Joint ICTP-IAEA School on Nuclear Energy Management

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The International Legal Framework for Nuclear Safety and Security

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“Nuclear law is the body of **special legal norms** created to regulate the conduct of legal or natural persons engaged in activities related to **fissionable materials and ionizing radiation**”
International legal framework

National law
Aims to protect individuals, society and the environment from radiological releases
Seven international instruments to remember
Scope:

Safety of nuclear installations =

“any land-based civil nuclear power plant including storage, handling and treatment facilities that are on the same site and directly related to the operation of the nuclear power plant”

Does not apply to research reactors
Key points:

All countries operating nuclear power plants are party to the Convention

Peer review process

Adequacy has been questioned

Extraordinary Meeting to discuss lessons learned from Fukushima
Scope:

Spent fuel from the operation of civilian nuclear reactors

Radioactive waste from civilian applications, including decommissioning activities

Uranium mining and milling wastes

Not spent fuel held at reprocessing facilities as part of a reprocessing activity

Not NORM material which is outside the nuclear fuel cycle
Key points:

Only 60 parties although relevant to all states (with or without a nuclear power programme)

Peer review process
CONVENTIONS ON EARLY NOTIFICATION AND ASSISTANCE IN THE CASE OF A NUCLEAR ACCIDENT OR RADIOLOGICAL EMERGENCY

Scope:

Obligation to notify nuclear accidents which have resulted or may result in a transboundary release that could be of radiological safety significance for another State

System of national contact points for information exchange
Key points:

So-called post-Chernobyl conventions

Global regime with more than 100 parties
CONVENTIONS ON EARLY NOTIFICATION AND ASSISTANCE IN THE CASE OF A NUCLEAR ACCIDENT OR RADIOLOGICAL EMERGENCY

Complemented by:

- Bilateral agreements between neighbouring States
- A number of safety standards; and practical arrangements and mechanisms:
IAEA REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

Scope:

All radioactive material ranging from very low activity material to very high activity material such as spent fuel and high-level waste

World-wide transport of radioactive material by all modes of transport, i.e. air, sea, land
Key point:

Not only a non-binding safety standard but creates also a legally binding regime

This is necessary to facilitate the movement of radioactive material across borders
IAEA REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

Overview

By Sea
- IMDG Code
- Annex 18 to the Chicago Convention
- IATA Dangerous Goods Manual

By Air
- ADR Agreement

By Road
- MERCOSUR/MERCOSUL Agreement

By Rail
- RID

By Inland Waterways
- ADNR

By Post
- Universal Postal Convention

= incorporate the principles of the IAEA Transport Regulations
Scope:

‘High risk’ sealed radioactive sources (Categories 1-3)

Supplemented by import/export guidance document to facilitate harmonized approach among exporting countries
CODE OF CONDUCT OF THE SAFETY AND SECURITY OF RADIOACTIVE SOURCES

Key points:

Is a non-binding legal instrument

Presently just over 100 political commitments

For the first time, cross-over with nuclear security regime

No peer review process but regular meetings
Scope:

Safety of “research reactors”

= nuclear reactors used mainly for the generation and utilization of neutron flux and ionising radiation for research and other purposes
CODE OF CONDUCT OF THE SAFETY OF RESEARCH REACTORS

Key points:

Is a non-binding legal instrument

Covers all stages of RR lives from siting to decommissioning

No political commitment foreseen under this Code

No peer review process but regular meetings

Lacks security provisions
Safety:
Regime started with Chernobyl in 1986

Comprehensive suite of legal instruments – although combination of binding and non-binding instruments

Complemented by a comprehensive set of safety standards

Common element of all of these instruments is the establishment of a system of control of nuclear activities

Regime now under scrutiny notably regarding its technical contents (design requirements, independence of regulatory body, analysis of information)
Aims to protect radioactive and nuclear material and facilities from malicious acts by non-State actors
Seven international instruments to remember
Resolution 1540 (2004)

Adopted by the Security Council at its 4594th meeting, on 20 April 2004

The Security Council,

noting that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security;

recalling in this context the statement of its President adopted at the Council’s meeting of 31 January 1997 (S/1997/20), regarding the need for all Member States to Ufers their obligations under the Non-Proliferation Treaty and to prevent proliferation in all its aspects of weapons of mass destruction;

regarding that the Non-Proliferation Treaty is a fundamenal instrument for all Member States to resolve peacefully, in accordance with the Charter, any problems that cannot be solved through diplomatic means or other peaceful means, including negotiations, as provided for in the United Nations Charter;

desiring, in support of the multilateral efforts whose aim is to eliminate or prevent the proliferation of nuclear, chemical and biological weapons and the importance for all States parties to these treaties to implement them fully in order to preserve international stability,

announcing that the Security Council will consider another resolution, if necessary, at its next meeting.

