HND International Conferenc
Nuclear Option in Countries with Small and M
Opatija, Croatia, 1996

REGIONAL COOPERATION BASED ON MULTILATERAL INTERNATIONAL AGREEMENTS IN NUCLEAR FIELD

Mr. IVO VALČIĆ,
Ministry of Economic Affairs,
Zagreb, Croatia

ABSTRACT

Multilateral international agreements have defined the framework of behavior and cooperation in various fields and aspects of peaceful use of nuclear energy. Thus, obligations have been defined in the following areas: nonproliferation of nuclear weapons, physical protection of nuclear material, liability for nuclear damage, nuclear safety, early notification about a nuclear accident and assistance in case of nuclear accident. Obligations regarding radioactive waste management should be defined soon.

This paper gives a review of obligations from particular agreements with a special emphasis on those which are being realized through mutual cooperation of concerned countries and are important for safe use of nuclear energy.

1. INTRODUCTION

The short history of nuclear energy usage very efficiently shows its international impact through import and export of nuclear materials and equipment, their international transport, but most of all through the fact that consequences of nuclear accident do not stop at borders: *Nuclear risk is international one.*

Those facts have initiated comprehensive worldwide nuclear cooperation among countries. Today we can speak about a network of international agreements (treaties, conventions) whose aim is to minimize hazardous effects of ionizing radiation as a natural attendant of nuclear technology. The most important agreements from the safety point of view are:

- CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL (1980)

- CONVENTION ON EARLY NOTIFICATION OF A NUCLEAR ACCIDENT (1986)

- CONVENTION ON ASSISTANCE IN THE CASE OF A NUCLEAR ACCIDENT OR RADIOLOGICAL EMERGENCY (1986)

- CONVENTION OF NUCLEAR SAFETY (1994)

- CONVENTION ON THE SAFETY OF RADOACTIVE WASTE MANAGEMENT (IN NEGOTIATION)

The International Atomic Energy Agency in Vienna (IAEA) plays various significant roles in facilitating their implementation, and for all of them the Director General of IAEA has a depository function.

Besides those, safety-related conventions, the Treaty on the Non-Proliferation of Nuclear Weapons (1968) and the Vienna Convention on Civil Liability for Nuclear Damage (1963) also have an important role in international nuclear co-operation. Regarding the third party liability there are also, so-called, Paris Convention and Joint Protocol.

This article concentrates mostly on the nuclear safety aspects of international nuclear co-operation reviewing the provisions of particular agreements.

2. CONVENTION ON PHYSICAL PROTECTION OF NUCLEAR MATERIAL

The Convention on Physical Protection of Nuclear Material was opened for signature on March 3, 1980, and entered into force on February 8, 1987. As of July 1995 there were 53 parties to the Convention (52 States and EUROATOM). The Republic of Croatia has become party of this convention by notification of the succession in September 1992 with effect of October 1991.

Nuclear material for the purpose of this Convention means plutonium (except that with concentration of plutonium-238 more then 80%), uranium-233, uranium enriched in isotope 235 and 233, mixture of uranium isotopes as occurring in nature other than in the form of ore or ore-residue and any material containing one or more of the foregoing (Art. 1). Annex II as a part of the Convention classifies each type of nuclear material according to its quantity.

The Convention shall apply to nuclear material used for peaceful purpose while in *international transport* and while in *domestic use, storage and transport* (Art. 2). Each State Party shall take *appropriate steps to ensure that certain category of nuclear material is protected at the levels* described in Annex I for storage and transportation (Art. 3).

Article 4 talks about obligations of the State Party not to allow exporting, importing, transiting or inland transporting of nuclear material before *receiving assurance* that it will be protected. Receiving the assurance means to cooperate with other countries involved in certain international transport. Therefore Article 5 defines that State Parties must identify and make

known to each other (directly or through IAEA) their *central authority and point of contacts* having responsibility for physical protection of nuclear material.

