

# IAEA Treaty-Making Activities in 1997

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## I. Introduction

The Statute of the International Atomic Energy Agency (hereafter "IAEA" or "the Agency"), was approved on 23 October 1956 by a Conference held at United Nations Headquarters. It came into force on 29 July 1957 upon the fulfilment of the relevant entry into force provisions. As of 31 December 1997, the Agency was composed of 127 Member States. The IAEA is not a specialized agency within the terms of Article 57 and 63 of the Charter of the United Nations. Its objectives and functions do not relate to the economic and social fields and it does not report to ECOSOC. It is, however, "related" to the United Nations, both by virtue of a 1957 relationship agreement between the two organizations and by virtue of its Statute which provides for the Agency reporting to the Security Council and the General Assembly in the event of non-compliance by a State with its safeguards undertakings with the Agency. Unlike specialized agencies, it submits annual reports to the General Assembly and, when necessary, to the Security Council. The General Assembly each year considers the IAEA annual report and adopts a substantive resolution thereon.

The Agency has two intergovernmental bodies: the General Conference composed of the representatives of all Member States, which meets annually; and the Board of Governors currently composed of 35 Member States, including the ten members most advanced in the technology of atomic energy, including the production of source materials, which meets approximately four times a year.

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<sup>1</sup> The views expressed in this article are those of the author and do not necessarily represent the views of the IAEA.

As to its statutory objectives, the Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose.

Among its functions, the Agency is authorized to establish or to adopt standards of safety, for protection of health and minimization of danger to life and property and to apply safeguards, at the request of a State or the parties to any bilateral or multilateral arrangement, to ensure that special fissionable or other materials, facilities, etc. are not used in such a way as to further any military purpose.

The IAEA in 1997 made substantial additions to the list of multilateral treaties of a universal character which have been concluded under its auspices. Three new instruments were adopted, one dealing with the safety of spent fuel and radioactive waste management and two others dealing with nuclear liability.<sup>2</sup> In addition, the Agency adopted and approved a Model Protocol additional to existing safeguards agreements concluded between the Agency and States or other parties. These developments have significantly strengthened the international legal infrastructure for the peaceful and safe use of nuclear energy.

The following attempts to spell out salient features of the adopted texts without going into scientific or technical detail and to point out matters which are of relevance not only to the specialized field of nuclear law, but also of interest in terms of general international law as well.

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<sup>2</sup> Earlier multilateral instruments concluded under the auspices of the Agency include: Agreement on Privileges and Immunities of the International Atomic Energy Agency, 1959, UNTS Vol. 374 No. 5334; Vienna Convention on Civil Liability for Nuclear Damage, 1963, UNTS Vol. 1063 No. 16197; Convention on the Physical Protection of Nuclear Material, 1980, UNTS Vol. 1456 No. 24631; Convention on Early Notification of a Nuclear Accident, 1986, UNTS Vol. 1439 No. 24404; Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, 1986, UNTS Vol. 1457 No. 24643; Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention, 1988, UNTS (not yet published), No. 28907; and Convention on Nuclear Safety, 1994 (see Section II.1. below).

## II. Adoption of Rules and Guidelines by the Contracting Parties of the Convention on Nuclear Safety

Between 21 and 24 April 1997, the Contracting Parties to the Convention on Nuclear Safety held a Preparatory Meeting in order to adopt rules and guidelines as required under the Convention to begin its operation. Before addressing what was adopted, it would be useful to recall briefly the background and salient features of the Convention itself.

### 1. The Convention on Nuclear Safety

First, the facts: the Convention was adopted at a Diplomatic Conference convened at IAEA Headquarters in June 1994 in which 84 States participated. It entered into force on 24 October 1996 and as of the end of December 1997 had 42 parties and 65 signatories.<sup>3</sup>

The Convention's preamble reaffirms that responsibility for nuclear safety rests with States having jurisdiction over a nuclear installation — it is not a matter over which any international organization has binding authority. The preamble goes on, however, to affirm “the importance of international co-operation for the enhancement of nuclear safety through existing bilateral and multilateral mechanisms and the establishment of this *incentive* Convention” (emphasis supplied). It also recognized that the Convention entailed a commitment to the application of fundamental safety principles for nuclear installations rather than of detailed safety standards. Thus, from the outset the context is clear: the Convention deals with a matter which is traditionally left for States to regulate, drawing upon internationally formulated safety principles and standards. The task of the drafters of the Convention was to formulate meaningful obligations in this field without unduly infringing upon the traditional rights and responsibilities of individual States.

For this reason, the word “incentive” is used in the preamble and the concept of “peer review” used throughout the negotiations as the description of the type of review or verifying mode to be employed.<sup>4</sup> Thus, parties

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<sup>3</sup> IAEA Doc. INFCIRC/449. It may be noted that the final clauses of the Convention provided that it would enter into force not simply by reaching a certain number of ratifications (22), but that that figure must include ratifications from a number of relevant States, namely by requiring that that number include a number of States (17), each having at least one nuclear installation which had achieved criticality in a reactor core.

