International Legal Framework for Nuclear Security George M. Moore Mombasa, Kenya 7-10 July 2008

International Legal Framework for Nuclear Security

- Agency's Legal Framework
 - Statute of the IAEA
 - Agreement on the Privileges and Immunities of the IAEA
 - Relevant resolutions of the Board of Governors and the General Conference of the IAEA



International Legal Framework for Nuclear Security

What is "nuclear security"?

The prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities



International Legal Framework for Nuclear Security

- Responsibility for nuclear security rests entirely with each State
- There is no single international instrument that addresses nuclear security in a comprehensive manner
- The legal foundation for nuclear security comprises international instruments and recognized principles that are implemented by national authorities
- Security systems at the national level will contribute to a strengthened and more universal system of nuclear security at the international level



IAEA Security related instruments (BINDING)

- Convention on the Physical Protection of Nuclear Material and the 2005 Amendment thereto
- Safeguards Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons
- Model Protocol Additional to Agreement(s) between State(s) and the Agency for the Application of Safeguards
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency
- Convention on Nuclear Safety
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

IAEA

IAEA Security related instruments (non-binding)

- Code of Conduct on the Safety and Security of Radioactive Sources (INFCIRC/663)
- Guidance on the Import and Export of Radioactive Sources (INFCIRC/663)
- The Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev.4)
- Physical Protection Objectives and Fundamental Principles (GC(45)/INF/14)
- Code of Conduct on the Safety of Research Reactors (GOV/2004/4 and Corr.1)



IAEA Security related instruments (non-binding) (cont'd)

- International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (Safety Series No. 115)
- Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety—Requirements (Safety Standards Series (No. GS-R-1)
- Emergency Notification and Assistance Technical Operations Manual (ENATOM); Joint Radiation Emergency Management Plan of the International Organizations (JPLAN); IAEA Response Assistance Network (RANET 2006)



Other international and regional instruments (BINDING)

International Conventions

- Treaty on the Non-Proliferation of Nuclear Weapons
- International Convention for the Suppression of Terrorist Bombings (UNGA Resolution 52/164, Annex) (1997)
 International Convention for the Suppression of Acts of Nuclear Terrorism (UNGA Resolution 59/290) (2005)

Regional Agreements

Regional Non-Proliferation and Nuclear Weapons Free Zone Treaties

United Nations Security Council Resolutions

- 1540 (2004), Non-proliferation of weapons of mass destruction



Convention on the Physical Protection of Nuclear Material (INFCIRC/274/Rev. 1)

- In force since 8 February 1987
- 134 Parties (as of March 2008)
- The CPPNM has a threefold scope of application: the physical protection of nuclear material during international transport; the criminalisation of offences; and international co-operation and information exchange
- While the whole of the CPPNM applies to nuclear material used for peaceful purposes while in international nuclear transport (Article 2.1), all but three of its provisions (Articles 3, 4 and 5.3) apply also to nuclear material used for peaceful purposes while in domestic use, storage and transport (Article 2.2)



Convention on the Physical Protection of Nuclear Material (INFCIRC/274/Rev. 1)

- Under the provisions that apply only to nuclear material used for peaceful purposes while in international nuclear transport, States Parties are required:
 - to ensure that, during international transport, nuclear material is protected at the levels described in Annex I as applicable to the categories of nuclear material set out in Annex II (Article 3);
 - not to export or import, or authorize the export or import of, nuclear material unless assurances have been received that the nuclear material will, during international transport and storage incidental to such transport, be protected at the levels described in Annex I (Article 4); and
 - to co-operate and consult with a view to obtaining guidance on the design, maintenance and improvement of systems of physical protection of nuclear material in international transport (Article 5.3).



