



CBRN Capacity Building Programs

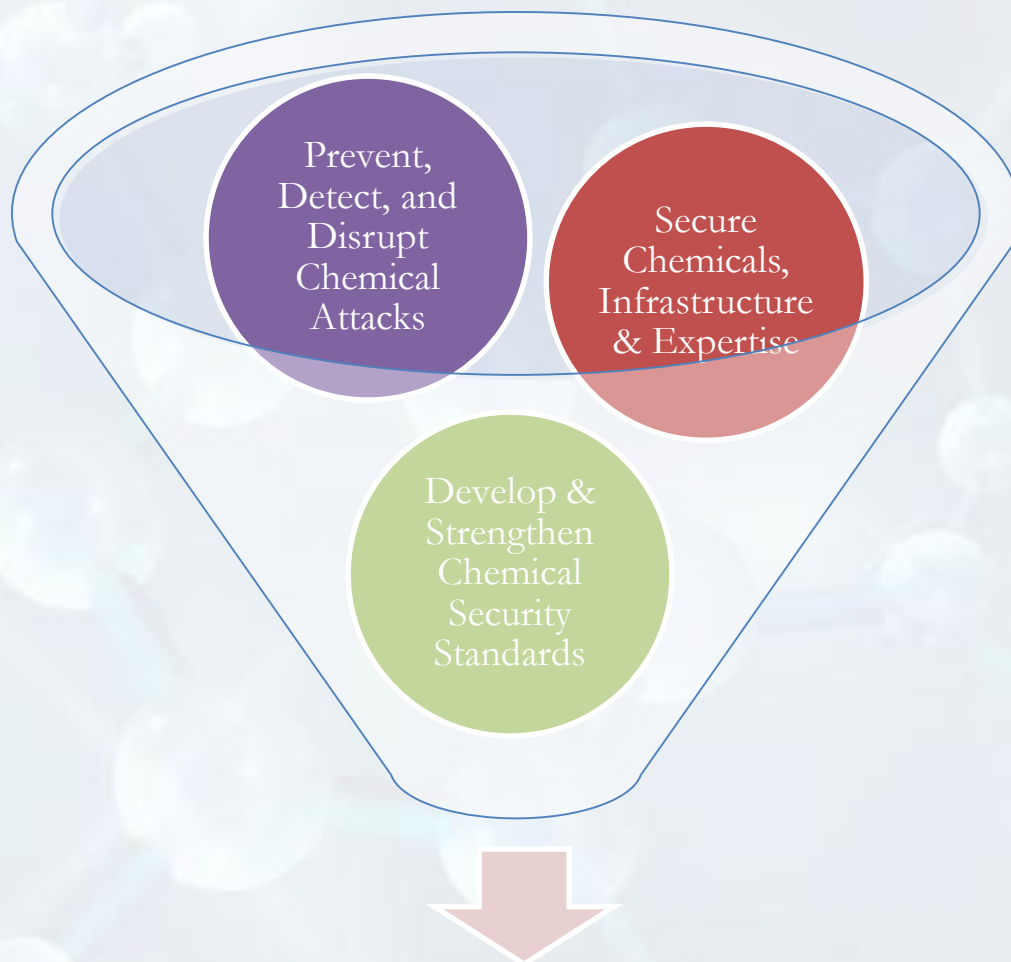


Cooperative Threat Reduction

- Evolved to combat emerging and global WMD threats
- Distinct approach to CBRN
- U.S. Department of State
- U.S. Department of Energy

The Chemical Security Program (CSP)

CSP promotes chemical security for a safer world.



Reduce chemical threats

CSP Activities

Goals	Activity
<p>Detect, Prevent, & Mitigate Chemical Attacks</p>	<ul style="list-style-type: none"> • Chemical Detection and Forensics Training Courses • Chemical Vendor - Law Enforcement Workshops • Develop U.S. – Host Nation Law Enforcement Partnerships • Chemical Risk Management Workshops
<p>Secure Chemicals, Infrastructure, & Expertise</p>	<ul style="list-style-type: none"> • Chemical Supply Chain Security Workshop • Chemical Security Improvement Grant Competition • Develop Chemical Inventory Management Systems • Strengthening of Chemical Societies or Associations • Personnel Reliability Training Courses
<p>Develop & Strengthen Chemical Security Standards</p>	<ul style="list-style-type: none"> • Chemical Policy and Legislation Roundtables • Promote Voluntary Security Standards-“Know Your Customer” • Promote adoption, implementation of international obligations (CWC and UNSCR 1540)