<sup>4</sup> See S. Carroll, “The Convention on Nuclear Safety: A Guide to the Convention, and a Description of the Requirements for the Preparation,

assumed obligations of a general and fundamental nature and verification of compliance would not be through sanctions or review panels of a quasi-judicial or fact-finding nature, but rather through submission of reports to meetings of States Parties at which experiences would be reviewed and exchanged — questions and suggestions by Parties would influence the conduct of other Parties in their compliance. No “outside” compliance or verification mechanisms were used, such as committees of experts or an international organization or secretariat; compliance and verification was left solely in the hands of States Parties.<sup>5</sup>

The “peer review” context is further evidenced by what would normally be called the dispute resolution clause, but in this case the word “dispute” is not used. In what must be an innovation in the field, the drafters of the Convention decided not to follow the traditional line of providing for negotiations and consultations between the parties to a dispute, followed by possible conciliation or third-party dispute settlement. Rather, they provided that in the event of a “disagreement” between two or more States Parties concerning the interpretation or application of the Convention, the Parties shall consult within framework of a meeting of the Contracting Parties with a view to resolving the disagreement. It is not clear if this means that parties to a disagreement must resolve their disagreement more publicly, e.g., consult not just between themselves but “within the framework of a meeting” of States Parties, so that all Parties could, should they so wish, take a position or share their experiences on the subject matter of the disagreement. In theory, any Party may have an interest in how the disagreement is to be resolved.

The scope of the Convention was limited to the safety of nuclear installations, a nuclear installation being defined as any land-based civil nuclear power plant. Thus excluded were plants not land-based, military nuclear installations, radioactive waste facilities not on the same site as the plant, and research reactors. The general obligation accepted by States Parties is to take, within the framework of its national law, the legislative, regulatory and administrative measures and steps necessary for implementing its obligations under the Convention. The Convention sets out these obligations under three broad headings:

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Submission and Review of National Reports”, Greenpeace International (Political Unit), 1997.

<sup>5</sup> The term “States Parties” will be used throughout this paper as the more correct term under the 1969 and 1986 Vienna Conventions on the Law of Treaties, even though in the practice of the Agency, the term “Contracting Parties” is the usual terminology.

- legislation and regulation (3 articles);
- general safety considerations (7 articles); and
- safety of installations (3 articles).

Each State Party is required to submit for review a report on the measures it has taken to implement each of the obligations of the Convention.

The implementation reports are to be reviewed at “review meetings” of the States Parties which are to be held at intervals which shall not exceed three years. Provision is also made in the Convention for the convening of “extraordinary meetings”. The Convention in addition mandated the convening of a “preparatory meeting” at which the States Parties would determine the date of the first review meeting, to be held no later than 30 months following entry into force of the Convention. The preparatory meeting was also to adopt the rules of procedure and financial rules of the States Parties. Most importantly, the preparatory meeting was to establish the following arrangements:

- guidelines regarding the form and structure of the reports which States Parties must submit;
- a date for the submission of such reports; and
- the process for reviewing such reports.

(Later review meetings were empowered to review these arrangements and adopt revisions but only by consensus).

With regard to the review process, the Convention provided certain elements itself: it was specified that sub-groups might be established during review meetings as deemed necessary to review specific subjects in the reports submitted; and each State Party shall have a “reasonable opportunity” to discuss the reports submitted by other State Parties and to seek clarification of such reports.

A few unusual features of the Convention may be noted here: All States Parties are *required* to attend all meetings of the States Parties, whether preparatory, review or extraordinary. While no sanction is provided in case of non-compliance with said obligation, the point of requiring attendance would seem to be based on the need to be present not only for the review of a State’s own report but also to participate in the review of other reports in the small groups established for that purpose. As to outsiders being present, the Convention allows the Parties to invite, by consensus, any intergovernmental organization competent in respect of matters governed by the Convention to attend as observer any meetings, but subject to such observer signing in writing and in advance the provisions of the Convention dealing with confidentiality. No provision is made with regard to participation of non-governmental organizations.

## 2. Rules and Guidelines

As indicated above, the Preparatory Meeting of the Contracting Parties met in Vienna from 21 to 24 April 1997 and adopted the rules and guidelines as called for under the Convention. Thirty-four States Parties participated in the meeting which, due to lack of consensus, was unable to adopt a decision allowing States which had signed the Convention but which had not as of the date of the meeting submitted instruments of ratification, to attend as observers. Thus, several signatory States with significant nuclear power programmes (Ukraine and the United States) could not participate as observers in the meeting.

In terms of the general treaty law issue of how compliance is monitored or verified,<sup>6</sup> the most important decisions taken at the Meeting were the adoption of the "Guidelines regarding national reports under the Convention on Nuclear Safety" and the "Guidelines regarding the review process under the Convention on Nuclear Safety".

