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### Joint ICTP-IAEA School of Nuclear Energy Management

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#### **Introduction to Nuclear Law - International Instruments**

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Office of Legal Affairs

Vienna

AUSTRIA

# Introduction to Nuclear Law - International Instruments

Nuclear Law Institute 21 November 2011 Vienna

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"Nuclear law is the body of <u>special legal norms</u> created to regulate the conduct of legal or natural persons engaged in activities related to <u>fissionable materials and ionizing radiation</u>"

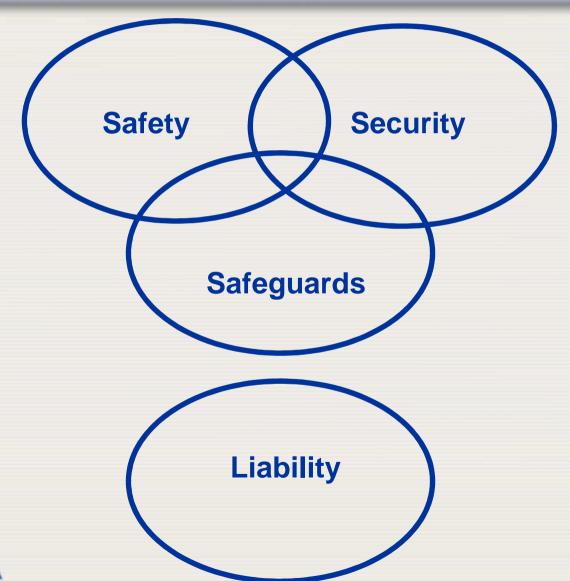


## International legal framework

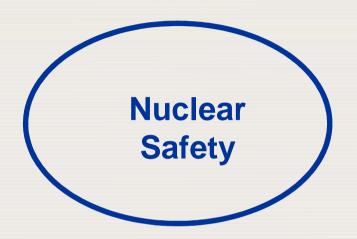


### **National law**









## Aims to protect individuals, society and the environment from radiological releases



## Seven international instruments to remember





CODE OF CONDUCT ON THE SAFETY OF RESEARCH REACTORS

研究堆安全行为准则

CODE DE CONDUITE POUR LA SURETE DES REACTEURS DE RECHERCHE

кодекс поведения по безопасности **ИССЛЕДОВАТЕЛЬСКИХ PEAKTOPOB** 

CÓDIGO DE CONDUCTA SOBRE LA SEGURIDAD DE LOS REACTORES DE INVESTIGACIÓN

مدونة قواعد السلوك بشأن أمان مفاعلات البحوث



### **CONVENTION ON NUCLEAR SAFETY**

Convention on Nuclear Safety

**LEGAL SERIES No. 16** 

### Scope:

Safety of nuclear installations

"any land-based <u>civil nuclear</u> <u>power plant</u> including storage, handling and treatment facilities that are on the same site and directly related to the operation of the nuclear power plant"

Does <u>not</u> apply to research reactors

### **CONVENTION ON NUCLEAR SAFETY**

### **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



## JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT



**INF** 

INFCIRC/546 24 December 1997

GENERAL Distr.
Original: ARABIC, CHINESE
ENGLISH, FRENCH, RUSSIAN and
SPANISH

#### JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT

- The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was adopted on 5 September 1997 by a Diplomatic Conference convened by the International Atomic Energy Agency at its headquarters from 1 to 5 September 1997. The Joint Convention was opened for signature at Vienna on 29 September 1997 during the forty-first session of the General Conference of the International Atomic Energy Agency and will remain open for signature until its entry into force.
- Pursuant to article 40, the Joint Convention will enter into force on the ninetieth day after the date of deposit with the Depositary of the twenty-fifth instrument of ratification, acceptance or approval, including the instruments of fifteen States each having an operational nuclear power plant.
- The text of the Convention, as adopted, is attached hereto for the information of Member States

### 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

# JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT

### **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

Convention
on Early Notification
of a Nuclear Accident
and
Convention on 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 <u>transboundary</u> release that could be of radiological safety significance for another State

