

The European Atomic Energy Community and its Legal Framework for the Radioactive Waste Management

PRESENTATION PREPARED FOR THE SYMPOSIUM "TOPICAL ISSUES OF IMPLEMENTATION OF THE FEDERAL LAW ON RADIOACTIVE WASTE MANAGEMENT", ATOMEXPO CONGRESS, 4TH JUNE 2012, MOSCOW

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□ My presentation will deal with following issues:

- The Primary Law of the European Atomic Energy Community and the Radioactive Waste Management
- The Secondary Law the European Atomic Energy Community and the Radioactive Waste Management
- □ My presentation will not deal with:
- Bilateral International Agreements among Member States or with Third States

Content of my presentation:

The Primary Law of the European Atomic Energy Community and the Radioactive Waste Management (1)

Preamble of the Treaty Establishing the European Atomic Energy Community:

- RECOGNIZING that nuclear energy represents an essential resource for the development and invigoration of industry and will permit the advancement of the cause of peace,
- CONVINCED that only a joint effort undertaken without delay can offer the prospect of achievements commensurate with the creative capacities of their countries,
- RESOLVED to create the conditions necessary for the development of a powerful nuclear industry which will provide extensive energy resources, lead to the modernization of technical processes and contribute, through its many other applications, to the prosperity of their peoples,
- ANXIOUS to create the conditions of safety necessary to eliminate hazards to the life and health of the public,
- DESIRING to associate other countries with their work and to cooperate with international organizations concerned with the peaceful development of atomic energy,
- HAVE DECIDED to create a EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM)

In order to perform its task, the Community shall, as provided in this Treaty:

to promote research and ensure the dissemination of technical information to establish uniform safety standards to protect the health of workers and of the general public and ensure that they are applied

to facilitate investment and ensure the establishment of the basic installations necessary for the development of nuclear energy in the EU

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to make certain that civil nuclear materials are not diverted to other (particularly military) purposes

to exercise the right of ownership conferred upon it with respect to special fissile materials

to foster progress in the peaceful uses of nuclear energy by working with other countries and international organisations

The Primary Law of the European Atomic Energy Community and the Radioactive Waste Management (2)

Chapters of the Euratom Treaty, which might concerns the Radioactive Waste Management: Chapter I: Development of Research Chapter III: Health Protection Chapter VIII: Property Rights Chapter X: External Relations

The Primary Law of the European Atomic Energy Community and the Radioactive Waste Management (3)

Article 30

Basic standards for the protection of the health of workers and of the general public from the dangers arising from ionising radiation shall be established within the Community.

- The term "basic standards" shall mean:
- (a) the maximum doses compatible with adequate safety;
- (b) the maximum permissible degree of exposure and contamination; and
- (c) the fundamental principles governing the medical supervision of workers.

The Primary Law of the European Atomic Energy Community and the Radioactive Waste Management (4)

Judgement of the European Court of Justice of 10 December 2002 in the Case 29/99 Commission / Council:

"Even though the Euratom Treaty does not grant the Community competence to authorise the construction or operation of nuclear installations, under Articles 30 to 32 of the Euratom Treaty the Community possesses legislative competence to establish, for the purpose of health protection, an authorisation system which must be applied by the Member States. Such a legislative act constitutes a measure supplementing the basic standards referred to in that article."

The Primary Law of the European Atomic Energy Community and the Radioactive Waste Management (5)

Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations

Preamble, at (12):

While this Directive concerns principally the nuclear safety of nuclear installations, it is also important to ensure the safe management of spent fuel and radioactive waste, including at storage and disposal facilities.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (1)

Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste

- **1)** Basic principles
- **2)** Obligations of the Member States
- **3)** Obligations of the licence holder
- 4) Mutual relations with other Member States and with the Third States

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (2)

Basic principles (1):

Reflecting the Joint Convention of 1997

The Joint Convention, concluded under the auspices of the IAEA, represents an incentive instrument which aims at achieving and maintaining a high level of safety worldwide in spent fuel and radioactive waste management through the enhancement of national measures and international cooperation.

Reflecting the recommendations of the ENSEG

Following the Council's invitation to set up a High Level Group at EU level, as recorded in its Conclusions of 8 May 2007 on Nuclear Safety and Safe Management of Spent Nuclear Fuel and Radioactive Waste, the European Nuclear Safety Regulators Group (ENSREG) was set.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (3)

Basic principles (2):

Freedom of Member States to define theirs energy policy

While each Member State remains free to define its energy mix, all Member States generate radioactive waste from power generation or in the course of industrial, agricultural, medical and research activities, or through decommissioning of nuclear facilities or in situations of remediation and interventions.

Freedom of Member States to define theirs fuel cycle policy

The operation of nuclear reactors generates spent fuel. Each Member State remains free to define its fuel cycle policy. The spent fuel can be regarded either as a valuable resource that may be reprocessed or as radioactive waste that is destined for direct disposal. Whatever option is chosen, the disposal of high-level waste, separated at reprocessing, or of spent fuel regarded as waste should be considered.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (4)

Basic principles (3):

Storage is an interim solution, disposal is final solution

Radioactive waste, including spent fuel considered as waste, requires containment and isolation from humans and the living environment over the long term. Its specific nature, namely that it contains radionuclides, requires arrangements to protect human health and the environment against dangers arising from ionising radiation, including disposal in appropriate facilities as the end location point. The storage of radioactive waste, including long-term storage, is an interim solution, but not an alternative to disposal.