With regard to the national reports to be submitted, the States Parties prepared detailed guidelines governing the form, structure and content of national reports. Thus, national reports are to include a general introduction followed by a detailed article-by-article accounting of what is being done (descriptions, plans, measures, lists, data, summaries, policies, programmes, activities, resources available, methods, processes, training, evaluations, measures, references). A final section should address the planned activities to improve safety, i.e. to address the safety issues of concern identified earlier in the report. Annexes are also to be attached to the reports, providing a list of reactors and data thereon, which may also include, *inter alia*, references to national laws, regulations, requirements, guides, etc.

The Parties decided that a review of national reports would most efficiently be accomplished through the establishment of sub-groups, called "Country Groups", each including a number of States Parties with nuclear installations. Each Group would consider in detail the national report of each member of that Group. Each Party would be a member of only one country group. The Parties decided not to divide into groups which would consider particular subject matters. Under the scheme adopted, groups would be relatively small and concentrate in detail on all matters in each report.

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<sup>6</sup> On that issue, see "Comparative study on monitoring implementation of and compliance with provisions of selected multilateral treaties and conventions", Doc.UNEP/CHW/LSG/1/Inf.2 of 17 April 1996.

A process was devised for the selection of the members of country groups, to ensure a mix of States with significant nuclear power programmes, those less so, and finally those with no reactors at all. States with the most operating nuclear power plants will not all be in the same country group. Organizational meetings of States Parties are to prepare for review meetings, including the selection of country groups, whose composition would change with each review meeting.

One problem which had to be addressed, however, was reconciling this scheme with the Convention provision which stated that each State Party shall have a "reasonable opportunity to discuss the reports submitted by other Contracting Parties and to seek clarification of such reports". This was addressed by providing for a limited observer-like participation: Parties non-members of a Country Group could attend meetings of other Groups, but only if the Party had previously submitted written questions on a national report being considered. Moreover, such presence is limited to the discussion of the national report on which the questions had been submitted. Practice will show whether this element of "peer review" will be utilized and if so, how effective it will be.

Country Group rapporteurs will report to the plenary review meeting on the results of their work, but orally, not in written form. (A meeting will have already been held among all the rapporteurs to agree on common structure, to ensure consistency in presentation). At that stage, each State Party will have the opportunity to respond to comments made on its own national report, as well as to comment on other national reports and the oral reports of rapporteurs of country groups. As specified in the Convention, the States Parties shall adopt by consensus and make available to the public a document addressing issues discussed and conclusions reached during a meeting. The States negotiating the Convention presumably believed the requirement for consensus would serve a useful purpose, namely a device to avoid publicly airing any strong disagreements or criticisms directed at one or more States Parties. Again, one sees the "peer review" approach to dealing with the implementation of treaty obligations, as opposed to public exposure and criticism.

Finally, the Preparatory Meeting decided on the following schedule: national reports are due by 29 September 1998; the Organizational Meeting will be held from 29 September to 2 October 1998 to prepare for the first Review Meeting; the first Review Meeting will begin on 12 April 1999 with a maximum duration of three weeks.

### III. Adoption of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

On 5 September 1997, a Diplomatic Conference convened by the Director General of the IAEA adopted a Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. The text was adopted by a vote of 62 in favour, 2 against, with 3 abstentions.<sup>7</sup>

#### 1. Background

The Joint Convention is the result of work which began as a consequence of the successful conclusion of the Convention on Nuclear Safety in 1994. By a preambular paragraph to that Convention, the Parties affirmed the need to begin promptly the development of an international convention on the safety of radioactive waste management as soon as the process to develop waste management safety fundamentals had resulted in broad international agreement.

That condition was met in March 1995 when the IAEA Board of Governors adopted a "Safety Series" document at what is known in the Agency as the "fundamentals" level, entitled "The Principles of Radioactive Waste Management".<sup>8</sup> The Board also approved the convening of a Group of Legal and Technical Experts on a Convention on the Safety of Radioactive Waste Management open to all States. Drawing inspiration from the provisions of the Nuclear Safety Convention and the Safety Series document, the Group of Experts completed in early 1997 a draft for

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<sup>7</sup> IAEA Doc. GC/INF/821-GC(41)/INF/12, RWSC/DC/SR.5, paras 105 – 118. For the text of the Joint Convention, see *ibid.* and *ILM* 36 (1997), 1433.

<sup>8</sup> IAEA Safety Series No. 111-F, Safety Fundamentals: The Principles of Radioactive Waste Management. In the IAEA Safety Series, the following hierarchical categorization scheme is used: "Safety Fundamentals" set out basic objectives, concepts and principles to ensure safety; "Safety Standards" set out basic requirements which must be satisfied to ensure safety for particular activities or application areas; "Safety Guides" set out recommendations, on the basis of international experience, relating to the fulfillment of basic requirements; and "Safety Practices" set out practical examples and detailed methods which can be used for the application of Safety Standards and Safety Guides.



submission to a diplomatic conference, subsequently authorized by the Board of Governors.<sup>9</sup>

## 2. The Joint Convention

The objectives of the Joint Convention can be summarized by the preambular paragraph which proclaims the desirability of promoting “an effective nuclear safety culture worldwide”. At the same time, it notes, as in the case of the 1994 Nuclear Safety Convention, that the ultimate responsibility for ensuring the safety of spent fuel and radioactive waste management rests with the State. The Joint Convention represents a step forward in turning “soft law” (safety fundamentals) into treaty obligations, albeit general in nature, while at the same time maintaining the ultimate responsibility of each State to ensure safety. Each State must report on its implementation in the same “peer review” manner as the Safety Convention. This is noted in the first objective: “to achieve and maintain a high level of safety worldwide in spent fuel and radioactive waste management, through the enhancement of national measures and international co-operation, including where appropriate, safety-related technical co-operation”.

