

**Milestones in the development of a national
infrastructure for nuclear power**
The Nuclear Security dimension
Technical meeting, 5-7 November 2007

Anita Nilsson



IAEA

International Atomic Energy Agency

Combating Nuclear Terrorism

- Terrorists continue to threaten peace and security.
- Nuclear terrorism remains a high-priority concern.

Two arms of nuclear security

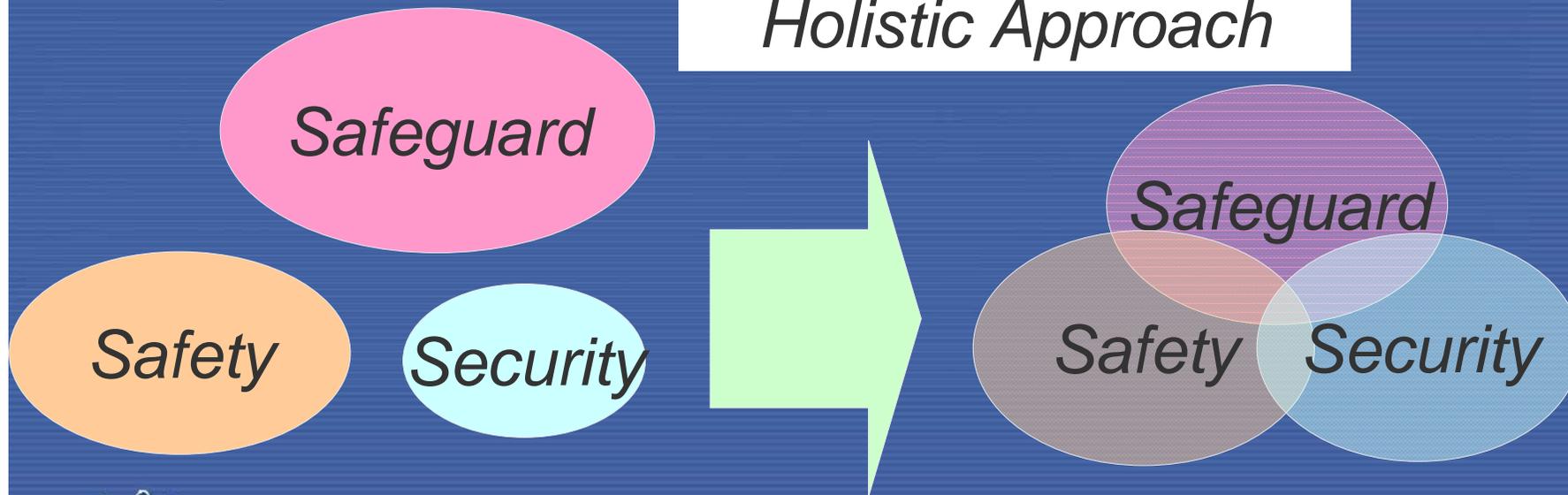
- Proliferation by non-State actors; the construction of a IND or equivalent.
 - Access to materials through theft
 - Access through technology
- Dispersal of radioactivity through acts of sabotage; facilities, storages, locations, transports



