



Multilateral conventions: Instruments of global co-operation

Through the IAEA, States have established important legal frameworks

Multilateral conventions are a cornerstone of international relations, and, in the nuclear field, the IAEA has long been an active partner in their formulation and execution. While the Agency's Statute does not expressly mention the formulation of multilateral conventions as one of the organization's functions, the objectives of the IAEA have been frequently furthered through them.

Most visible perhaps in the aftermath of the Chernobyl accident in 1986 was the leading role that the IAEA and its Member States assumed in the formulation of two international conventions on the timely response to nuclear accidents and on the provision of emergency assistance. These conventions — the *Convention on Early Notification of a Nuclear Accident* and the *Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency* — today serve as models for similar conventions in other fields. The United Nations Environment Programme (UNEP) has proposed conventions patterned on them that would apply to chemical accidents.

Following is a brief review of these and other selected multilateral conventions and agreements which are under IAEA auspices or that assign responsibilities to the Agency.*

Convention on Early Notification of a Nuclear Accident and Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. Since 1959, the IAEA has had an action plan by which it would arrange to provide assistance to any Member State following an accident involving radioactive materials. Member States have also been encouraged to enter into bilateral or multilateral assistance arrangements with neighbouring States. This is to provide the technical services which they might need but which are beyond their own resources. In 1963, the *Nordic Mutual Emergency Assistance Agreement in Connection with Radiation Accidents* was signed between the four Nordic States (Denmark, Finland, Norway, and Sweden) and the IAEA.

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* This article does not cover the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the Tlatelolco Treaty under which the IAEA has safeguards responsibilities. They are addressed in a related article by Prof. H. Grümmer in this edition of the *IAEA Bulletin*, as well as in *IAEA Bulletin*, Vol. 26, No. 3 (1984).

To stimulate the conclusion of such emergency assistance agreements between two or more Member States and the IAEA, draft model bilateral and multilateral agreements were prepared by an expert committee and, with endorsement of the IAEA Board, they were circulated in 1967. A number of bilateral agreements providing for speedy notification, information exchange, and mutual assistance have been signed since 1977 in Europe.

In the mid-1980's, the idea of international co-operation in the event of a nuclear accident was further developed. It materialized in two IAEA documents: *Guidelines on Reportable Events, Integrated Planning, and Information Exchange in a Transboundary Release of Radioactive Materials* (1985, INFCIRC/321), and *Guidelines for Mutual Emergency Assistance Arrangements in Connection with a Nuclear Accident or Radiological Emergency* (1984, INFCIRC/310).

Shortly after the accident at Chernobyl in April 1986, the IAEA Board of Governors at a special session moved to convene a meeting of senior governmental experts to draft, on an urgent basis, two international conventions on accident response and emergency assistance. Within five weeks, by mid-August 1986, experts from 62 countries had produced draft conventions. They were both subsequently adopted on 26 September 1986 by the Special Session of the IAEA's General Conference and immediately opened for signature. (See accompanying box for current status.)

The early notification convention, which came into force on 27 October 1986, establishes an "early-warning" system for all nuclear accidents holding potential transboundary consequences. The emergency assistance convention, which entered into force on 26 February 1987, sets out an international framework to facilitate prompt assistance by requiring States to notify the IAEA in advance of available experts, equipment, and other materials. The IAEA will serve as a focal point for co-operation by channelling information, co-ordinating assistance, and helping Member States to develop training and radiation monitoring programmes.

With respect to both of these conventions, actions have been taken to enable the IAEA to exercise assigned functions and responsibilities.*

* Full texts of both conventions are published in the *IAEA Bulletin* Vol. 28, No. 4 (1986).

Convention on the Physical Protection of Nuclear Material. In 1972, the IAEA issued a set of recommendations concerning organizational and technical measures to be applied for the physical protection of nuclear material in use or storage within a State or during national or international transit. The recommendations, as updated, introduce the concept of "categorization" of nuclear material in order to ensure an appropriate relationship between the material concerned and the protection measures. The categorization is based on the potential hazard of the material, which in itself depends on its type, physical and chemical form, radiation level, and quantity.

In 1975, the First Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) recognized the importance of this subject and the possibility of an international convention. This shared recognition led to international negotiations, under the Agency's auspices, on the *Convention on the Physical Protection of Nuclear Material*. It came to be adopted in 1979, and entered into force in February 1987.