The sensitivity of the issue of waste management to the issue of protection of public health and the environment is addressed in the second objective as follows:

“to ensure that during all stages of spent fuel and radioactive waste management there are effective defenses against potential hazards so that individuals, society and the environment are protected from harmful effects of ionizing radiation, now and in the future, in such a way that the needs and aspirations of the present generation are met without compromising the ability of future generations to meet their needs and aspirations”.<sup>10</sup>

Finally, the third objective is “to prevent accidents with radiological consequences and to mitigate their consequences should they occur during any stage of spent fuel or radioactive waste management”.

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<sup>9</sup> For an analysis of the Convention and its background, see W. Tonhauser and O. Jankowitsch, “The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management”, *Nuclear Law Bulletin* 60 (1997), NEA/OECD, 9.

<sup>10</sup> Several articles refer explicitly to the environmental aspects, see Tonhauser and Jankowitsch, see note 9.

The structure of the Joint Convention is as follows:

- Chapter 1: Objectives, Definitions and Scope of Application (3 articles);
- Chapter 2: Safety of Spent Fuel Management (7 articles);
- Chapter 3: Safety of Radioactive Waste Management (7 articles);
- Chapter 4: General Safety Provisions (9 articles);
- Chapter 5: Miscellaneous Provisions (2 articles);
- Chapter 6: Meetings of Contracting Parties (9 articles); and
- Chapter 7: Final Clauses and Other Provisions (7 articles).

The above structure reflects a final decision on the scope of the Convention which was a source of disagreement for some time. As noted in the preamble, some States consider that spent fuel to be a valuable resource that may be reprocessed, while other States elect to dispose of it as radioactive waste. Some of those in the former category thus opposed inclusion of any provisions on spent fuel in a Convention on waste. It was also pointed out that neither the Safety Convention nor the decisions of the Board of Governors referred to preparing a convention on spent fuel; thus, it was maintained that the Group of Experts had exceeded its mandate in proposing a convention dealing with spent fuel in addition to radioactive waste. On the other hand, the Group of Experts had reported its draft to the Board, which did not indicate that the Group acted *ultra vires*; rather, the Board authorized the convening of a diplomatic conference to deal with both issues. Besides the option of preparing two separate and distinct treaties, another option discussed in Group was to prepare a convention limited to radioactive waste management, but with a separate protocol on spent fuel management.

Quite rightly, it was concluded that from a general treaty law point of view, this option would have been undesirable, as it would have left open the possibility of varying safety regimes depending on whether a Party to the Convention had accepted the Protocol or not. In the end, the “Joint” Convention approach was adopted. Two separate chapters govern their respective matters, each containing generally parallel provisions requiring each State Party to take certain steps in relation to: general safety requirements; existing facilities (the radioactive waste management chapter includes “past practices” in this article as well); siting of proposed facilities; design and construction of facilities; and assessment of safety of facilities. The spent fuel management chapter concludes with an article on the disposal of spent fuel, whereas the radioactive waste management chapter concludes with an article on institutional measures after closure of a disposal facility. A few States continued to maintain their position that it was not appropriate or legally permissible to combine the two matters in a single convention.

Another scope issue arose when it was recognized that there could be some overlap with the Safety Convention since that Convention also covers “storage, handling and treatment facilities for radioactive materials as are on the same site as a land based civil nuclear power plant and are directly related to the operation” of said plant. In the end, it was agreed to live with the overlap. Since the two Conventions served different purposes and required different steps, it was not a foregone conclusion that the reports to be submitted on compliance would in fact be identical. Moreover, the meetings of the States Parties of the two Conventions could resolve any problems should they arise in this respect.

The general safety provisions include the basic obligation that each State Party “shall take, within the framework of its national law, the legislative, regulatory and administrative measures and other steps necessary for implementing its obligations under this Convention”. The other provisions in that chapter relate to: legislative and regulatory framework; regulatory body; responsibility of the licence holder; human and financial resources; quality assurance; operational radiation protection; emergency preparedness; and decommissioning.

The chapter on miscellaneous provisions includes an article on transboundary movement (a highly charged topic discussed below) and an article on “disused sealed sources”. The chapter on the meetings of the States Parties closely parallels that included in the Safety Convention discussed above, such as provision for a preparatory meeting deciding on guidelines regarding the content and procedures for the review of the national reports to be submitted on implementation. An article is also included on confidentiality. As to entry into force, the text follows the model of the Safety Convention in requiring not only a given number of ratifications (here 25 as compared to 22 in the Safety Convention), but that that number must include a given number (here 15 as compared to 17 in the Safety Convention) of ratifications from relevant States, namely those each of which has an operational nuclear power plant. By 31 December 1997, the Joint Convention had been signed by 26 States.