Cooperation of State Parties (mutual or with states that are not parties) is very important for recovery and response operations in the event of any *unauthorized removal* (theft, robbery), use or alteration of nuclear material or in the event of credible threat thereof. State Parties shall also co-operate and consult with each other with a view to obtain guidance on the design, maintenance and improvement of system of physical protection of nuclear material in international transport.

Regarding Article 5 IAEA periodically reviews a *list of contact points*, as provided by States, Parties or non Parties, and distributes it to all States and relevant international organizations. The last one is referenced as "phyprout.wpf 1996-07-04".

The Convention also talks about confidentiality (Art. 6) and punishment of the offenses (Art. 7-14),

3. CONVENTION ON EARLY NOTIFICATION OF A NUCLEAR ACCIDENT

The Convention on Early Notification of a Nuclear Accident was adopted by General Conference of IAEA at a special session in September 1986 and entered into force on October 27, 1986. 72 states and three organizations had as of July 31, 1995, consented to be bound by the Convention.he Republic of Croatia has become party of this convention by notification of the succession in September 1992 with effect of October 1991.

This Convention shall apply in the event of *any accident on facilities or activities* 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 for another State. The referred facilities and activities practically include all kinds of nuclear facilities as well as all kinds of activities with radioisotopes (Art. 1). In the event of an accident State Party shall *forthwith notify*, directly or through IAEA, those States which are or may be affected and IAEA of the nuclear accident, its nature, the time of its occurrence and its exact location and *promptly provide* the States and IAEA with such available *information* relevant to minimizing the radiological consequences in those States (Art. 2). The information to be provided are defined in Art. 5.

The cooperation between the states is here related to the early notification and prompt information about the accidents. In order to fulfill that, the most important are competent authorities and points of contacts in each State Party. Therefore, each State Party shall make known to the IAEA and to the other State Parties its *competent authorities and point of contact* responsible for issuing and receiving the notification and the information. IAEA shall maintain an up-date list of such national authorities and points of contact and shall provide it to State Parties and Member States (Art. 7).

The Convention encourages State Parties to, in furtherance of their mutual interest, where deemed appropriate, conclude *bilateral or multilateral arrangements* relating to the subject matter of the Convention (Art. 9). Many countries, neighbours and others, did it with intention to prepare and install more precise and full structure which shall give and accept the information regarding nuclear accidents. The Republic of Croatia is currently preparing arrangements with Slovenia, Hungary and Italy.

4. CONVENTION ON ASSISTANCE IN THE CASE OF A NUCLEAR ACCIDENT OR RADIOLOGICAL EMERGENCY

The Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency was also adopted by General Conference IAEA at the special session in September 1986 and entered into force on February 28, 1987. The Republic of Croatia has become a party of this convention by notification of succession in September 1992 with effect of October 1991. As of July 31, 1995 - 68 States and three organizations had consented to be bound by the Convention.

The States Parties *shall co-operate* between themselves and with IAEA in accordance with the provisions of this Convention *to facilitate prompt assistance* in the event of a nuclear accident or radiological emergency in order to minimize its consequences and to protect life, property and environment from effects of radioactive releases. To facilitate such cooperation States Parties may agree on *bilateral or multilateral arrangements*. IAEA should use its best endeavors to promote, facilitate and support such cooperation between States Parties (Art. 1). Furthermore, the Convention deals with provision of assistance (Art. 2), direction and control of assistance (Art. 3), competent authorities and point of contacts (Art. 4), functions of IAEA (Art. 5), confidentiality and public assessments (Art. 6), reimbursement of cost (Art. 7), privileges, immunities and facilities (Art. 8), transit of personnel, equipment and property (Art. 9), claims and compensation (Art. 10), termination of assistance (Art. 11) and other conventional provisions.

