

***The IAEA Nuclear Security Programme
Achievements, resources and plans***

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IAEA

International Atomic Energy Agency

The threat

- Nuclear Explosion
 - Nuclear material
 - Technology
 - Knowledge
- Dispersal
 - Radioactive dispersal device
 - Sabotage, facilities



United Nations A/RES/62/46

 **General Assembly** Distr.: General
10 January 2008

Sixty-second session
Agenda item 98 (e)

Resolution adopted by the General Assembly
[on the report of the First Committee (A/62/391)]

62/46. Preventing the acquisition by terrorists of radioactive materials and sources

The General Assembly,

Recognizing the essential contribution of radioactive materials and sources to social and economic development, and the benefits drawn from their use for all States,

Recognizing also the determination of the international community to combat terrorism, as evident in relevant General Assembly and Security Council resolutions,

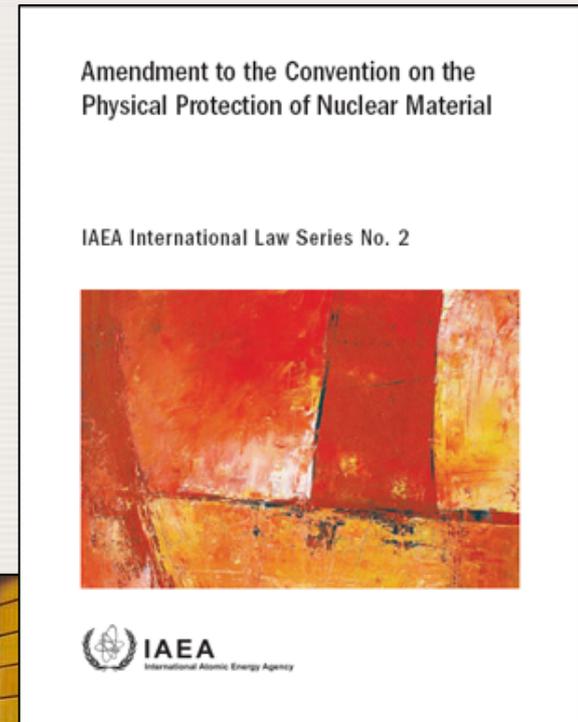
Deeply concerned by the threat of terrorism and the risk that terrorists may acquire, traffic in or use radioactive materials or sources in radiological dispersion devices,

Recalling the importance of international conventions aimed at preventing and suppressing such a risk, in particular the International Convention for the Suppression of Acts of Nuclear Terrorism, adopted on 13 April 2005,¹ and the Convention on the Physical Protection of Nuclear Material, adopted on 26 October 1979,² as well as its Amendment, adopted on 8 July 2005,

Noting that actions of the international community to combat the proliferation of weapons of mass destruction and prevent access by non-State actors to weapons of mass destruction and related material, notably Security Council resolution

International response to nuclear terrorism

- *Convention on the Physical Protection of Nuclear Material*
- *Nuclear Terrorism Convention*
- *UNSC Resolutions (1540, etc.)*
- *Safeguards agreements*
- *Nuclear Safety conventions*



Elements of Effective Nuclear Security

- *Effective legal and regulatory structures*
- *Up-to-date physical protection*
- *Accounting, control and registry*
- *Effective border control*
- *Security within the public domain*
- *Threat reduction; vulnerabilities*
- *Human resource development*
- *Research and development*
- *Nuclear security culture*
- *Sustainability*



Achievements

Implementation of

- **Nuclear Security Plan 2002 – 2005**
- **Nuclear Security Plan 2006 – 2009**

N.B. Implementation builds on interaction with host countries, donors and donors experts