Before turning to contentious points of interest, it should be noted that the dispute resolution clause eventually adopted by the Conference differs from other texts on this subject. The Group of Experts included the same “peer review” type provision as appears in the Safety Convention discussed in the previous section, calling for resolution of any disagreements on the interpretation or application of the Joint Convention through consultation within the framework of a meeting of the States Parties. The conference, however, approved without a vote a proposal by Morocco which added the following sentence: “In the event that the consultations prove unproductive, recourse can be made to the mediation, conciliation and arbitration mechanisms provided for in international law, including

the rules and practices prevailing within the IAEA". Thus, while consultation within the framework of a meeting of States Parties is the preferred option, if that proves "unproductive", it is possible to have recourse to other more traditional methods of dispute settlement, but it is not spelled out how this would be done.

Besides scope issues referred to earlier, another matter of some debate was whether spent fuel and radioactive waste from military or defence programmes should be covered by the text. After considering the possibility of providing for its inclusion in principle, but allowing for an "opt out" procedure, the solution adopted was the reverse: the Joint Convention does not apply to the safety of management of spent fuel or radioactive waste within military or defence programmes, unless declared as such fuel or waste for the purposes of this Convention by the State Party; thus excluded, but with a possibility to "opt in". Nonetheless, if such materials from military or defence programmes are transferred permanently to and managed within exclusively civilian programmes, they will be covered by the Joint Convention. Finally, by means of the preamble, the States Parties recognize that the spent fuel and radioactive waste excluded from the scope of the Convention because they are within military or defence programmes should be managed in accordance with the objectives stated in the Joint Convention. A number of States continue to express dissatisfaction that the military spent fuel and radioactive waste were not included within the ambit of the Joint Convention.

### 3. Transboundary Movement

Contentious issues arose at the Conference with regard to article 27 of the Convention entitled "Transboundary movement". One issue related to transboundary movements to or from non-State entities. News reports in early 1997 indicated that local authorities on Taiwan Province of China had concluded an agreement with authorities in the Democratic People's Republic of Korea (DPRK) for the disposal of Taiwanese radioactive waste in the DPRK. China proposed an amendment to article 27 which stated that a State Party "may conduct transboundary movements to or from a non-State entity without prejudice to the sovereignty and safety of the State of that entity". A roll-call vote on the amendment resulted in 15 in favour, 15 against, with 41 abstentions. As a two-thirds majority of those present and voting was required for adoption (in this case 20 votes in favour), the amendment was rejected. The rejection of this amendment was

one of the reasons cited by the Chinese representative for his abstention in the vote on the Joint Convention as a whole.<sup>11</sup>

The text requires that a State to which spent fuel or radioactive waste is destined must be notified and given consent to that movement. No such requirements are specifically indicated with regard to transboundary movement through transit States. Rather, such movement "shall be subject to those international obligations which are relevant to the particular modes of transport utilized."

The supporters of this text maintained that it was a correct reflection of existing international law and pointed in particular to the relevant provisions of the 1982 UN Convention on the Law of the Sea concerning innocent passage in the territorial sea and transit passage through straits used for international navigation.

Various proposals, however, were made to amend the text to require some form of notification and/or consent in the case of transboundary movement of spent fuel/radioactive waste through a transit State. Full notification and consent proposed by New Zealand was rejected by a vote of 28 to 25, with 19 abstentions. A limited notification requirement proposed by Morocco obtained 29 votes in favour, 24 against and 20 abstentions, but was not adopted because it failed to obtain the requisite two-thirds majority of those present and voting (36).<sup>12</sup>

Furthermore, the Conference had before it a draft resolution proposed by Turkey calling, *inter alia*, on States to "fully implement" IAEA regulations (non-binding) for the safe transport of radioactive material and on strengthening certain IMO codes on the subject by making them mandatory. On the basis of a compromise proposal by Australia, the Conference adopted a resolution which urged States "to take into full consideration" the said IAEA regulations and invited certain international organizations to keep under review existing relevant rules and regulations.

At the General Conference of the Agency, the matter was discussed in connection with proposals on the safety of transport of radioactive materials. On 3 October 1997, the Conference without objection adopted Resolution GC(41)/RES/12 by which it, *inter alia*, requested the Secretariat to prepare, for consideration at the June 1998 session of the IAEA Board of Governors, a report on legally binding and non-binding international instruments and regulations concerning the safe transport of radioactive materials and their implementation.

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<sup>11</sup> See IAEA Doc. GOV/INF/821-GC(41)/INF/12, RWSC/DC/SR.5, paras 57, 113–114.

<sup>12</sup> For the official records of the conference indicating the debate and results of the vote on amendments to article 27, see *ibid.*, RWSC/DC/SR.4, paras 115–139 and SR 5, paras 1–90.