BEP Objectives

- Build capacity of partner states to meet national and international standards including the World Health Organization International Health Regulation (IHR) standards
- Partner with biological experts to raise awareness about dual use issues in the life sciences
- Enhance networks to improve partner nation capabilities to detect, diagnose, and report human and animal disease outbreaks
- Secure pathogens by providing assistance for laboratory biosecurity and biosafety
- Build safe laboratory capacity to prevent and respond to emerging infectious disease threats as well as a bioterrorism attack



BEP Activities

- Biocontainment labs
 - Risk Assessments
 - Physical Security Upgrades
 - Inventory Management
 - SOP Development
 - Risk Assessment
 - Technical Consultation:
 - Design
 - Commissioning
 - SOPs
 - Safe and Secure Operations & Maintenance
 - Sustainability
- Biosafety and biosecurity best practices
 - Awareness Raising
 - International & In-country Training
 - Support Biosafety & Biosecurity Associations
 - Train-the-Trainers Programs
 - Indigenous BSS Training Capacity Building



PNS Objectives

Insider Threat Mitigation:

- Develop and sustain **trustworthiness programs** (i.e. human reliability program, fitness-for-duty, etc.) to mitigate insider threats at nuclear facilities.

Applied Nuclear Security Culture:

- Strengthen **security practices and procedures** at nuclear technical organizations to prevent diversion of nuclear material.

Nuclear Security Train-the-Trainer Initiatives:

- Empower partners to **institutionalize nuclear security trainings** to respond to emerging threats.



PNS Activities

PNS Does:	PNS Does Not:
Focus on the human factor of nuclear security, including human reliability, insider threat, and security culture.	Develop physical protection systems or a design basis threat, undertake programs focused on nuclear safety, safeguards or IT infrastructure, emergency response, or general regulatory development.
Promote a self-sufficient nuclear security culture, ingrained in partner countries' nuclear technical organizations.	Provide training on nuclear security culture primarily for national or site response forces, border control, or PPS designers and evaluators.
Sponsor events which have a majority focus on issues related to nuclear security culture, insider threat, and human reliability.	Sponsor events which have <u>a majority focus on issues other than</u> nuclear security culture, insider threat, and human reliability.
Incorporate nuclear security culture considerations into university curriculum for future technical experts.	Develop academic curriculum for guard forces, PPS designers, or topics such as nuclear safety, safeguards, or emergency response.
Engage PNS priority countries bilaterally or regionally.	Engage non-PNS priority countries bilaterally.

Export Control and Related Border Security Program

- EXBS assistance focuses on the broad range of export controls and border security:
 - Legal and Regulatory
 - Licensing
 - Enforcement
 - Interagency Coordination
 - Government – Industry Outreach
- EXBS assistance is delivered primarily through training and detection/interdiction equipment donations.