Convention on the Physical Protection of Nuclear Material (INFCIRC/274/Rev. 1)

The remaining provisions of the CPPNM apply both to nuclear material used for peaceful purposes while in international transport and to nuclear material used for peaceful purposes while in domestic use, storage and transport (Article 2.2). Those provisions relate to:

- co-operation and assistance in the event of theft, robbery or any other unlawful taking of nuclear material or of credible threat thereof with a view, among other things, to the recovery of unlawfully taken nuclear material (Article 5.1 and 2);
- protection of the confidentiality of information (Article 6)
- making specified acts involving nuclear material punishable offences under national law
 and the establishment of jurisdiction over such offences (Articles 7 & 8) (e.g., theft,
 embezzlement or threat to use nuclear material to cause death/serious injury to any
 person or substantial property damage); and
- the prosecution or extradition of alleged offenders and the provision of assistance by States Parties in connection with criminal proceedings relating to such offences (including the supply of evidence necessary for the proceedings) (Articles 9-14).



Amendment to the CPPNM

- In July 2005, an Amendment to the CPPNM was adopted
- It will enter into force once it has been ratified by two-thirds of the States Parties to the CPPNM.
- The Amendment extends the scope of the CPPNM to nuclear facilities and material in peaceful domestic use, storage as well as transport. It will also provide for expanded cooperation between and among States regarding rapid measures to locate and recovers stolen or smuggled nuclear material, mitigate any radiological consequences of sabotage and prevent and combat related offences
- It specifically covers, among other things
 - the addition of definitions of "nuclear facility" and "sabotage" (new Article 1(d) and (e))
 - the establishment of new offences relating to nuclear smuggling/illicit trafficking (new Article 7.1(d) and to sabotage (new Article 7.1(e))
- As of March 2008, 15 States Parties to the CPPNM have adhered to the Amendment. If will enter into force once adhered to by two thirds of the States Parties to the CPPNM



Convention on Early Notification of a Nuclear Accident (1986) (INFCIRC/335)

- In force since 27 October 1986
- 102 States Parties (as of March 2008)
- Applies in the event of any accident involving specified facilities or activities of a State Party (or of persons or legal entities under its jurisdiction or control) from which a release of radioactive material occurs or is likely to occur and which has resulted or may result in an international transboundary release that could be of radiological safety significance to another State (Article 1.1)
- Contributes to the enhancement of the response to an act of "terrorism" by providing a mechanism for rapid information exchange



Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986) (INFCIRC/336)

- In force since 26 February 1987
- 100 States Parties (as of March 2008)
- States Parties are to co-operate between themselves and with the IAEA (in accordance with the Convention) to facilitate prompt assistance in the event of a nuclear accident or radiological emergency to minimize its consequences and to protect life, property and the environment from the effects of radioactive releases
- The Convention contributes to the enhancement of the response to a relevant terrorist act with a view to minimizing its consequences and protecting against the effects of radioactive releases



Convention on Nuclear Safety (CNS) (1994) (INFCIRC/449)

- 61 States Parties (as of March 2008)
- Parties are required to take, within the framework of their national law, the legislative, regulatory and administrative measures and other steps necessary to implement their obligations under the Convention (Article
- Of particular relevance are the requirements that each Party:

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 ensure that on-site and off-site emergency plans are in place, are routinely tested and cover the activities to be carried out in the event of an emergency (Article 16)

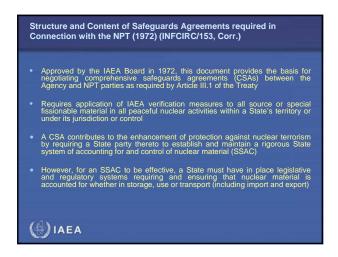
 take the appropriate steps to ensure that the design and construction of a nuclear installation provides for several reliable levels and methods of protection (defence in depth) against the release of radioactive materials, with a view to preventing the occurrence of accidents and to mitigating their radiological consequences should they occur (Article 18(i))



Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (1996) (INFCIRC/546)

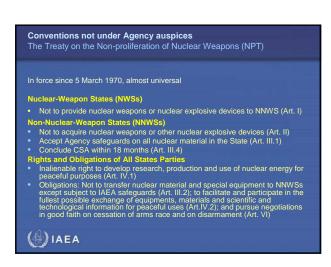
- In force since 18 June 2001
- 46 States Parties (as of March 2008)
- The Joint Convention applies to the safety of spent fuel management and to the safety of radioactive waste management
- It has comparable objectives and requirements (including the establishment of a regulatory body, the design and construction of facilities, emergency preparedness) to the CNS





