Overview

• IAEA Nuclear Security Plan 2014-2017
• IAEA Transport Security Activities
• Practical implementation
  • Training and workshops
  • Exercises
• Summary
Programme Elements of 2014-2017 NSP

• Needs Assessment, Information and Cyber security
• External Coordination
• Supporting the Nuclear Security Framework Globally
• Coordinated Research Projects
• Assessment through Self-assessment and/or through Peer Review Missions
• Human Resources Development
• Risk Reduction and Security Improvement
Nuclear Security of Materials and Facilities (MAFA) under Regulatory Control

• Nuclear Security of material and facilities:
  • under regulatory control
  • in use, storage and transport
  • in civilian use

• For protection against unauthorized removal and sabotage
Elements of the Programme

• Development of nuclear security guidance documents
• Practical implementation of IAEA guidance - improving security in Member States
• Development of security model exercises
• Establish CRPs on nuclear security
• Organize and hold international technical meetings, seminars and workshops
• Expert, assessment and advisory missions
• Capacity building
• Physical protection upgrades
Thematic Areas - Nuclear Security of Regulated Facilities

Objectives and Essential Elements of a State’s Nuclear Security Regime – NSS 20

SABOTAGE, UNAUTHORISED REMOVAL (NSS NO. 13, INFCIRC 225)

**THREAT (External and Insider)**
- Characterization/Description
- Threat Assessment/DBT
- Assessment Methodologies

**PROTECTION**
- PHYSICAL
- CYBER
- NMAC

**RESPONSE**
- Contingency Plans

**Security Management**
- Security Plans
- Nuclear Security Culture
- Quality Assurance
- Sustainability programme

**PRACTICAL IMPLEMENTATION**
- FRONT END
- REACTORS
- BACK END
- TRANSPORT
IAEA Transport Security Programme

• Comprises of the following components:
  • Nuclear security guidance
  • Peer review/assessment missions
  • Capacity building/Training
  • Exercises
  • CRP

• Assist Member States with
  • Legal and regulatory framework, State level
  • Practical implementation, Shippers/carriers
Nuclear Security Series Publications on Transport

Fundamentals

NSS 20
Objective and Essential Elements of a State’s Nuclear Security Regime

Recommendations

NSS 13 (NM)
Nuclear Security Recommendations on Physical Protection

NSS 14 (RAM)
Nuclear Security Recommendations on Radioactive Material

NSS 15 (Material Out of Regulatory Control)

Implementing Guides

NSS 26-G

NST053 Security of NM and RAM in Transport

Technical Guides

NST053
DPP approved by NSGC 7

NSS 13 (NM) In publication process

NSS 26-G (TNM) In publication process

NSS 9 (TRAM) Under revision
International Physical Protection Advisory Service (IPPAS)

• Assist Member States in strengthening their national physical protection regimes

• **Specific modules to cover**
  • Security in transport of nuclear material, based on NSS 13
  • Security of radioactive material, associated facilities and associated activities, including transport

• Member States are encouraged to include transport security modules when requesting an IPPAS mission
Transport Security Training

• Raise awareness of the need for security during transport of nuclear and other radioactive material

• Enable MS to effectively develop and implement transport security frameworks

• The target audience
  - policy makers
  - regulators
  - shippers, carriers and
  - other organizations (such as law enforcement agencies, e.g. customs, police)
Transport Security Training, 2015

- 1 International Training Course, NM/RAM (Japan) 16-20 November 2015
- 2 Regional Workshops, Africa and Asia
- 7 National Courses/Workshops
Transport Security Training, 2016

• 2 Regional Training Courses RAM
  • Asia and Pacific (TBD)
  • Latin America (Argentina)

• 6 National Training Courses/Workshops
  • Additional requests expected
Practical Activities – Model Exercises

• Assist Member States to apply IAEA recommendations on security of nuclear and other radioactive material in transport
  • understand the
    • need for exercises
    • types, nature and scope of exercises
  • experience one or more example exercise(s)
    • table top, field
  • Transport security exercise guide developed (working material)
• Pilot exercise(s) “Pilot 2015” to test the draft exercise guide
  • Sweden, maritime transport of spent nuclear fuel
    • Table top (ttx), February 2015
    • Field, May 2015
  • International experts invited
“Action at sea: transport security exercise conducted off the coast of Sweden”

“As in an action movie, ships, helicopters and uniformed people set the scene off the coast of Sweden on 6 May 2015 when national authorities conducted an exercise on security while transporting spent nuclear fuel. The exercise was part of a joint project with the IAEA to test and evaluate a new IAEA guide on planning, conducting and evaluating transport security exercises.”

(IAEA Bulletin June 2015)
Experiences from the Swedish Pilot Exercises

• Allow at least 18 months for planning
• Ensure high level commitment early
  • Financial and human resources
• Agree on purpose and overall objectives and sub objectives for the main participating organizations
• Scenario(s) can then be developed
• The planning helped strengthening cooperation between involved
Experiences from the Swedish Pilot Exercises, cont’d

• TTX was the first time all stakeholders came together

• Educational for all participants,
  • to understand roles, responsibilities and capabilities of others

• Follow up and evaluation should be planned early
Practical Activities – Model Exercises, cont’d

• Security in transport of radioactive material
• Pilot exercises, “Gate to Africa”
  • Joint Moroccan and Spanish table top and field exercises, in cooperation with IAEA, 27-29 October
• Input to the transport security exercise guide
Gate to Africa Transport Security Exercise 27-29 October
Experiences from planning Gate to Africa

• Bilateral exercises takes longer time to plan
• Establish a joint planning committee early
• Agree on realistic planning milestones early
• Follow up and revise planning as needed
IAEA Transport Security Exercise Guide

• “Preparation, Conduct and Evaluation of Exercises for Nuclear and Other Radioactive Material Transport Security” (Draft guide)
• Tested in pilot exercises
• Make available to Member States as interim guidance
  • Get experience and feedback from using it
Technical Meeting (TM) 2016

• Tentatively June/July 2016
  • Follow up on TM June 2014

• Possible topics
  • Draft revised NSS 9 after MS comments
  • Draft technical guide NST053
  • Coordination between IAEA NSS and UN Orange Book
  • Model exercises
  • Capacity building, training practical workshops
Summary

• The IAEA transport security activities comprises of the following components:
  • Nuclear security guidance
  • Peer review/assessment missions
  • Capacity building/Training
  • Exercises
  • CRP

• Assist Member States with
  • Legal and regulatory framework
  • Practical implementation
Summary, cont’d

• Exercises should be conducted to ensure effective transport security arrangements
• Table top exercises are cost effective
• An open discussion climate should be established
• Follow up and evaluation should be agreed early
• IAEA is ready to assist and work together with Member States, upon request, to plan and organize transport security exercises
Thank you for your attention!