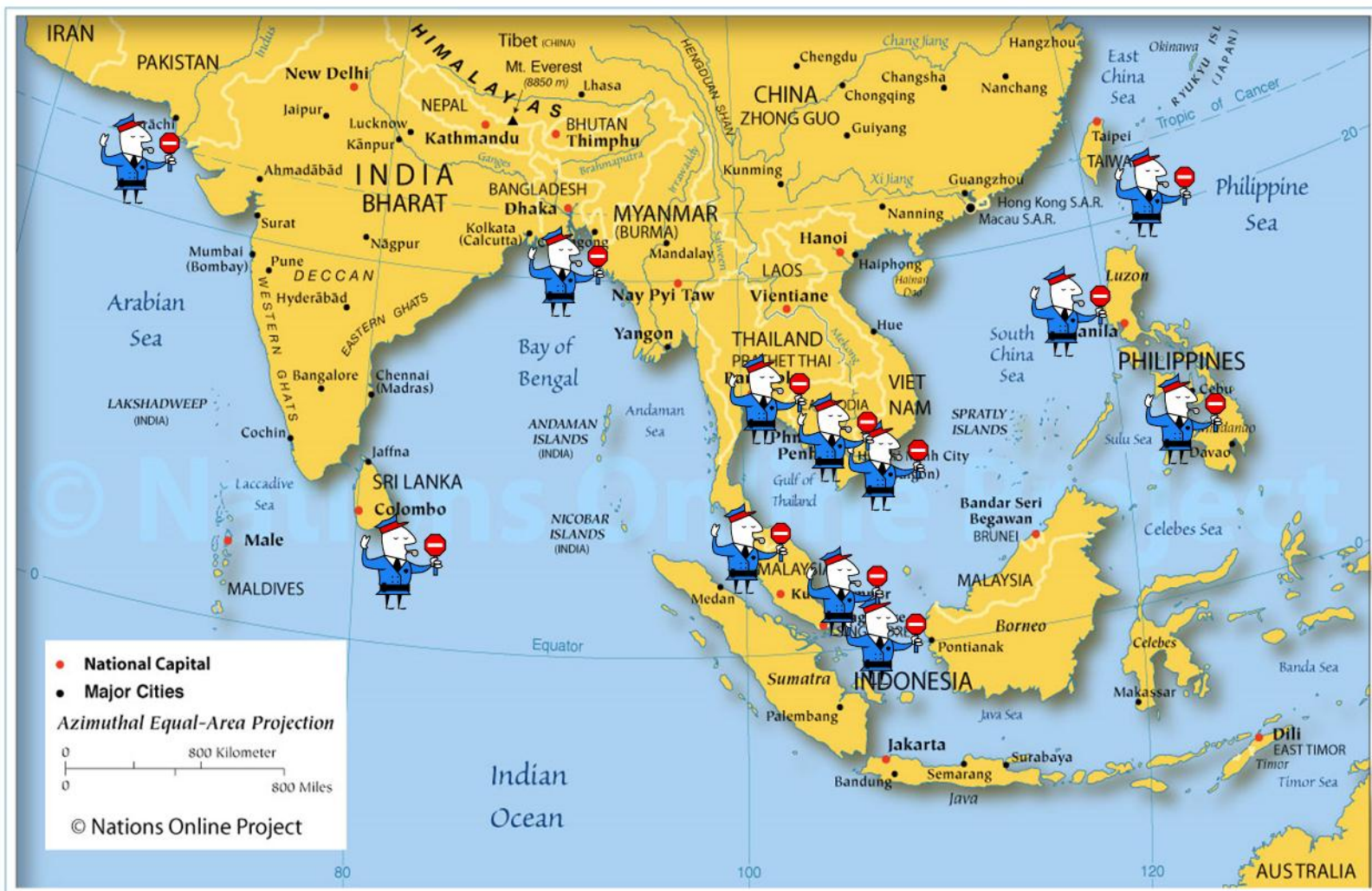
DOE/NNSA's Office of Nuclear Smuggling Detection & Deterrence

Mission, Goal, & Strategy

- **Mission:** To provide equipment, training, and technical support to international partners to enhance their ability to deter, detect, and investigate the illicit trafficking of special nuclear and other radioactive materials that could be used by terrorists in a nuclear weapon or radiological device
- **NSDD Strategy:** incorporates a threat-based, defense-in-depth approach to target efforts and maximize effectiveness
 - Deployment of fixed and mobile systems to close key gaps along high-risk smuggling pathways
 - Over 3100 Radiation Portal Monitors (RPMs) at over 550 sites and over 90 mobile systems deployed in 56 countries since 1998
 - Transition of long-term responsibility to partners within 3
 - Focus on training, workshops, and exercises, as well as support for maintenance, regulations development, and program management
 - Over 450 sites transitioned to partner country ownership
 - Forensics engagements to build awareness, capacity and improve technical expertise

DOE/NNSA's Office of Nuclear Smuggling Detection & Deterrence

Deployments in South East Asia



DOE/NNSA's Office of Nuclear Smuggling Detection & Deterrence

Lessons Learned

- Threat posed by nuclear and radioactive materials out of regulatory control persists and is evolving
- Countries within South East Asia continue to detect and interdict material out of regulatory control, as well as contaminated cargo, which pose a threat to the security and safety of ASEAN citizens and the global community as a whole
- Progress in combatting nuclear smuggling will be optimized only if:
 - ◆ Detection systems are effectively integrated into national-level response plans, as well as regional and global strategy for detecting illicit trafficking
 - ◆ Bilateral and multilateral mechanisms are established to share data and other information on the detection, seizure, and investigations of material out of regulatory control
 - ◆ Nations develop regulations governing the operation and maintenance of their respective nuclear detection architecture

DOE/NNSA's Office of Nuclear Smuggling Detection &
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Global Initiative to Combat Nuclear Terrorism

- Voluntary initiative
- 86 partner nations
- Capacity building activities
- Nuclear detection, nuclear forensics, response and mitigation

Cooperation and Coordination

- Partner countries
- International organizations
- Donor countries
- Maximize global efforts
- Avoid duplication and redundancy



Questions?