Model Protocol Additional to Agreements for the Application of Safeguards (1997) (INFCIRC/540, Corr.) A number of enhancements to the CSA were established in the Model Additional Protocol, approved by the IAEA Board in 1997. Among the improvements are: • the provision by the State of additional information with respect to all nuclear material and activities related to the nuclear fuel cycle • "complementary access" for the Agency to locations additional to the locations to which the Agency has access under a CSA; and • administrative improvements, including simplified inspector designation and long term, multiple entry visas Conclusion of an Additional Protocol, in combination with a CSA, represents an important improvement in safeguards that can contribute significantly to

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United Nations Conventions

- International Convention for the Suppression of Terrorist Bombings (UN General Assembly resolution 52/164, Annex) (1997)
- International Convention for the Suppression of the Financing of Terrorism (UN General Assembly resolution 54/109, Annex) (1999)
- International Convention for the Suppression of Acts of Nuclear Terrorism (UN General Assembly resolution 59/290) (2005)



International Convention for the Suppression of Acts of Nuclear Terrorism

- Adopted by the UNGA on 13 April 2005 (A/RES/59/290)
- Open for signature by all States from 14 September 2005 until 31 December 2006
- Entered into force on 7 July 2007
- Status: 34 States Parties (as of March 2008)



International Convention for the Suppression of Acts of Nuclear Terrorism

- Details offences relating to unlawful and intentional possession and use of radioactive material (which includes nuclear material) or a nuclear explosive device or radioactive material dispersal or radiation-emitting device, and use or damage of nuclear facilities
- States Parties are required to adopt measures as necessary to criminalize these offences
- States Parties are "to make every effort to adopt appropriate measures to ensure the protection of radioactive material, taking into account relevant recommendations and functions of the International Atomic Energy Agency" (Article 8)



United Nations Security Council Resolution 1373 (2001)

- Adopted under Chapter VII of the UN Charter and as such legally binding
- Prevention and suppression of terrorist financing
- Prevention and criminalization of terrorist acts
- International cooperation
 The Security Council ... Notes with concern the close connection between international terrorism ... and illegal movement of movement ... and other potentially deadly materials, and in this regards emphasizes the need to enhance coordination of efforts on national, subregional, regional and international levels in order to strengthen a global response to this serious challenge and threat to international security (op. 4)
- Establishes a Counter-Terrorism Committee



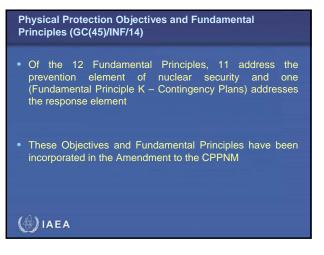
United Nations Security Council Resolution 1540 (2004) Adopted under Chapter VII of the UN Charter and as such legally binding Refers specifically to the CPPNM and to the IAEA Code of Conduct Deals with WMD and non-State actors, and obliges States to: adopt and enforce appropriate effective law device problet any row-lotes actor to manufacture, acquire, possed develope, feeting, it residence are agreement with problets any row-lotes actor to manufacture, acquire, possed develope, resident, iteration or a surface of the through subsequence or a surface of the transfer purposes, and to establish demestic controls to prevent the problems of madeen weapons. implement accountancy and control and physical protection measures; border controls, measures to detect, deter, prevent and combat flight into trafficiancy, and import and export control measures. Dedection measures. Measures mirror the structure and activities of the IAEA's Nuclear Security Plan of Activities Explicitly states, inter alia, that none of its obligations shall be interpreted so as to conflict with or alter the rights and obligations of States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons or alter the responsibilities of the Agency Establishes the 1540 Committee