Promoted on the朝鲜 nuclear issue.

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CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL

Scope: (threefold)

Physical protection of nuclear material during international transport

Criminalisation of offences (prosecution or extradition)

International co-operation and information exchange
THE AMENDMENT TO THE CPPNM

Scope (extended):

Physical Protection of nuclear facilities and of nuclear material in **domestic** use, storage and transport

New offences relating to nuclear smuggling/illicit trafficking and sabotage

Expanded co-operation among States regarding stolen or smuggled nuclear material, sabotage, and related offences
Scope:

Applies to security of **sealed** sources

Nuclear material or unsealed sources are **not** covered
INTERNATIONAL CONVENTION FOR THE SUPPRESSION OF ACTS OF NUCLEAR TERRORISM

Scope:

All radioactive material, including nuclear material

Same subject matter as the CPPNM and its Amendment (i.e. physical protection, criminalization of offences and international cooperation)

Refers to relevant IAEA recommendations regarding the physical protection of radioactive material
Scope:

All ships except warships

Criminalisation of offences (prosecution or extradition)

International cooperation and information exchange

The 2005 Protocols (eif in 2010) extend scope to include criminalisation of maritime transport of terrorists, terrorist acts and unlawful transport of WMD and related materials
**IAEA ICAC SUA CONVENTION AND PROTOCOL**

**Scope:**

**Civil aircraft**

**Criminalisation of offences (prosecution or extradition)**

**International cooperation and information exchange**

Beijing 2010 Conference extend scope of Convention and Protocol to include criminalisation of unlawful transport of WMDs and radioactive material, use of civil aircraft to discharge WMDs and use of WMDs to attack civil aircraft.
UN SECURITY COUNCIL RESOLUTION 1540

Scope:

Weapons of mass destruction (nuclear, biological, chemical)

States to prohibit non-State actors from acquiring such weapons through:

- adoption of laws
- enforcement measures
- domestic controls

Establishes the 1540 Committee to monitor implementation of the resolution
Security:

- Was reinforced after 9/11
- Multiplicity of instruments and numerous international initiatives (currently 18 international counter terrorism instruments)
- The common thread for the majority of these instruments is the threefold scope of application: subject matter; criminalization and international cooperation
- International legal framework on nuclear security is supported by a number of international initiatives
Three international instruments to remember
THE STRUCTURE AND CONTENT OF AGREEMENTS BETWEEN THE AGENCY AND STATES REQUIRED IN CONNECTION WITH THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS

MODEL PROTOCOL ADDITIONAL TO THE AGREEMENT(S) BETWEEN STATE(S) AND THE INTERNATIONAL ATOMIC ENERGY AGENCY FOR THE APPLICATION OF SAFEGUARDS
Nuclear Liability
International Instruments

OECD/NEA REGIONAL
- 1960 Paris Convention
- 1963 Brussels Supplementary Convention
- 2004 Protocols revising the Paris and Brussels Conventions

IAEA GLOBAL
- 1963 Vienna Convention
- 1997 Protocol to amend the Vienna Convention
- 1997 Convention on Supplementary Compensation
- 1988 Joint Protocol
LIABILITY:

- The liability regime was created with the dual objective of assuring adequate compensation for victims and facilitating nuclear energy development.

- The international instruments are relevant for both nuclear power and non-nuclear power countries.

- 1997 CSC provides the basis for a global nuclear liability regime but not yet in force.
All of these international legal instruments are relevant as States will transform them into national law.
All texts can be found via the website of the Office of Legal Affairs

http://ola.iaea.org/OLA/default.asp
THANK YOU FOR YOUR ATTENTION!