Under the convention, each party must take steps to ensure that, during international transport, nuclear material is protected at the agreed level as long as the material is within its territory or aboard ship or aircraft under its jurisdiction. Each party also agrees not to export or import nuclear material, or allow its transit through its territory, unless it has received assurances that the nuclear material will be protected during international transport according to the levels based upon the categorization of nuclear material. A party must also apply such levels of protection to material which, during transit from one part of its territory to another, will pass through international waters or airspace. The party responsible for receiving the requisite assurances must provide advance notice of the transfer to States through which the nuclear material will pass.

In the event of theft or robbery, sabotage, or any threat of them, the parties undertake to provide co-operation and assistance to any requesting State in the protection and recovery of the nuclear material involved. Thus, even States not parties to the convention may invoke the benefit of this undertaking. This reflects the objective of facilitating the widest possible international co-operation. Each party must make certain acts involving nuclear material serious criminal offences under its legislation and subject offenders to prosecution or extradition. Such acts include theft or robbery, embezzlement, extortion, and sabotage — that is, any unlawful act that causes or is likely to cause death or serious injury to persons, or substantial damage to properties. Appropriate penalties will apply to such acts, irrespective of whether the nuclear material involved is in domestic use, storage, transit, or international transport. The convention has thus adopted the strategy of "no sanctuary" to cope with criminal acts committed in those circumstances.*

* See *IAEA Bulletin*, Vol. 27, No. 1 (Spring 1985) for a fuller report.

The Vienna Convention on Civil Liability for Nuclear Damage. At the international level, two conventions have been adopted to regulate liability to third parties for nuclear damage. The *Vienna Convention on Civil Liability for Nuclear Damage*, which is under IAEA auspices, was adopted in 1963 and entered into force in 1977. The *Convention on Third Party Liability in the Field of Nuclear Energy* (known as the Paris Convention) was adopted in 1960 and entered into force in 1968. The Paris Convention falls within the framework of the Organization for Economic Co-operation and Development (OECD). Parties to it are Belgium, Denmark, Finland, France, Federal Republic of Germany, Greece, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Turkey, and United Kingdom. Parties to the Vienna Convention are Argentina, Bolivia, Cameroon, Cuba, Egypt, Niger, Peru, Philippines, Trinidad and Tobago, and Yugoslavia.

The conventions establish a special regime aimed at ensuring adequate compensation for nuclear damage. The regime is based on the following principles: 1) absolute and exclusive liability of the operator of the nuclear installation concerned, 2) limitation of the operator's liability in amount and time, 3) obligation for the operator to cover his liability by insurance or other financial security, and 4) guarantee of State intervention to meet compensation claims exceeding the operator's financial security.*

While the two conventions are closely similar in substance, conflicts of law may arise in the event of their simultaneous application to a nuclear accident involving parties to each convention. Also under them, the damage for which liability and compensation are envisaged is limited to that suffered by individuals or their property, and liable activities are limited to those of the operator. The IAEA's Standing Committee on Civil Liability for Nuclear Damage, which was established to review relevant issues, is working with the Nuclear Energy Agency of the OECD in this area. During the last session of the Standing Committee held in March 1987, it was agreed that the immediate task was to achieve a Joint Protocol to the Paris and Vienna conventions; the development of a global convention to cover the question of State liability for transboundary damage was viewed as a longer-term possibility.

Convention on the Prevention of Maritime Pollution by Dumping of Wastes and other Matter (London Dumping Convention, (LDC). Although not under IAEA auspices, the LDC assigns key responsibilities and tasks to the Agency.** The need for acceptable international standards and regulations for preventing pollution of the sea was first recognized by the UN Conference on the Law of the Sea, when it adopted the *Convention on the High Seas* in 1958. It provides *inter alia* that "every State shall take measures to prevent

* See the *IAEA Bulletin*, Vol. 27, No. 1 (Spring 1985) for a fuller report on the international nuclear liability regime.

** The International Maritime Organization (IMO), based in London, is responsible for Secretariat duties with respect to the LDC.

pollution of the seas from the dumping of radioactive wastes, taking into account any standards and regulations which may be formulated by the competent international organizations". The conference also adopted a resolution recommending that the IAEA pursue studies and take action to assist States in controlling the discharge of radioactive materials into the sea.

In response to this resolution, the IAEA set up an expert panel in 1958 to recommend the necessary measures for ensuring that the disposal of radioactive wastes into the sea would not involve an unacceptable degree of hazard to man. At the UN Conference on the Human Environment held in Stockholm in 1972, a special concern was expressed regarding international measures for control of marine pollution and the need to preserve the resources of the sea. Subsequently, an intergovernmental conference was convened in London the same year, which in 1972 adopted the LDC.