IAEA periodically revises a list of points of contacts and competent authorities for the early notification and assistance conventions, so called EMERCON list, and distributes it to all States and relevant international organizations. The last one was distributed by the IAEA letter referenced as N5.55.2 Circ. from January 17, 1996.

5. CONVENTION ON NUCLEAR SAFETY

The Convention on Nuclear Safety was adopted on June 17, 1994, opened for signature on September 20, 1994 and will enter into force on October 24, 1996. The Republic of Croatia deposited the instrument of ratification of the Convention on April 18, 1996. Up to July 26, 1996, 24 other States did the same.

The objectives of this Convention are: to *achieve and maintain a high level of nuclear safety worldwide* through the enhancement of national measures and international cooperation including safety-related technical cooperation; to establish and maintain effective defenses in nuclear installations against potential hazards in order to protect individuals; to prevent accidents with radiological consequences and to mitigate such consequences should they occur (Art. 1). The Convention shall apply to the safety of any land-based civil nuclear power plant including facilities on the same site which are directly related to the operation of the nuclear power plant (Art. 2-3).

As obligations the Convention stipulates practically all *the safety fundamental requirements* known from safety series IAEA No. 110 (Art. 7-19: legislative and regulatory framework; regulatory body; responsibility of license holder; priority to safety; financial and human resources; human factor; quality assurance; assessment and verification of safety; radiation protection; emergency preparedness; siting; design and construction; operation). Each Contracting Party shall submit for review a *report* on the measures it has taken to implement each of obligations of the Convention (Art. 5). For reviewing the reports Contracting Parties shall hold *review meetings* with opportunity to discuss the reports submitted by other Contracting Parties (Art. 20), and adopt and make available to the public a document addressing issues discussed and conclusions reached during the meeting (Art 25).

The review itself is going to be so called *peer review* - exchange of opinions between experts, colleagues. in various fields. The report and peer review system is something new in international law practice, oriented more towards co-operation among Contracting Parties, far from any confrontation as in some other multilateral agreements.

6. CONVENTION ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT

This Convention is still under discussion by a Group of Legal and Technical Experts formed pursuant to the decision of IAEA General Conference. The work of the Group resulted in the Fourth Working Draft (June, 1996) which is going to serve as the basis for discussion at the fifth meeting of the Group scheduled for November 1996. The Group agreed that the Convention on Nuclear Safety should be the model for a *"sister" convention* on radioactive waste safety, meaning that practically all the requirements known as *fundamental principles of radioactive waste management* (IAEA Safety Series No. 111-F) will become mandatory. State Parties will *report* on implementation of those requirements and mutually review the reports on *review meetings*.

It is still uncertain whether the convention will include the spent fuel management and military source waste. The most interesting topics in further discussion will also be: transboundary movement of radioactive waste, discharges of radioactivity as well as sealed sources treatment.

7. CONCLUSION

International orientation in using nuclear energy today is arranged by numerous international agreements. Among these, a group of so called safety related conventions has major significance; it covers physical protection of nuclear material, early notification in case of a nuclear accident, nuclear safety and safe management of radioactive waste. By implementing those conventions the states which are parties to them try to enhance measures for prevention of nuclear accidents, or mitigation of their harmful consequences. These agreements determine frameworks and means of mutual cooperation of states parties.

Cooperation, particularly regional one and cooperation between neighbouring countries, is the only way of creating conditions for further safer usage of nuclear energy.

REFERENCES:

- The Convention on the Physical Protection of Nuclear Material, IAEA, INFCIRC/274/Rev. 1, May 1980
- Convention on Early Notification of a Nuclear Accident, IAEA, INFCIRC/335, 18 November 1986
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, IAEA, IFCIRC/336, 18 November 1986
- Convention on Nuclear Safety, IAEA, INFCIRC/449, 5 July 1994
- The Report by the Chairman of the Group of Experts on a Convention on the Safety of Radioactive Waste Management, IAEA, T2-TC-928.5, 3 July 1996