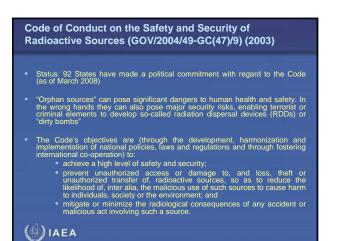
Other relevant IAEA Recommendations and Guidelines

- The instruments described in this part were developed to provide guidance to assist States in implementing stringent measures of regulatory control over nuclear materials, other radioactive substances and facilities using those materials
- They are non-binding. However, they can assume a legally binding character where national law or a separate international agreement so provides



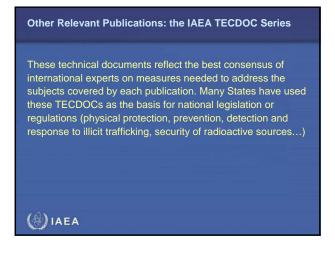
The Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev.4, Corr.) Intended to apply to the physical protection of nuclear material in use, storage and transport, whether domestic or international and whether peaceful or military (including protection of nuclear facilities and nuclear material against sabotage)











Implementation of the Binding and Non-binding Instruments

There are 7 fundamental elements of national legislation relating to security

- Regulatory Authority
- Licensing
- Inspection
- Enforcement
- Criminalization
- International Cooperation
- Import/Export Controls



Implementation of the Binding and Non-binding Instruments The Regulatory Authority Issues regulations and guidance Issues, amends, revokes authorizations Conducts inspections, visits and carry out complementary access Verifies compliance Grants exemptions Releases from regulatory control Provides access to information Maintains an SSAC Maintains a register Communicates with other domestic authorities Cooperates and communicates with international organizations



Implementation of the Binding and Non-binding Instruments Inspection Require any person performing regulated "activities": to grant access to duly authorized inspectors to all premises/facilities where activities are carried out with a view to: Obtaining information Verifying compliance Investigating incidents Interviewing relevant personnel Inspecting equipment Taking environmental samples to grant access within prescribed time limits to provide support to designated inspectors so that they can carry out the necessary activities to fulfil their duties

Implementation of the Binding and Non-binding Instruments Enforcement Grant authority to the Regulatory Authority to enforce compliance with the requirements laid down by the legal framework (e.g. licence suspension/revocation; fines) Detail procedures for determining and exercising enforcement actions (e.g. powers to seize or detain, bar or restrict access) Prescribe criminal penalties in case of serious violations

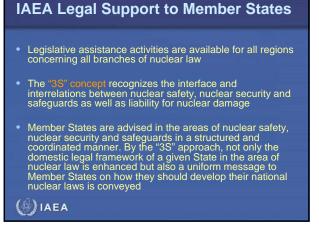




Implementation of the Binding and Non-binding Instruments Import/Export Controls: Key Elements a system of State supervision of transfers of specified materials, equipment and other items through authorization or licensing: verification measures to ensure that transferred commodities are not diverted from their authorized uses; measures to ensure that necessary information on the functioning of the export and import control system is available to stakeholders, including persons engaged in nuclear commerce; a listing of controlled materials, equipment and other items subject to control; and a system of enforcement for violations of export or import requirements. Legislative drafters need to ensure that all relevant elements are included in the law.



Objectives Create awareness in Member States of the legally binding and non-binding international instruments in the nuclear field; assist Member States to comply with their international obligations and commitments; enable Member States to establish national legislative frameworks governing the safe and peaceful uses of nuclear energy; transfer relevant knowledge to Member States



Primary Elements of the Legislative Assistance Programme: Interaction with individual States Interface between legal and technical issues Multi-means approach to transfer knowledge and know-how: - workshops, - training, - assistance in drafting legislation, - development of reference material for the assessment and drafting of national nuclear legislation

IAEA Legal Support to Member States Advisory Missions Relevant to Nuclear Security Under Nuclear Security Plan for 2006-2009: INSServ: International Nuclear Security Advisory Service IPPAS: International Physical Protection Advisory Service ITE: International Teams of Experts Other missions: RASSIA: Radiation Safety and Security Infrastructure Appraisal ISSAS: IAEA State System of Accounting for and Control of Nuclear Material Advisory Service