Principle of national responsibility

The ultimate responsibility of Member States for the safety of spent fuel and radioactive waste management is a fundamental principle reaffirmed by the Joint Convention. That principle of national responsibility, as well as the principle of prime responsibility of the licence holder for the safety of spent fuel and radioactive waste management under the supervision of its competent regulatory authority, should be enhanced and the role and independence of the competent regulatory authority should be reinforced by this Directive.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (5)

Basic principles (4):

Transparency

Transparency is important in the management of spent fuel and radioactive waste. Transparency should be provided by ensuring effective public information and opportunities for all stakeholders concerned, including local authorities and the public, to participate in the decision-making processes in accordance with national and international obligations.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (6)

Basic principles (5):

Inaplicability on military installations

This Directive shall apply to all stages of: (a) spent fuel management when the spent fuel results from civilian activities; (b) radioactive waste management, from generation to disposal, when the radioactive waste results from <u>civilian</u> activities.

National responsibility

Radioactive waste shall be disposed of in the Member State in which it was generated

Facility – sharing among Member States

Some Member States consider that the sharing of facilities for spent fuel and radioactive waste management, including disposal facilities, is a potentially beneficial, safe and cost-effective option when based on an agreement between the Member States concerned.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (7)

Obligations of the Member States (1):

Maintaining of national policies

Member States shall establish and maintain national policies on spent fuel and radioactive waste management. Without prejudice to Article 2(3), each Member State shall have ultimate responsibility for management of the spent fuel and radioactive waste generated in it.

Maintaining of national legislative framework

Member States shall establish and maintain a national legislative, regulatory and organisational framework ("national framework") for spent fuel and radioactive waste management that allocates responsibility and provides for coordination between relevant competent bodies. Member States shall ensure that the national framework is improved where appropriate, taking into account operating experience, insights gained from the decision-making process referred to in Article 4(3)(f), and the development of relevant technology and research.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (8)

Obligations of the Member States (2):

Competent regulatory authority

Each Member State shall establish and maintain a competent regulatory authority in the field of safety of spent fuel and radioactive waste management. Member States shall ensure that the competent regulatory authority is functionally separate from any other body or organisation concerned with the promotion or utilisation of nuclear energy or radioactive material, including electricity production and radioisotope applications, or with the management of spent fuel and radioactive waste, in order to ensure effective independence from undue influence on its regulatory function.

Adequate financial resources

Member States shall ensure that the national framework require that adequate financial resources be available when needed for the implementation of national programmes referred to in Article 11, especially for the management of spent fuel and radioactive waste, taking due account of the responsibility of spent fuel and radioactive waste generators.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (9)

Obligations of the licence holder (1):

Prime responsibility for the safety is by the licence holder

Member States shall ensure that the prime responsibility for the safety of spent fuel and radioactive waste management facilities and/or activities rest with the licence holder. That responsibility can not be delegated.

Appropriate safety assessment

Member States shall ensure that the national framework in place require licence holders, under the regulatory control of the competent regulatory authority, to regularly assess, verify and continuously improve, as far as is reasonably achievable, the safety of the radioactive waste and spent fuel management facility or activity in a systematic and verifiable manner. This shall be achieved through an appropriate safety assessment, other arguments and evidence.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (10)

Obligations of the licence holder (2):

Licencing of facilities

As part of the licensing of a facility or activity the safety demonstration shall cover the development and operation of an activity and the development, operation and decommissioning of a facility or closure of a disposal facility as well as the post-closure phase of a disposal facility.

Adequate financial and human resources

Member States shall ensure that the national framework require licence holders to provide for and maintain adequate financial and human resources to fulfil their obligations with respect to the safety of spent fuel and radioactive waste management

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (11)

Cooperation among the Member States and with the Third States (1):

Disposal of waste into international repositories

Radioactive waste shall be disposed of in the Member State in which it was generated, unless at the time of shipment an agreement, taking into account the criteria established by the Commission in accordance with Article 16(2) of Directive 2006/117/Euratom, has entered into force between the Member State concerned and another Member State or a third country to use a disposal facility in one of them.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (12)

Cooperation among the Member States and with the Third States (2):

Prior to a shipment to a third country, the exporting Member State shall inform the Commission of the content of any such agreement and take reasonable measures to be assured that:

- (a) the country of destination has concluded an agreement with the Community covering spent fuel and radioactive waste management or is a party to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management ("the Joint Convention");
- (b) the country of destination has radioactive waste management and disposal programmes with objectives representing a high level of safety equivalent to those established by this Directive; and
- (c) the disposal facility in the country of destination is authorised for the radioactive waste to be shipped, is operating prior to the shipment, and is managed in accordance with the requirements set down in the radioactive waste management and disposal programme of that country of destination.

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (13)

- <u>The Directive: A Summary:</u>
- Member States are free to chose their energy mix,
- However if producing radioactive waste, they are obliged to maintain a legal and regulatory framework as demanded by the Directive,
- Waste produced in the Member State shall be basically disposed in that country,
- National regulatory authorities are in charge, there is no "Euratom Authority"
- Directive does not contain any procedural rules for permit proceedings
- Directive is neutral towards financial regulations
- Directive must be implemented in Member States until 23 August 2015

The Secondary Law of the European Atomic Energy Community and the Radioactive Waste Management (14)



THANK YOU FOR YOUR KIND ATTENTION

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