## IV. Adoption of a Protocol to Amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage and of a Convention on Supplementary Compensation for Nuclear Damage

Pursuant to the decision by the Board of Governors in June 1997, the Director General convened a Diplomatic Conference in Vienna from 8 to 12 September 1997 at which 81 States participated. On 12 September 1997, the Conference adopted by a vote of 64 in favour, 1 against, with 2 abstentions, the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage and by a vote of 66 in favour to 1 against, with 2 abstentions, the Convention on Supplementary Compensation for Nuclear Damage.<sup>13</sup>

### 1. Background

Since the Chernobyl accident, the question of liability for nuclear damage has been under consideration by the IAEA as a matter of priority. The Chernobyl accident revealed certain limitations and gaps in the existing international nuclear liability regime. The IAEA 1963 Vienna Convention on Civil Liability for Nuclear Damage<sup>14</sup> had attracted 27 States Parties as of the end of 1996. Many viewed its provisions as out-dated and calls were made for its amendment. A Standing Committee was established in 1990 to consider the general issue of nuclear liability and in particular the question of amending the 1963 Vienna Convention. In early 1997, the Standing Committee prepared two draft instruments for submission to a Diplomatic Conference.

### 2. The Texts

*The Protocol* maintains the essential features of the Vienna Convention: strict (no fault) and exclusive liability of the operator; financial limitations of liability; compulsory financial security; time limits; unity of jurisdiction (in general, courts of a State in which a nuclear incident occurs have jurisdiction) and enforcement of judgements; and non-discrimination. However, it increases the limit of liability to not less than 300 million SDR

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<sup>13</sup> IAEA Doc. GOV/INF/822 - GC(41)/INF/13. See also *ILM* 36 (1997), 1454.

<sup>14</sup> UNTS Vol. 1063 No. 16197.

(approximately US\$ 400 million) in respect of one nuclear incident, while allowing a phase-in period of up to 15 years during which the liability of the operator may be limited to a minimum lower transitional amount. It provides a better definition of “nuclear damage”, addressing the concept of environmental damage and preventive measures and extends the geographic scope of the Convention to cover nuclear damage suffered in a non-Contracting Party (unless the latter has a nuclear installation and does not afford reciprocal privileges). Finally, it extends the period during which claims for loss of life and personal injury may be made to 30 years.

Of particular interest in the context of treaty law are the provisions relating to the entry into force and application of the Protocol. All States, not just Parties to the 1963 Vienna Convention, are entitled to become Parties to the Protocol. If a State not a Party to the 1963 Vienna Convention becomes a Party to the Protocol, it shall be bound by the provisions of the Convention as amended by the Protocol in relation to other Parties to the Protocol *and*, failing an expression of a different intention at the time of deposit of the consent-to-be-bound instrument, such a State shall also be bound by the provisions of the 1963 Convention in relation to States which are Parties *only* to that Convention.

*The Convention on Supplementary Compensation* is a free-standing instrument which may be adhered to by all States irrespective of their participation in the Vienna Convention or the regional, 1960 OECD Paris Convention on Third Party Liability in the Field of Nuclear Energy. Its objective is to generate compensation for nuclear damage supplementary to that available under the national legislation implementing the Vienna Convention or the Paris Convention, or under the national legislation consistent with the principles of those conventions. The Convention contains a “grandfather clause” which allows a State having well developed national nuclear liability legislation with “economic channeling”, like the United States, to participate in it without changing its legislation.

The system of supplementary compensation is intended to operate as follows. When the national compensation amount (not less than 300 million SDR's, which corresponds to the amount provided for in the Protocol) is exhausted, additional compensation is provided jointly by States Parties in accordance with a specific formula (contributions of individual States are based on the installed nuclear capacity of their civilian nuclear reactors — 1 unit for each MW (Mega Watt) of thermal power — and their UN rate of assessment). States without nuclear reactors and which are at the minimum UN rate of assessment are exempt from contributing to the fund. In order to avoid an unbalanced financial burden on a State Party with a large nuclear power capacity that joined the Convention at an early stage, its contribution is capped at its UN rate of assessment expressed as a percentage, plus eight percentage points. The

“cap” will, however, phase-out when the total installed nuclear capacity of States Parties reaches the level of 625,000 units of installed nuclear capacity. Also, the installation State of a liable operator cannot avail itself of the “cap”.

In an important development related to the law of the sea and nuclear damage which occurs during maritime transport, both instruments provide for jurisdiction of coastal States over actions concerning nuclear damage arising from a nuclear incident. Each contains a provision providing, as an exception to the general rule, that in case of nuclear incidents within the area of a State Party’s exclusive economic zone or in an area not exceeding the limits of such a zone were one to be established, jurisdiction over actions concerning nuclear damage shall lie with the courts of that State. (It may be recalled that as a rule, jurisdiction lies with the courts of the State Party within whose territory the nuclear incident occurred, but if the incident occurs outside the territory of a State Party, the courts of the installation State may exercise jurisdiction).