Global Nuclear Security Regime

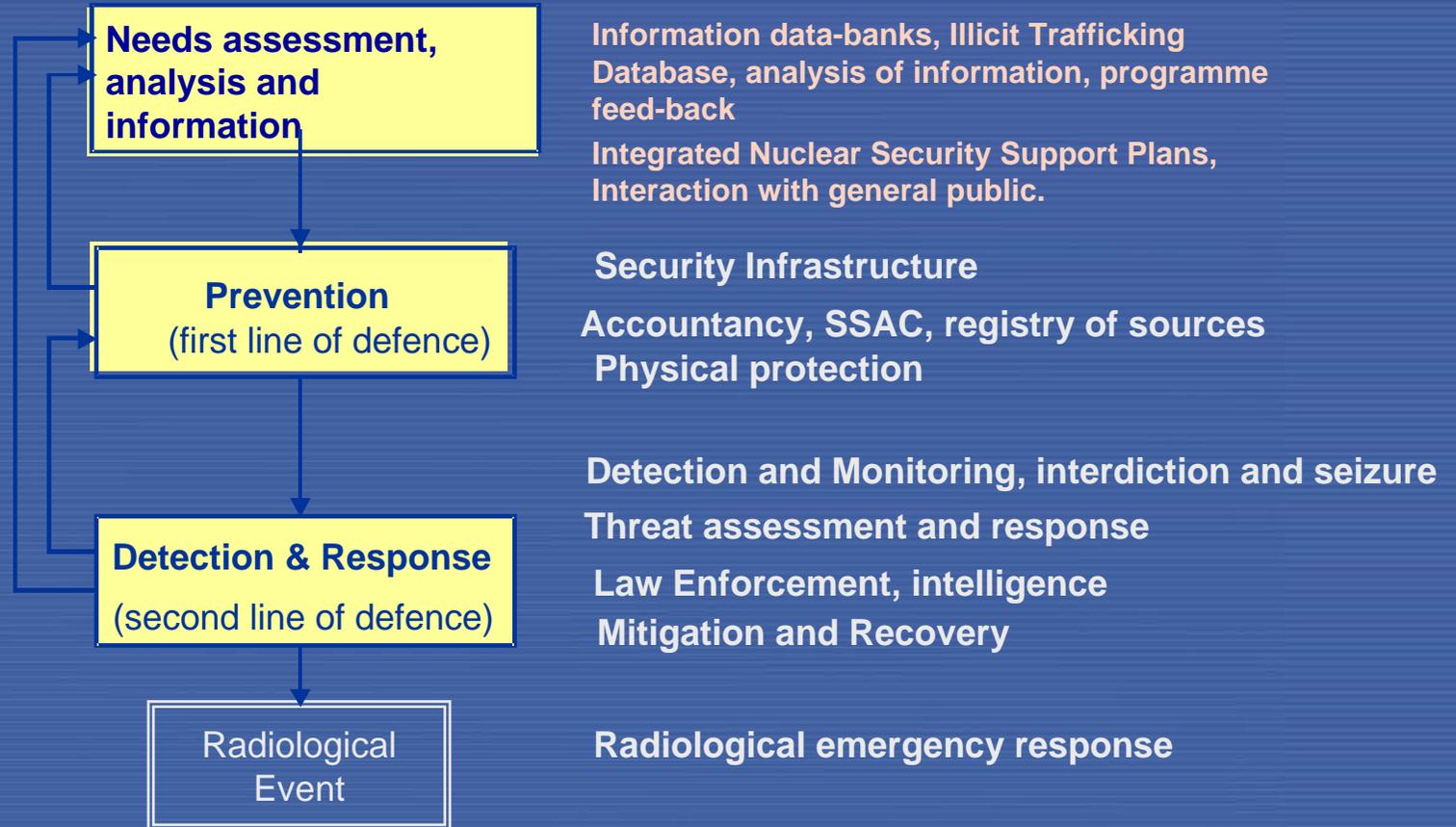
- Nuclear Safeguard – Non-proliferation
- Nuclear Security – Counter Terrorism
- Nuclear Safety – Technical Accident Prevention

Holistic Approach



Comprehensive Nuclear Security Approach

Maintaining confidentiality of information



Nuclear Security Support
(Knowledge Base, Legal Framework)