Nuclear Security Information

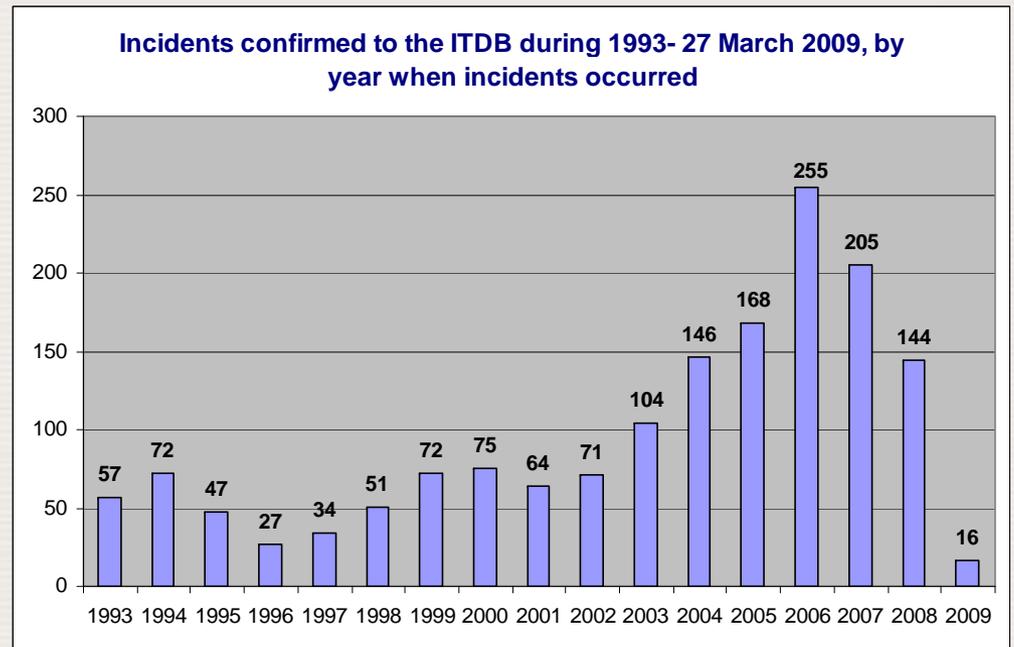
- Enhanced ITDB & other databases
- Continuous improvement of quality of data in cooperation of MS
- Identification of nuclear security needs
Integrated Nuclear Security Support Plans (INSSP)
- Priority setting methodology
- Nuclear Security Information helpful for States and for the general public

N.B. Maintaining confidentiality of sensitive information

IAEA Illicit Trafficking Database Programme

- International recognized sources of information
- Network of 106 States and international organizations
- 1600 incidents since 1995
- Interaction with *inter alia* Interpol, Europol, UNICRI, UNODC, WCO, OSCE
- Nuclear Security Initiatives

Material is circulating in unauthorized/criminal circumstances



Human resource development

- **>7300 persons from 120 States trained**
- **> 90 States hosted such training**
- **Postgraduate, academic education programme in nuclear security established**
- **National training centres in 6 countries, several more to come**
- **Steps taken to streamline training material**

IAEA Nuclear Security Advisory Services

Numerous advisory and assessment missions

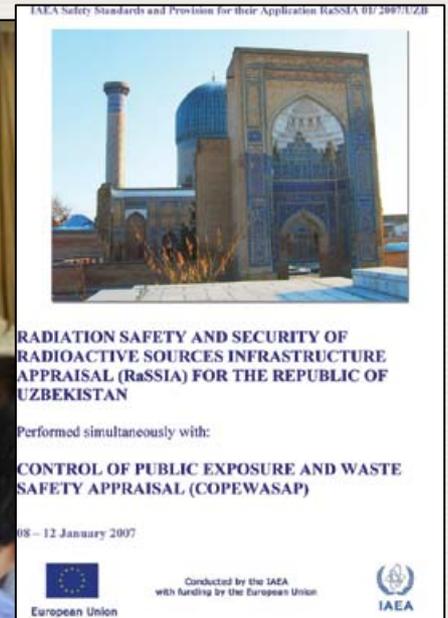
Physical protection



Accountancy/registry



Regulatory infrastructure



Threat reduction

- **Physical Protection improvements in 14 nuclear facilities in 13 countries**
- **>2000 radioactive sources secured**
- **>750 kg of HEU returned to the supplier**
- **Mobile hot cell (SHARS) constructed, for flexible use**
- **SSACs supported (training & equipment)**
- **Registry of radioactive sources improved through RAIS support**