After considerable debate on what should be required for the entry into force of the Convention, the Conference maintained the proposed text that the Convention enters into force on the ninetieth day following the date on which at least five States with a total minimum of 400,000 units of installed nuclear capacity have deposited an instrument of ratification, accession or approval. The Protocol will enter into force three months after the date of the fifth instrument of ratification, acceptance or approval. The Director General is depositary for both instruments. As of 31 December 1997, the Protocol to Amend the 1963 Vienna Convention and the Convention on Supplementary Compensation had each been signed by nine States.

Given the complexity of the subject matter, one can expect States to take some time to complete their internal review and decide upon their participation. Also, States that are Party to the OECD Paris Convention will most likely defer a decision regarding what action to take with regard to the Convention on Supplementary Compensation until completion of the review of the Paris Convention recently undertaken within the Nuclear Energy Agency of the OECD.

## **V. Approval of the Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards**

On 15 May 1997, the IAEA Board of Governors approved by consensus the text of a “Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application



of Safeguards".<sup>15</sup> By this action, the Board approved measures to strengthen the effectiveness and improve the efficiency of the IAEA safeguards system. Through incorporating the terms of the Model Protocol into existing safeguards agreements, States Parties would accept stronger, more intrusive verification activities on their territory, with a view to providing greater assurance as to the absence of proscribed or undeclared nuclear material and activities.

## 1. Background

As the then Director General stated to the United Nations General Assembly in November 1997, the discovery during the 1991 IAEA inspections in Iraq that Iraq, a party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and to a comprehensive safeguards agreement with the Agency, had been able, undetected, to pursue a secret programme for the enrichment of uranium and weaponization, "shocked the world".<sup>16</sup> This discovery, as well as inspection experiences faced in DPRK, led to the effort to strengthen the safeguards system. While certain strengthening could be done under the statutory authority of the Director General, other measures required new authority by means of a Board approved addition to existing safeguards agreements.

In June 1996, the Board established a Committee on Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System, with the task of drafting a model protocol. All IAEA Member States, other States which had concluded or had a legal obligation to conclude a comprehensive safeguards agreement with the Agency, and any intergovernmental organizations parties to an existing safeguards agreement, were invited to participate in the Committee's work (the latter invitees as observers). After a series of four meetings in 1996–1997, the Committee agreed on a draft Model Protocol, which was adopted, without change, by the Board in May 1997.

## 2. The Model Protocol

The Agency applies safeguards pursuant to basically three types of agreements: (i) "comprehensive" safeguards agreements (more than 130 in number), mainly in connection with the NPT, under which non-nuclear-

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<sup>15</sup> IAEA Doc. INFCIRC/540. Also see *ILM* 36 (1997), 1232.

<sup>16</sup> Doc. A/52/PV.48 (Plen. Mtg. of 12 November 1997).

weapon States are required to place under IAEA safeguards *all* nuclear material in *all* peaceful nuclear activities of the State and not to divert such material to nuclear weapons or to other nuclear explosive devices;<sup>17</sup> (ii) “voluntary offer agreements” by which the five nuclear-weapon-States (NWS) have voluntarily agreed to place certain material under IAEA safeguards;<sup>18</sup> and (iii) “item-specific” agreements with four States covering safeguards limited to particular materials and locations.<sup>19</sup>

The Model Protocol is designed for any State which has any kind of safeguards agreement with the Agency, in order to strengthen the effectiveness and improve the efficiency of the safeguards system as a contribution to global nuclear non-proliferation.

With regard to States having concluded comprehensive safeguards agreements with the Agency, the Model Protocol is the *standard* to be used for the conclusion of additional protocols. In spite of the word “model”, the foreword to the Model Protocol specifies quite clearly that *all* measures thereof are to be incorporated into any additional protocol to a comprehensive safeguards agreement.

With regard to safeguards agreements with NWS, the Board requested the negotiation of those measures provided in the Model Protocol that each NWS had identified as capable of contributing to the non-proliferation and efficiency aims of the Protocol and as consistent with that State’s obligations under article I of the NPT, for incorporation in additional protocols or other legally binding agreements.

Concerning “item-specific” agreements with non-NPT parties, additional protocols are to be negotiated with such States as are prepared to accept the measures provided for in the Model Protocol in pursuance of safeguards effectiveness and efficiency objectives. Thus, not all measures are required to be incorporated in protocols additional to item-specific agreements.

The relationship of the additional protocol to the underlying safeguards agreement is spelled out in the first article: the provisions of the underlying agreement shall apply to the Protocol “to the extent they are relevant to and compatible with” provisions of the Protocol. In case of conflict, the provisions of the Protocol are to apply.

In content, the Protocol provides new safeguards measures falling into the following categories: access to more nuclear-related information; much greater access for inspectors to relevant sites; the use of new detection techniques such as environmental sampling and remote surveillance and

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<sup>17</sup> IAEA Doc. INFCIRC/153 (corrected).

<sup>18</sup> See, e.g. IAEA Doc. INFCIRC/288 (US/IAEA).

<sup>19</sup> IAEA Doc. INFCIRC/66/Rev.2.

monitoring systems; and introduction of measures to facilitate operations and reduce costs.<sup>20</sup> Additional information will provide a more complete picture of the nuclear activities being undertaken in a State, particularly from the standpoint of assessing capabilities to produce nuclear-weapons-usable material. Increased access to sites means greater bases upon which to provide assurances not only of the non-diversion of declared nuclear material but also of the absence of undeclared nuclear activities which may be concealed within a State's declared nuclear programme.