System of national <u>contact</u> points for information exchange

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

### **Key points:**

So-called post-Chernobyl conventions

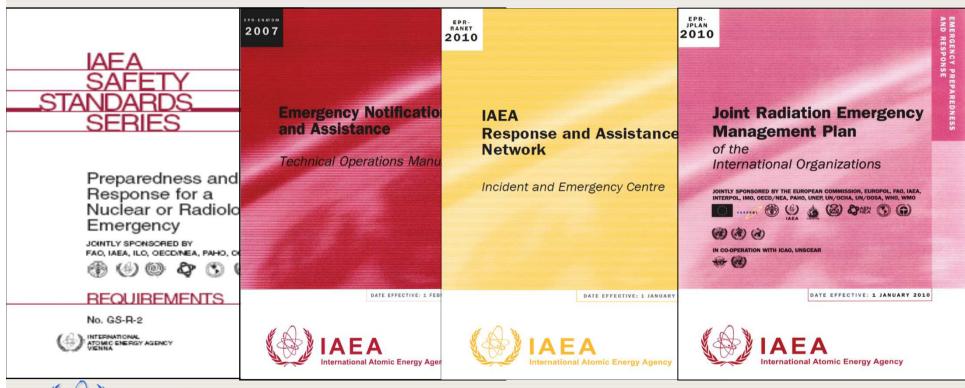
Global regime with more than 100 parties



# 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

### IAEA Safety Standards

for protecting people and the environment

Regulations for the Safe Transport of Radioactive Material 2009 Edition

Safety Requirements

No. TS-R-1

### 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 <u>all</u> modes of transport, i.e. air, sea, land



## IAEA REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

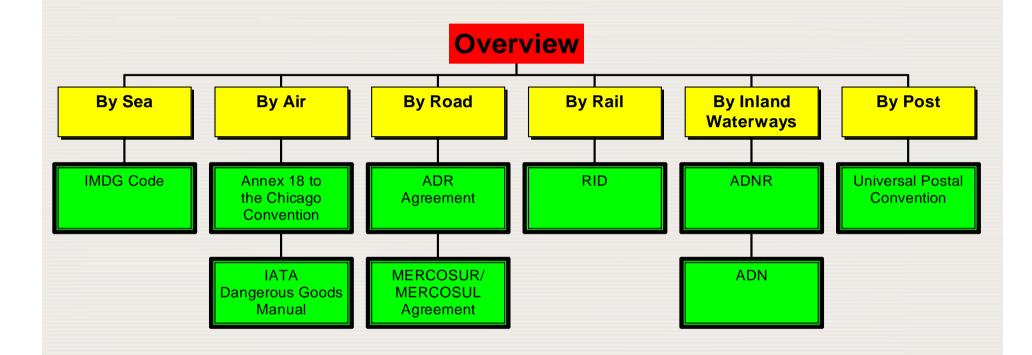
### **Key point:**

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



= incorporate the principles of the IAEA Transport Regulations



## CODE OF CODUCT ON THE SAFETY AND SECURITY OF RADIOACTIVE SOURCES

CODE OF CONDUCT ON
THE SAFETY AND SECURITY OF
RADIOACTIVE SOURCES

放射源安全和保安行为准则

CODE DE CONDUITE SUR LA SÛRETÉ ET LA SÉCURITÉ DES SOURCES RADIOACTIVES

КОДЕКС ПОВЕДЕНИЯ ПО ОБЕСПЕЧЕНИЮ БЕЗОПАСНОСТИ И СОХРАННОСТИ РАДИОАКТИВНЫХ ИСТОЧНИКОВ

CÓDIGO DE CONDUCTA SOBRE SEGURIDAD TECNOLÓGICA Y FÍSICA DE LAS FUENTES RADIACTIVAS

مدونة قواعد السلوك بشأن أمان المصادر المشعة وأمنها

### Scope:

'High risk' sealed radioactive sources (Categories 1-3)

Supplemented by <u>import/export</u> <u>guidance</u> document to facilitate harmonized approach among exporting countries



## CODE OF CODUCT 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



## CODE OF CODUCT OF THE SAFETY OF RESEARCH REACTORS

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КОДЕКС ПОВЕДЕНИЯ
ПО БЕЗОПАСНОСТИ
ИССЛЕДОВАТЕЛЬСКИХ
РЕАКТОРОВ

CÓDIGO DE CONDUCTA SOBRE LA SEGURIDAD DE LOS REACTORES DE INVESTIGACIÓN

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### 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 CODUCT 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



### POINTS TO REMEMBER

### Safety:

Regime started with Chernobyl in 1986

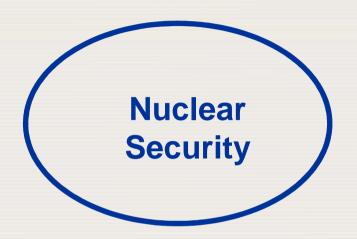
Comprehensive suite of legal instruments – although combination of binding and non-binding instruments

