 - Providing the nation with state of the art nuclear counterterrorism and emergency response capabilities.
- AOR: Domestic and International
- Border Work: Within NNSA, there are several projects being undertaken to assist in broader international border security efforts, such as: Megaports Initiative and the Counter Trafficking Systems Development group.

NATIONAL DEFENSE UNIVERSITY (NDU)⁹

- Overview: Established in 1976 to consolidate the nation’s defense community intelligence resources into a joint institution of higher learning.
- Mission: Prepare military and civilian leaders from the United States and other countries to evaluate national and international security challenges through multi-disciplinary educational and research programs, professional exchanges, and outreach.
- Strategic Objectives:
 - Achieve the highest standard of joint Professional Military Education.
 - Develop strategic knowledge and critical thinking, promote cross-cultural understanding, and create operational awareness to prepare graduates to exercise strong leadership.
 - Promote unity of effort across and beyond the U.S. Government through national security education programs, research, activities, and organizations that anticipate and address complex security challenges.
 - Invest in faculty, staff, technology, and facilities to promote excellence in educational programs, research, exchanges, and outreach.
 - Cultivate national and international relationships that contribute to the University’s vision and mission.
 - Build life-long learning communities that sustain and renew the capabilities of graduates over the course of their professional careers.
- AOR: Domestic and International
- Border Work: NDU’s Near East South Asia (NESA) Center for Strategic Studies hosts the US, Pakistan, and Afghanistan Programs to promote cross-border awareness between the participating countries. Activities include:
 - The one-week bilateral seminars are co-hosted with the House Democratization Assistance Commission in the U.S. House of Representatives and are designed to introduce parliamentarians from the legislative branches of Afghanistan and Pakistan to U.S. democracy and to facilitate dialogue between the parliamentarians and their U.S. counterparts.

⁹ National Defense University, <http://nduweb03.ndu.edu/info/mission.cfm>

- The two-week trilateral seminars are conducted with participation from the Afghanistan National Army and Police forces and the Pakistan Army concentrating on border security issues.
- The two-week Pakistan military seminars introduce senior leaders of the Pakistan armed forces to the U.S. Government's national security structure/apparatus and to overcome the "trust deficit" between the U.S. and Pakistan necessary to achieve mutually supportive regional and international security.¹⁰

DEPARTMENT OF JUSTICE (DOJ)¹¹

- Overview: Under the Office of the Attorney General, there are numerous other offices responsible for the DOJ mission as it relates to border security, including: Federal Bureau of Investigation (FBI), Drug Enforcement Administration (DEA), and the National Security Division.
- Mission: "To enforce the law and defend the interests of the United States according to the law; to ensure public safety against threats foreign and domestic; to provide federal leadership in preventing and controlling crime; to seek just punishment for those guilty of unlawful behavior; and to ensure fair and impartial administration of justice for all Americans."
- Strategic Objectives:
 - To detect and prevent terrorism;
 - To combat violent crime;
 - To combat computer, especially child pornography, obscenity, and intellectual property theft;
 - To combat illegal drugs;
 - To attack corporate and public corruption; and
 - To promote civil rights and civil liberties.
- AOR: Primarily domestic; does provide support international efforts
- Border Work: The DOJ supports a broad range of border security activities, including: cross-border criminal investigations (FBI), international drug trafficking investigations and interdiction (DEA), and human rights enforcement (also contains the National Drug Intelligence Center and the National Security Division). DOJ is part of the Border Enforcement and Security Taskforce, an inter-departmental border security effort established in 2006 and spearheaded by the Department of Homeland Security (DHS).

DOMESTIC NUCLEAR DETECTION OFFICE (DNDO)¹²

- Overview: Resides within the DHS; jointly staffed by representatives from several federal, state, and local government agencies.
- Mission: "Improve the Nation's capability to detect and report unauthorized attempts to import, possess, store, develop, or transport nuclear or radiological material for use against the Nation, and to further enhance this capability over time."
- Strategic Objectives:
 - Develop the global nuclear detection and reporting architecture;

¹⁰ NESACenter for Strategic Studies: US, Pakistan, Afghanistan Programs, <http://nesa-center.org/en/node/375>

¹¹ U.S. Department of Justice, Strategic Plan 2007-2012, <http://www.justice.gov/jmd/mps/strategic2007-2012/index.html>

¹² Domestic Nuclear Detection Office (DNDO) http://www.dhs.gov/xabout/structure/editorial_0766.shtm

- Develop, acquire, and support the domestic nuclear detection and reporting system;
- Fully characterize detector system performance before deployment;
- Establish situational awareness through information sharing and analysis;
- Establish operation protocols to ensure detection leads to effective response;
- Conduct a transformational research and development program; and
- Establish the National Technical Nuclear Forensics Center to provide planning, integration, and improvements to USG nuclear forensics capabilities.
- AOR: Primarily focused on domestic detection; does coordinate with U.S. efforts overseas through the design of a “global nuclear detection architecture”.
- Border Work: TBD

DEFENSE THREAT REDUCTION AGENCY (DTRA)¹³

- Overview: Under the Department of Defense’s official Combat Support Agency for countering weapons of mass destruction through a wide variety of programs.
 - “Open Skies” Program
 - Future aerial monitoring needs
 - Synergistic needs that abide by treaties
 - International Cooperation
- Missions:
 - Nunn-Lugar Global Cooperative Initiative;
 - Arms Control and Verification;
 - Chemical and Biological Defense;
 - Consequence Management;
 - Nuclear Deterrence and Defense;
 - Nuclear Detection and Forensics; and
 - Reachback.
- Strategic Objectives: (see above)
- AOR: Domestic and International
- Border Work: TBD

¹³ Defense Threat Reduction Agency (DTRA), US STRATCOM Center for Combating WMD
<http://www.dtra.mil/Home.aspx>

APPENDIX 2. BORDER SECURITY TEAM

Name	Department
Sandia – New Mexico	
Kent Biringer	Global Security Engagement
Amir Mohagheghi	Global Security Engagement
Ashley Nilsen	Global Security Engagement
Michael McDaniel	International Safeguards and Technical Systems
Allen Runyan-beebe	Global Security Systems and Technologies
Faraj Ghanbari	Global Security Engagement
Ron Mori	International Safeguards and Technical Systems
Tom Ciccateri	Global Security Engagement
Ben Bonin	Global Security Engagement
Eric Wallace	Global Security Engagement
Sandia – California	
Jason Reinhardt	Systems Research and Analysis I
Chad Haddal	Systems Research and Analysis I
US CENTCOM	
Micheal J. Sircy	
Christopher M. Gebbia	
John S. Hester III	

APPENDIX 3. DISTRIBUTION LIST

Ashley Nilsen
Michael Mcdaniel
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