



SAND2015-2371PE

International Physical Security Department



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Mission Statement

The mission of the International Physical Security Department is to provide leadership and support to the U.S. Department of Energy (DOE) and the International Atomic Energy Agency (IAEA) in international physical protection of nuclear materials in use, storage, and transport, against the threats and risks of theft and radiological sabotage.





Expertise and Experience

- Department management and staff have extensive knowledge and domestic and international experience in a broad spectrum of related physical protection topics, including:
 - System requirements definition
 - System effectiveness assessments
 - System design and performance specification
 - Component and system test and evaluation
 - System installation and operation
 - Training development and presentation
 - International technical guidance documents



Global Security Program

Program Sponsor

U.S. Department of Energy (DOE)

National Nuclear Security Agency (NNSA)

Office of Defense Nuclear Nonproliferation (NA-20)

Office of Global Material Security (NA-21)

International Nuclear Security (NA-211)





Program Areas

- We perform four major types of activities:
 - Assessments
 - Guidance
 - Capacity Building
 - Collaboration





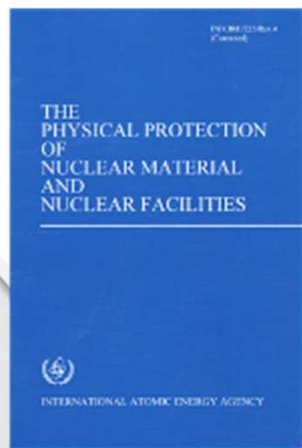
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Assessments

- On-site assessments of physical protection systems
 - Countries with US-obligated nuclear materials
- IAEA assessments of physical protection regime
 - Member State requests
 - International Physical Protection Advisory Service (IPPAS) missions
- Basis for assessments is recommendations in current version of IAEA INFCIRC/225, The Physical Protection of Nuclear Material and Nuclear Facilities

- Technical consultation and input to IAEA Nuclear Security Series
- IAEA process steps:
 - Director General's Advisory Group on Nuclear Security (AdSec) approves Document Preparation Profile (DPP)
 - Consultancy Services Meeting (CSM) of international subject matter experts write draft
 - Technical Meeting (TM) of Member States provides comments for IAEA consideration

- NSS Framework is hierarchical:
 - Nuclear Security Fundamentals
 - incl. Nuclear Security Glossary
 - Recommendations
 - e.g. INFCIRC/225/Rev.5
 - Implementing Guides
 - e.g. Development, Implementation, and Maintenance of a Design Basis Threat
 - Technical Reference Manuals
 - e.g. Identification of Vital Areas at Nuclear Facilities





Capacity Building

- Development of international physical protection training courses and workshops
 - Trend is for training that parallels and addresses NSS of guidance documents/topics
- Presentation of international physical protection training course and workshops
 - Benchmark is International Training Course on Physical Protection of Nuclear Facilities and Materials
 - U.S. commitment in Nuclear Non-Proliferation Act of 1978
 - ITC-24 completed on November 8, 2013
 - More than 650 students and 60 Member States





Collaboration

- Technical collaboration with other IAEA Member States for topics of mutual interest in physical protection
 - Current engagements with
 - Argentina
 - Brazil
 - France
 - Japan
 - Korea
 - UAE
 - Current topic examples
 - Performance testing workshops
 - Vulnerability assessment methodologies





Impact

- Assessments provide specific nuclear security recommendations to IAEA Member State's Competent Authority and Licensees
- Guidance documents provide general recommendations on best practices and lessons learned to all IAEA Member States
- Training supports development and sustainability of human resources and indigenous capabilities
- Collaborations focus on specific countries and topics of interest with mutual benefits

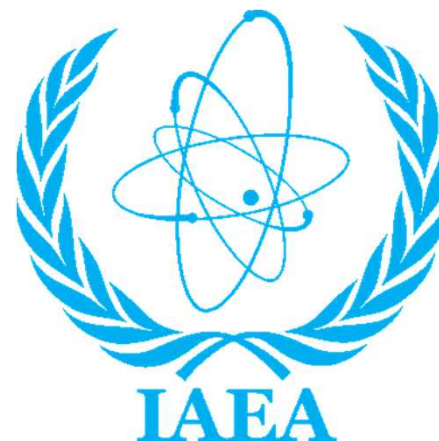




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IAEA Interface

- Department of Nuclear Safety and Security
 - Office of Nuclear Security
- U.S. Department of State
 - U.S. Mission Vienna





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Matrix Organizations

- Subject matter experts from across the labs
- Note: ITC 24 included support from 70 staff