The convention provides for international control of all sources of pollution of the marine environment especially "any deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea" and any deliberate disposal of such vessels, aircraft, etc., themselves. Three categories of materials are defined: 1) those which are prohibited from being dumped in the ocean, 2) those which require a special permit to be dumped, and 3) other wastes and matter requiring only a general permit by the national authority for dumping. Radioactive wastes and other radioactive matter are included in the first two categories.

The convention specifically prohibits disposal of *high-level* radioactive waste in the ocean, and it entrusts the IAEA with the responsibilities of defining high-level radioactive material unsuitable for sea dumping, and for establishing recommendations for issuance of special permits for dumping other radioactive material.* In 1974, the IAEA provided the provisional definition and recommendations, and revised them in 1978 and 1985. The recommendations provide for detailed ecological and environmental assessments prior to dumping, and they set forth requirements for selection of dumping sites, for conditioning and packaging wastes, and for the ships themselves. They also provide for supervision of operations by the escorting officers on board. The IAEA emphasizes that the definition and recommendations should not be construed as encouraging the dumping at sea of radioactive wastes or other radioactive matter. Countries party to the LDC have adopted non-binding resolutions calling for the suspension of sea dumping of radioactive wastes pending further scientific studies and there is now a moratorium on sea disposal in the northeast Atlantic Ocean. Dumping of radioactive wastes in the northeast Atlantic is overseen by the Nuclear Energy Agency of the Organization for Economic Co-operation and Development (NEA/OECD) under its Multilateral Consultation and Surveillance Mechanism.

* An article on the IAEA's role appears in the *IAEA Bulletin*, Vol. 28, No. 1 (Spring 1986).

Status of three IAEA international conventions

Within the past year, three major international conventions under IAEA auspices have entered into force: The *Convention on Early Notification of a Nuclear Accident*, the *Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency*, and the *Convention on the Physical Protection of Nuclear Material*. As of 18 August 1987, the status of each convention is:

Convention on Early Notification of a Nuclear Accident

Signatures and ratifications: Afghanistan, Australia, Austria, Belgium, Brazil, Bulgaria, *Byelorussian Soviet Socialist Republic*, Canada, Chile, China, Costa Rica, Côte d'Ivoire, Cuba, *Czechoslovakia*, Denmark, Egypt, Finland, France, *German Democratic Republic*, Federal Republic of Germany, Greece, Guatemala, Holy See, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Jordan, Democratic People's Republic of Korea, Lebanon, Liechtenstein, Luxembourg, Mali, Mexico, Monaco, *Mongolia*, Morocco, Netherlands, *New Zealand*, Niger, Nigeria, Norway, Panama, Paraguay, Poland, Portugal, Senegal, Sierra Leone, *South Africa*, Spain, Sweden, Switzerland, Syrian Arab Republic, Tunisia, Turkey, *Ukrainian Soviet Socialist Republic*, *Union of Soviet Socialist Republics*, United Kingdom, United States, Yugoslavia, Zaire, Zimbabwe.

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency

Signatures and ratifications: Afghanistan, Australia, Austria, Belgium, Brazil, Bulgaria, *Byelorussian Soviet Socialist Republic*, Canada, Chile, China, Costa Rica, Côte d'Ivoire, Cuba, *Czechoslovakia*, Denmark, Egypt, Finland, France, *German Democratic Republic*, Federal Republic of Germany, Greece, Guatemala, Holy See, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Jordan, Democratic People's Republic of Korea, Lebanon, Liechtenstein, Mali, Mexico, Monaco, *Mongolia*, Morocco, Netherlands, *New Zealand*, Niger, Nigeria, Norway, Panama, Paraguay, Poland, Portugal, Senegal, Sierra Leone, *South Africa*, Spain, Sudan, Sweden, Switzerland, Syrian Arab Republic, Tunisia, Turkey, *Ukrainian Soviet Socialist Republic*, *Union of Soviet Socialist Republics*, United Kingdom, United States, Zaire, Zimbabwe.

Convention on the Physical Protection of Nuclear Material

Signatures and ratifications: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, *Czechoslovakia*, Denmark, Dominican Republic, Ecuador, Finland, *German Democratic Republic*, Federal Republic of Germany, France, Greece, Guatemala, Haiti, Hungary, Indonesia, Ireland, Israel, Italy, Republic of Korea, Liechtenstein, Luxembourg, *Mongolia*, Morocco, Netherlands, Niger, Norway, Panama, Paraguay, Philippines, Poland, Portugal, Romania, South Africa, Spain, Sweden, Switzerland, Turkey, *Union of Soviet Socialist Republics*, United Kingdom, United States, Yugoslavia, and the European Atomic Energy Community (Euratom).