Nuclear Security Framework

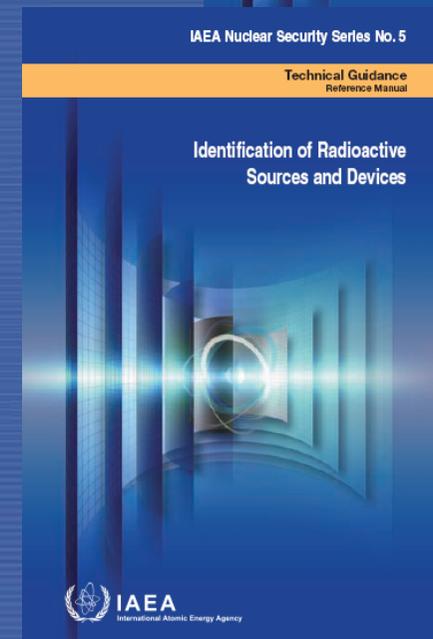
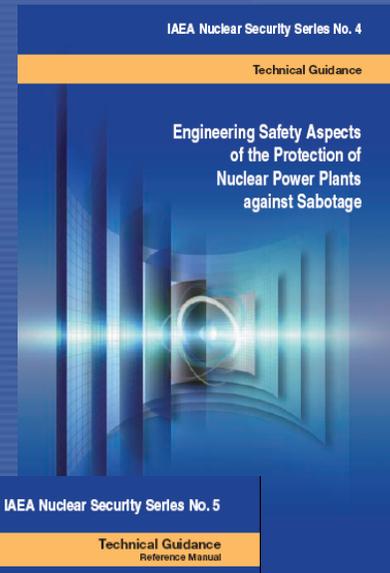
International binding and non-binding instruments

- **Convention on the Physical Protection of Nuclear Materials**
 - 90% IAEA Member States are now party
- **CPPNM Amendment, ratification in progress.**
- **Convention on the Suppression of Acts of Nuclear Terrorism; now in force**
- **UN Security Council Resolutions 1540 and 1373**
 - Obligations are binding for all States.
- **Code of Conduct on the Safety and Security of Radioactive Sources**
- **Safeguards Agreements, Additional Protocols; the Agency's safeguards system**
- **[Nuclear Safety Conventions; contribute to the legal platform]**

Nuclear Security Framework

IAEA Guidance

- **Fundamentals – “*principles*”**
- **Recommendations – “*what*”**
 - **Prevention**
 - A) nuclear materials and facilities (being also rev. 5 of INFCIRC/225)
 - B) radioactive, non-fissile, materials
 - **Detection and response**
 - **Transport (integrated in A) and B))**
- **Implementing Guides – “*how*”**
- **Technical Guidance/Reference Manuals**



Nuclear Security Regime

IAEA programmes to support States

- Facilitating the establishment and implementation of international legal instruments, as foreseen in those instruments
- Developing the nuclear security framework;
 - Guidance and recommendations *The Nuclear Security Series documents*
- Evaluation & advisory services to States
- Capacity building in States
 - Human resource development; training at all levels, graduate education
 - Technical assistance and advice
 - Detection and security equipment and upgrades
- Risk reduction in States:
 - Facilitating the recovery and securing of materials; e.g. research reactor fuel, orphan sources, vulnerable sources
 - Facilitating reactor conversions or decommissioning
- Research and Development
- Information services

Introducing a new or expanded nuclear energy programme

- Recognize the need to establish a nuclear security regime, as part of national normative efforts:
 - Become State party to international binding and non-binding instruments
 - Establish the State System for Nuclear Security
 - Legal infrastructure
 - Regulatory aspects
 - Technical systems, scientific/technical support
 - Export-import licensing and control; at facilities, at borders.
 - Human Resource Development Plan
 - As needed; request assistance from the IAEA NSF
 - Integrated Nuclear Security Support Plan (INSSP) for a coordinated and coherent approach and goals.

In summary

- Recognize the new challenge in relation to security; visibly and sustainably; recognize the need to build confidence among the general public, also for security.
- Set the house in order: Deal with the legacy of lax security in the past; recognize that radioactive materials are not self-protecting
- Establish the starting point for nuclear security to underpin and facilitate nuclear power introduction. IAEA assistance available.
- Bring on-board all national constituencies, beyond the nuclear regulator; establish the necessary coordination bodies
- Establish a plan for; adherence to legal instruments, introduction of IAEA nuclear security guidance; seek implementation assistance, as required. INSSP, as requested.