Nuclear security in the public domain

Border control

- **Enhanced capabilities in 47 countries**
 - >2070 instruments and related training
 - >45 Radioactive Portal Monitors in 14 countries
 - Remote (domestic) monitoring systems in 7 countries

Security at major public events

- **Six major sports events and high-level meetings**
- **Preparation for four events 2010 - 2012**



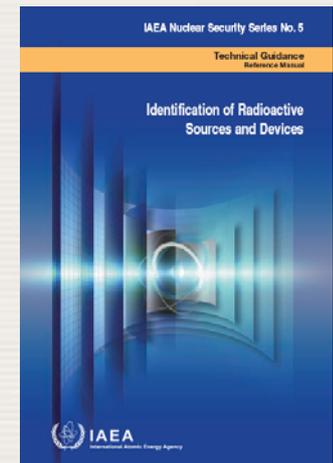
Nuclear Security Series

Published guidance (“Bottom-up approach”)

- In response to urgent needs; Nine Security Guidance documents published, many more in development

Establishing a structured nuclear security framework

- Advanced draft “Nuclear security essential elements” as a fundamental document
- Recommendations: concepts and principles “the what”, one document to be INFCIRC/225/Rev.5
- Technical guidance: “how to”
- Performance based approach, to allow flexible implementation

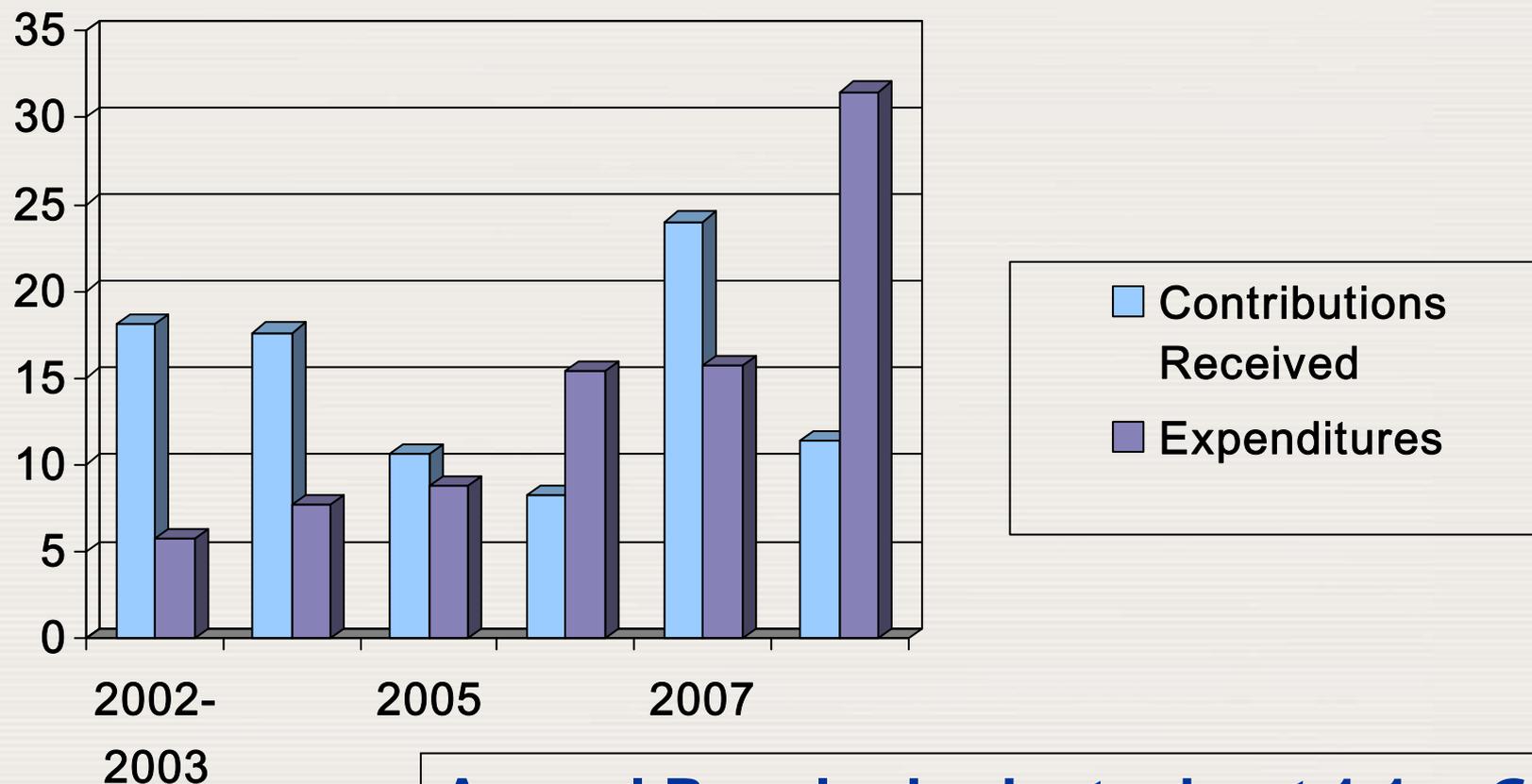


Research and development

- **One Coordinated Research Project (CRP) completed (related to user-friendly instruments)**
- **Three new CRPs initiated/ongoing; detection instruments; nuclear forensics; risk assessment**
- **A way to interact with national research and respond to needs identified in field**

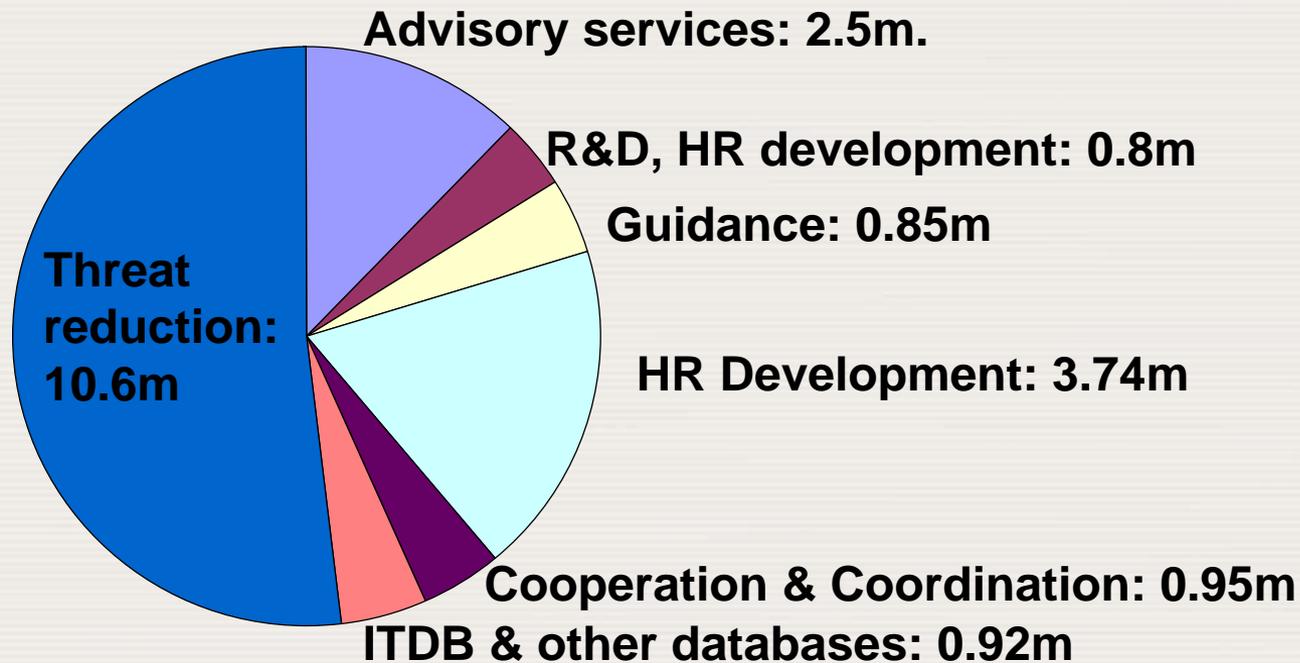
Nuclear Security Fund:

