

Next Generation Nuclear Security - Meeting the Global Challenge –

Rethinking Multilateral Approaches to Fissile Material Security

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IAEA

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The threat diversity

- **Nuclear Explosion – highest concern**
 - Nuclear material
 - “Know-how”
- **Dispersal – recognized concern: disruption**
 - Radioactive dispersal device (RDD)
 - Sabotage against facilities, locations, transports
- **Significantly changed view on radiological self-protection**
- **Portability of material**
- **Terrorist interest**

The materials

Estimates of inventory of Pu and HEU in the world (open source info.):

- Plutonium: 1,830,000 kg
- HEU: 1,900,000 kg

Equivalent to about 305,000 SQs

(about 50% in civil stocks, 50% in military stocks)

IAEA Safeguards Implementation Report for 2008

- Nuclear materials under IAEA safeguards: 158,670 SQs
- Number of nuclear facilities and locations: 1131

Security of materials is a national responsibility,



The International response

Solid platform of international legal instruments, binding and non-binding

Safeguards agreements, additional protocols

Convention on the Physical Protection of Nuclear Material , and amendment

Nuclear Terrorism Convention,

UNSC Resolutions (1540, etc.)

Nuclear Safety conventions

Codes of conduct (non-binding)

All instruments point to IAEA functions and programmes for implementation: internationally accepted guidance, common principles, strategies and assistance

Essential Elements of Nuclear Security

National level:

- Effective legislative system, allocation of responsibilities

Facility level:

- Effective security measures
- Securing vulnerable materials

Outside facilities

- Detecting illegal movement of materials
- Effective border control, protection of major public events

Supporting infrastructure

- Human resource development
- Technical support, R&D



***Sustainability
nuclear security
culture***



Nuclear Security Plan 2010—2013

Objective:

Contribute to global efforts to achieve worldwide, effective security wherever nuclear or other radioactive material is in use, storage and/or transport, and of associated facilities, by supporting States, upon request, in their efforts to establish and maintain effective nuclear security through assistance in capacity building, guidance, human resource development, sustainability and risk reduction



Major Achievements

- Risk reduction in some 30 States
- Improved measures to combating illicit nuclear trafficking
- Improved border control in some 50 States
- 11 IAEA Nuclear Security Series guides published
- Broad use of Nuclear Security advisory missions (~170)
- Solid education and training programme established
- Information, outreach and coordination reaching ~ 90 States, international organizations & initiatives
- Some 50 Integrated Nuclear Security Support Plans

Priorities

- **Comprehensive information platform**
- **International Guidance: Complete Nuclear Security Series (including INFCIRC/225/Rev.5)**
- **Modular nuclear security services, used by all**
- **Accelerated assistance for risk reduction and capacity building**
- **Effective border control arrangements in a global context, including the necessary technical support**
- **Increased coordination & cooperation with Member States, international organizations, initiatives and industry**
- ***N.B. Confidentiality of sensitive information***

A growing nuclear energy sector

- **Increased use of nuclear energy by States: expectations and challenge**
- **Increased volume of materials, transports, facilities and storages**
- **The general public will require highest level of assurances about safety, security and peaceful uses**
- **Nuclear security is an enabling factor**

Conclusion

- The IAEA, with its 151 Member States, to take a leading role in nuclear security at the international level
- Reaching the goal of global nuclear security requires dedicated participation of all with common goals and shared tools
- Nuclear security is an investment - assistance and support is needed to reach goals
- Coordination with States, other international organizations and non-governmental organizations to be intensified
- Effective nuclear security is a long-term effort