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





## CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL

Convention
on the Physical Protection
of Nuclear Material

**LEGAL SERIES No.12** 

**Scope: (threefold)** 

Physical protection of nuclear material during international transport

Criminalisation of <u>offences</u> (prosecution or extradition)

International co-operation and information exchange

### THE AMENDMENT TO THE CPPNM

#### Amendment to the Convention on the Physical Protection of Nuclear Material

 The Title of the Convention on the Physical Protection of Nuclear Material adopted on 26 October 1979 (hereinafter referred to as "the Convention") is replaced by the following title:

CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL AND NUCLEAR FACILITIES

2. The Preamble of the Convention is replaced by the following text:

THE STATES PARTIES TO THIS CONVENTION.

RECOGNIZING the right of all States to develop and apply nuclear energy for peaceful purposes and their legitimate interests in the potential benefits to be derived from the peaceful application of nuclear energy,

CONVINCED of the need to facilitate international co-operation and the transfer of nuclear technology for the peaceful application of nuclear energy,

BEARING IN MIND that physical protection is of vital importance for the protection of public health, safety, the environment and national and international security.

HAVING IN MIND the purposes and principles of the Charter of the United Nations concerning the maintenance of international peace and security and the promotion of good-neighbourliness and friendly relations and cooperation among States.

CONSIDERING that under the terms of paragraph 4 of Article 2 of the Charter of the United Nations, "All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations,"

RECALLING the Declaration on Measures to Eliminate International Terrorism, annexed to General Assembly resolution 49/60 of 9 December 1994,

DESIRING to avert the potential dangers posed by illicit trafficking, the unlawful taking and use of nuclear material and the sabotage of nuclear material and nuclear facilities, and noting that physical protection against such acts has become a matter of increased national and international concern.

DEEPLY CONCERNED by the worldwide escalation of acts of terrorism in all its forms and manifestations, and by the threats posed by international terrorism and organized crime.

### **Scope (extended):**

Physical Protection of nuclear facilities and of nuclear material in <u>domestic</u> 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

## CODE OF CONDUCT ON THE SAFETY AND SECURITY OF RADIOACTIVE SOURCES

CODE OF CONDUCT ON
THE SAFETY AND SECURITY OF
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### Scope:

Applies to security of <u>sealed</u> sources

**Nuclear** material or unsealed sources are <u>not</u> covered



### INTERNATIONAL CONVENTION FOR THE SUPPRESSION OF ACTS OF NUCLEAR TERRORISM

United Nations

A/RES/59/290



Distr.: General 15 April 2005

Fifty-ninth session Agenda item 148

#### Resolution adopted by the General Assembly

on the report of the Ad Hoc Committee established by General Assembly resolution 51/210 of 17 December 1996 (A/59/766)]

#### 59/290. International Convention for the Suppression of Acts of Nuclear Terrorism

The General Assembly

Having considered the text of the draft international convention for the suppression of acts of nuclear terrorism elaborated by the Ad Hoc Committee established by General Assembly resolution 51/210 of 17 December 1996 and the Working Group of the Sixth Committee.

- 1. Adopts the International Convention for the Suppression of Acts of Nuclear Terrorism annexed to the present resolution, and requests the Secretary-General to open the Convention for signature at United Nations Headquarters in New York from 14 September 2005 to 31 December 2006;
- 2. Calls upon all States to sign and ratify, accept, approve or accede to the Convention

91st plenary meeting 13 April 2005

#### Annex

#### International Convention for the Suppression of Acts of Nuclear Terrorism

The States Parties to this Convention

Having in mind the purposes and principles of the Charter of the United Nations concerning the maintenance of international peace and security and the promotion of good-neighbourliness and friendly relations and cooperation among States

Recalling the Declaration on the Occasion of the Fiftieth Anniversary of the United Nations of 24 October 1995.