Receipts and Expenditures (US\$): 2002 – 2008



Annual Regular budget: about 1.1m €
Total expenditures 2008: 22.9m €

Breakdown of Expenditure in 2008



The Nuclear Security Plan 2010-2013

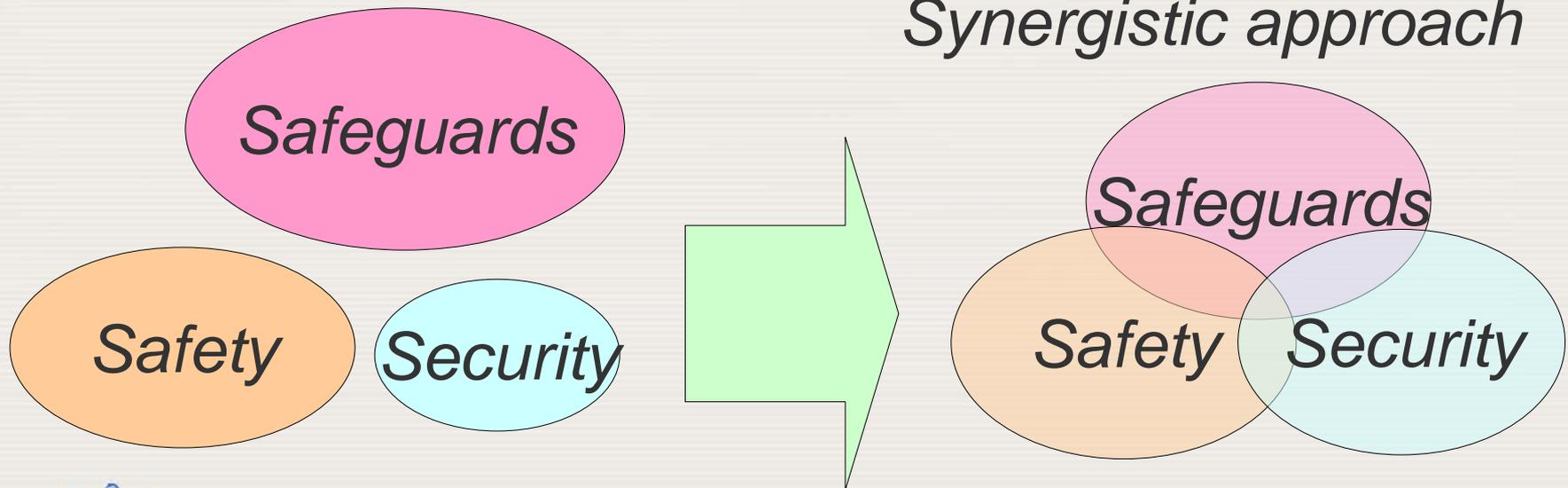
- **Build on experiences & lessons learned 2002-2009**
- **Systematic approaches**
- **Emphasis on sustainability**
- **Increased international coordination**
- **Identify core, long-term activities**
- **Continued focus on threat reduction; most targets reached by the end of the period**
- **Continued assistance and cooperation**

Growing nuclear energy demand – requires solid security arrangements

- Increased use of nuclear energy by States; expectations and challenge
- Nuclear security is to be seen as an enabling factor
- A significant growth in nuclear energy; increased volume of materials, transports, facilities and depositories
- The general public demands, and is entitled to, assurances about safety, security and peaceful uses

Nuclear Security Perspective

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



New Nuclear Security Plan: Priorities (1)

Nuclear Security Information platform

- Comprehensive information system, input for activities, analysis and for clearing house functions. Efficient use of existing information, in-house and external, open sources

Increased coordination and cooperation

- Networks, joint activities, shared platform and priorities
- Interaction; States, International Organizations, NGOs
- Effective analysis, value-added reports
- INSSP to play increased role for assistance and cooperation between donors

Sustainability

New Nuclear Security Plan: Priorities (2)

Nuclear Security Series completed

- Norms and guidance representing international consensus on target security levels, performance based
- Optimal synergies with safety standards and safeguards requirements for accounting and control

Research and Development

- IAEA CRP to further develop and understand fundamental elements of nuclear security.
Nuclear forensics

New Nuclear Security Plan: Priorities (3)

Nuclear Security Services

- Useful for all; *inter alia* as “certificate” of achievements
- Use to build confidence with e.g. General Public
- Modular approach, “custom” oriented

Human Resource Development Programme

- Predictable, streamlined training programme
- Nuclear Security Support Centres for national & regional training in many countries
- “Certified” training material; for “train the trainer”
- Graduate education available in all regions, sometimes in more than one university



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New Nuclear Security Plan: Priorities (4)

Threat reduction and capacity building

- *Security of vulnerable material and technology, e.g. research reactor fuel, bulk material and radioactive sources*
- Building *border monitoring* capacity
- Nuclear Security at major public gatherings
- Increased attention to *security of transport*
- *Return* of unused or spent research reactor fuel
- More attention to *graded approach* within the concept of security of material from *cradle to grave*
- Increased attention to *sustainability* and long-term arrangements



New Nuclear Security Plan: Priorities (5)

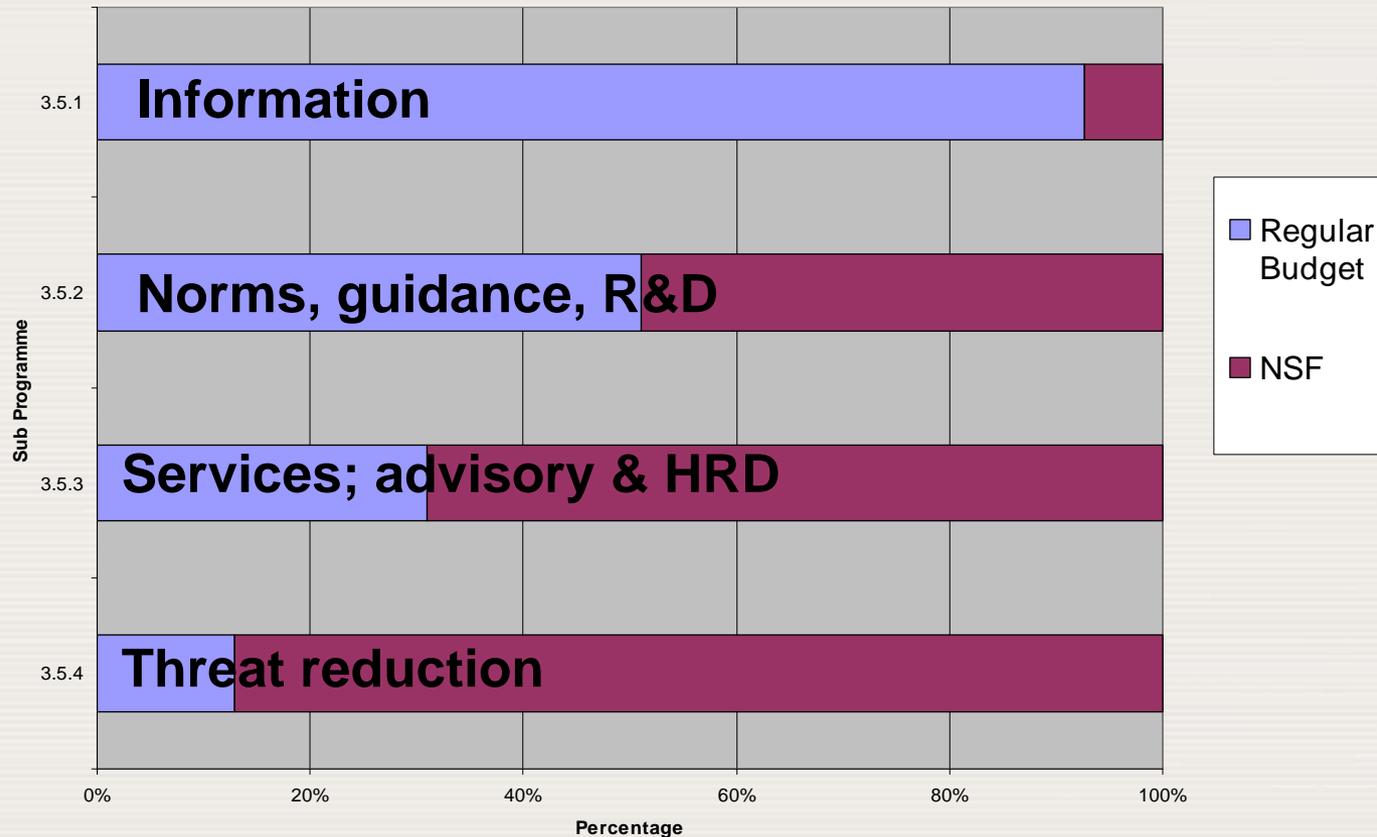
Individual priorities for countries, established in the INSSP. Work-plan and coordination tool.