Recognizing the right of all States to develop and apply nuclear energy for peaceful purposes and their legitimate interests in the potential benefits to be derived from the peaceful application of nuclear energy,

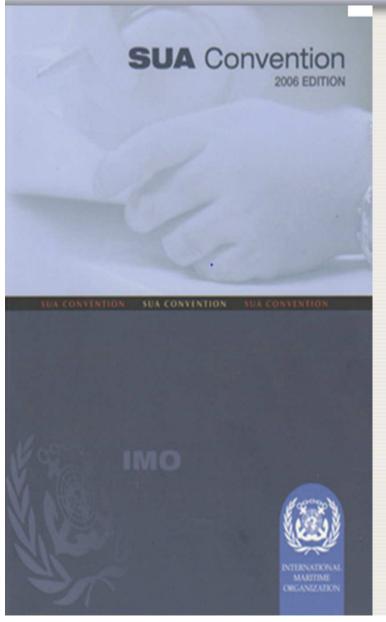
### Scope:

radioactive material, including nuclear material

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

Refers relevant to recommendations regarding the physical protection of radioactive material

### **IMO SUA CONVENTION AND PROTOCOLS**



Scope:

All ships except warships

Criminalisation of offences (prosecution or extradition)

International cooperation and information exchange

The 2005 Protocols (eif in 2010) <u>extend scope</u> to include criminalisation of maritime transport of terrorists, terrorist acts and unlawful transport of WMD and related materials

### ICAO SUA CONVENTION AND PROTOCOL

#### PROTOCOL

SUPPLEMENTARY TO THE CONVENTION FOR THE SUPPRESSION OF UNLAWFUL SEIZURE OF AIRCRAFT

THE STATES PARTIES TO THIS PROTOCOL.

DEEPLY CONCERNED about the worldwide escalation of unlawful acts against civil aviation:

RECOGNIZING that new types of threats against civil aviation require new concerted efforts and policies of cooperation on the part of States; and

BELIEVING that in order to better address these threats, it is necessary to adopt provisions supplementary to those of the Convention for the Suppression of Unlawful Seizure of Aircraft signed at The Hague on 16 December 1970, to suppress unlawful acts of seizure or exercise of control of aircraft and to improve its effectiveness;

HAVE AGREED AS FOLLOWS:

#### Article I

This Protocol supplements the Convention for the Suppression of Unlawful Seizure of Aircraft, signed at The Hague on 16 December 1970 (hereinafter referred to as "the Convention").

#### Article II

Article 1 of the Convention shall be replaced by the following

#### "Article 1

- Any person commits an offence if that person unlawfully and intentionally seizes
  or exercises control of an aircraft in service by force or threat thereof, or by coercion,
  or by any other form of intimidation, or by any technological means.
- Any person also commits an offence if that person:
  - (a) makes a threat to commit the offence set forth in paragraph 1 of this Article;
  - (b) unlawfully and intentionally causes any person to receive such a threat,

under circumstances which indicate that the threat is credible.

### 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**

United Nations

S/RES/1540 (2004)



Distr.: General 28 April 2004

#### Resolution 1540 (2004)

Adopted by the Security Council at its 4956th meeting, on 28 April 2004

The Security Council.

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,\* constitutes a threat to international peace and security.

Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on 31 January 1992 (8/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction.

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,

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

Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use.

Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.

Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.

04-32843 (E)

\*0432843\*

### 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

<sup>\*</sup> Definitions for the purpose of this resolution only:

### POINTS TO REMEMBER

### **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



(Corrected)

(Corrected)



(A) IAEA

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





#### TREATY ON THE NON-PROLIFERATION OF NUCL

Notification of the entry into force

 By letters addressed to the Director General on 5, 6 and 20 Mar Governments of the United Kingdom of Great Britain and Northern In America and the Union of Soviet Socialist Republics, which are desig Governments in Article IX. 2 of the Treaty on the Non-Proliferation of informed the Agency that the Treaty had entered into force on 5 Marc

The text of the Treaty, taken from a certified true copy provides Governments, is reproduced below for the convenience of all Member

#### ON THE NON-PROLIFERATION OF NUCLEAR W

The States concluding this Treaty, hereinafter referred to as the "P.

Considering the devastation that would be visited upon all mank consequent need to make every effort to avert the danger of such a safeguard the security of peoples,

Believing that the proliferation of nuclear wea

In conformity with resolutions of the United Nations Gener-conclusion of an agreement on the prevention of wider dissemination

Undertaking to co-operate in facilitating the application of Inter-agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other application, within the framework of the International Atomic Ene system, of the principle of safeguarding effectively the flow of source naterials by use of instruments and other techniques at certain strategic Affirming the principle that the benefits of peaceful application including any technological by-products which may be derived by mu-the development of nuclear explosive devices, should be available for Parties to the Treaty, whether nuclear-weapon or non-nuclear-weapon 5

Convinced that, in furtherance of this principle, all Parties to participate in the fullest possible exchange of scientific information or in co-operation with other States to, the further development of energy for peaceful purposes,