Integrated Nuclear Security Support Plan Matrix Component		COUNTRY		
Proposed Actions ¹	Responsible Entity	Proposed Initiation	Matrix Comments	
Legal and Regulatory Framework				
1. Review the relevant Country laws and regulations to determine where provisions specifically related to nuclear security issues (physical protection, sabotage, illicit trafficking, import-export, penalties) could usefully be added taking into account international legal instruments and IAEA guidelines (gap analysis).	Country/IAEA	Month/Year	Dealt with by EU Joint Action, Project ...	
2. Expedite drafting and promulgation of amendments or additional laws, based on gap analysis, and bring into force the necessary new provisions.	Country/IAEA	Month/Year		
3. Expedite drafting and promulgation of additional regulatory codes, based on gap analysis, and bring into force the necessary new provisions.	Country/IAEA	Month/Year	RASSIA mission conducted.... Dealt with by...	
4. Expedite the ratification of the Additional Protocol to the IAEA Safeguards Agreement.	Country	Month/Year	ITE mission conducted in....	
5. Initiate process of adhering to and implementing the Convention on Physical Protection of Nuclear Material (CPPNM).	Country	Month/Year		
6. Initiate process of adhering to and implementing the Amendment to Convention on Physical Protection of Nuclear Material (CPPNME).	Country	Month/Year		
7. Initiate process of adhering to and implementing the Nuclear Terrorism Convention	Country	Month/Year		
8. Consider endorsing the Code of Conduct on the Safety and Security of Radioactive Sources including the supplementary Guidance on the Import and Export of Radioactive Sources	Country	Month/Year		
Prevention				
9. Establish State's treat assessment.	Country/IAEA	Month/Year		
10. Carry out review of the level of security arrangements of the relevant facilities, taking into account the threat assessment, regulatory requirements and IAEA recommendations. Implement the necessary upgrades.	Country/IAEA/Donors	Month/Year	Partially dealt with by EU Joint Action, Project... DOE will provide support for upgrading ...	

IAEA Resources

Regular Budget and NSF (2010)

Relative funding; regular budget and NSF



Continued mixed funding; regular budget and voluntary contributions to NSF: 22.9m

Conclusion

- Nuclear security is an investment
- The IAEA to assume a leadership role at the international level, in close coordination with States and other international organizations
- A holistic, synergistic and sustainable approach with emphasis on synergies will be both efficient and effective
- Operators must manage their facilities/locations with focus on security
- There is no room for complacency in this serious matter

Q&A