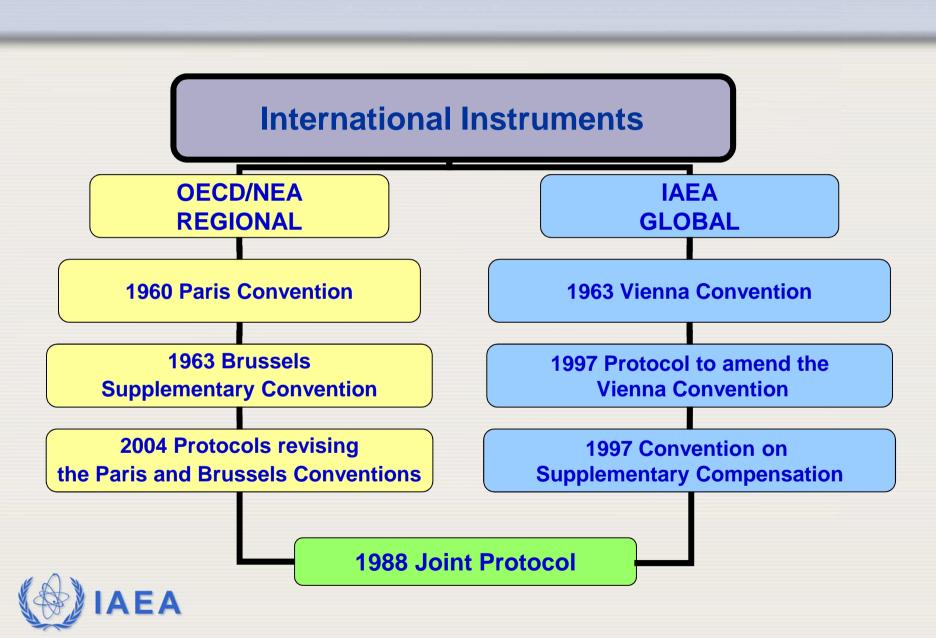
Declaring their intention to achieve at the earliest possible date the arms race and to undertake effective measures in the direction of nuclea

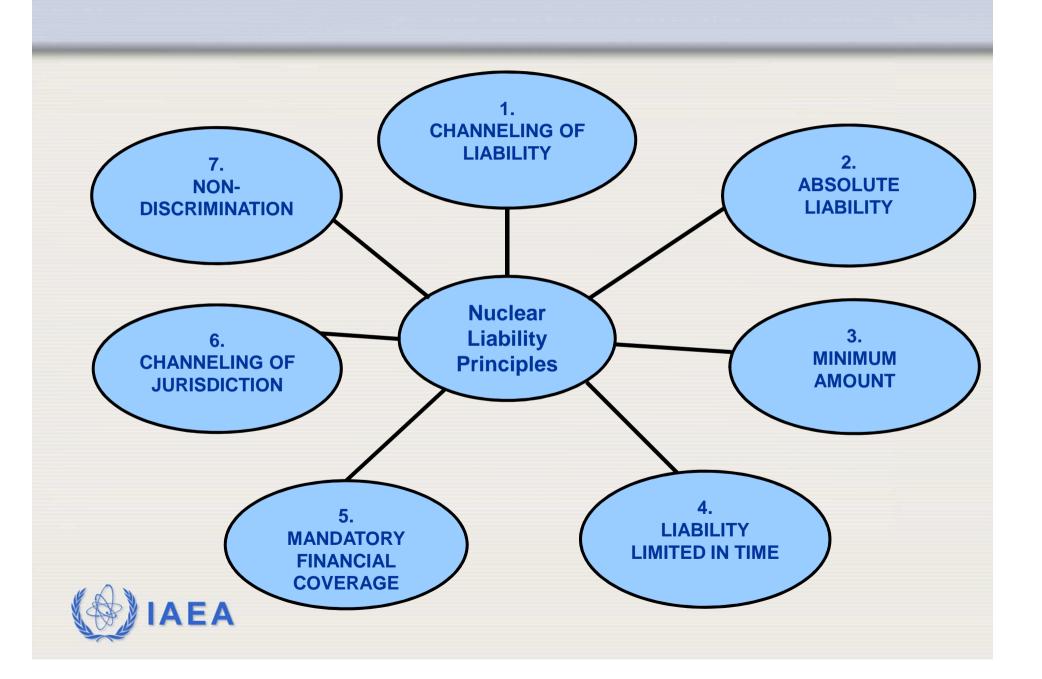
Urging the co-operation of all States in the attainment of this objective,











### POINTS TO REMEMBER

### **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!**