The Protocol is organized with the following substantive headings: provision of information (2 articles); complementary access (7 articles); designation of Agency inspectors (1 article); visas (1 article); communications systems (1 article); and protection of confidential information (1 article). Detailed annexes are also an integral part of the Protocol and an article on definitions is also provided. Each individual Protocol, or other legally binding agreement, requires approval of the Board and its authorization to the Director General to conclude and subsequently implement the approved Protocol.

The entry into force article provides for entry upon signature or on the date of receipt of written notification that the statutory and/or constitutional requirements for entry into force for the State Party have been met. It also provides that, before entry into force, the signatory State may declare that it will apply the Protocol provisionally. The relevant texts having been authorized by the Board, Model Protocols have been signed, as of 31 December 1997, by the Agency and 6 States. One such Protocol entered into force on 12 December 1997;<sup>21</sup> another Additional Protocol, signed on 29 September 1997, provides for provisional application pending entry into force.<sup>22</sup>

### 3. Confidentiality

Finally, of relevance to the law of international organizations and their staff is a provision found in the article on protection of confidential information. That article provides that the Agency shall maintain a stringent

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<sup>20</sup> See Doc. A/52/PV.48 For an analysis of the Model Protocol see, L. Rockwood, "Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System", *Nuclear Law Bulletin* 60 (1997), NEA/OECD, 41.

<sup>21</sup> Additional Protocol concluded between Australia and the IAEA, IAEA Doc. INFCIRC/217/Add.1.

<sup>22</sup> Additional Protocol concluded between Armenia and the IAEA, IAEA Doc. INFCIRC/455/Add.1.

regime — to be approved and periodically reviewed by the Board — to ensure effective protection against the disclosure of commercial, technological and industrial secrets and other confidential information coming to its knowledge, including such information coming to the Agency's knowledge in the implementation of the Model Protocol. The regime is to include provisions relating to, *inter alia*, "procedures in cases of breaches or alleged breaches of confidentiality."

At the request of the Board, the Secretariat prepared reports on the matter for submission to the March and December 1997 meetings of the Board. The reports provided information on the measures undertaken to protect safeguards confidential information as well as possible action in the event of unauthorized release of safeguards confidential information. For existing and new staff, disciplinary measures currently in place were deemed sufficient, but staff obligations with respect to the treatment of *all* confidential information (not just safeguards information) would henceforth be highlighted by having all existing and new staff sign a "confidentiality undertaking" reiterating the relevant obligations and the consequences of unauthorized disclosure.

With regard to action in the event of unauthorized release of safeguards confidential information by a former staff member, the reports noted the various legal difficulties which would have to be faced in deciding whether to pursue either criminal or civil action against a former staff member in a domestic court, for example: (a) finding a court with subject matter jurisdiction, i.e. a court where national legislation (civil or criminal) would provide a basis for a claim or complaint under that jurisdiction for the given set of circumstances of the case; (b) obtaining personal jurisdiction over the individual concerned; and (c) the impact on the privileges and immunities of the Agency if it files a claim or complaint, particularly if such action would be deemed to constitute a waiver — partial or comprehensive — of the Agency's immunity before a domestic court.

The Board took note of the information provided, approved the regime for the protection of safeguards confidential information as supplemented by such envisaged measures as the confidentiality undertaking, requested the Director General to inform the Board periodically on the implementation of the regime and decided to review periodically the regime as provided for in the Model Protocol.

## VI. Towards the Future

The legal instruments adopted in 1997 and described above will, as appropriate, be the subject of signings, ratification, implementation and application in 1998 and years to follow. One can only hope that these new

additions to the legal infrastructure of international nuclear law will be joined by others.

In that connection, it may be noted that at the close of 1997, the General Assembly of the United Nations adopted Resolution 52/165 of 15 December 1997 by which an *Ad Hoc* Committee it had established in 1996 (“Terrorism Committee”), a subsidiary legal organ of the Assembly, was mandated to take up in 1998 the elaboration of a convention against the suppression of acts of nuclear terrorism. (The Russian Federation had already circulated a proposed draft convention on that topic in early 1997<sup>23</sup>). The Assembly requested to assist the *Ad Hoc* Committee in its deliberations.

In his first introductory statement to the IAEA Board of Governors on 8 December 1997, the new Director General of the Agency, Mr. Mohamed El Baradei, informed the Board of the expected adoption of the draft resolution and noted that the consideration of such a convention was “directly relevant to the Agency’s mandate” and should be discussed in full awareness of the Convention on the Physical Protection of Nuclear Material adopted under the auspices of the IAEA, Agency Guidelines on that subject and the Agency’s general illicit trafficking programme. He urged Agency Member States to actively participate in the work of the General Assembly’s *Ad Hoc* Committee with persons thoroughly familiar with the work of the Agency — and thereby avoid creating overlapping or contradictory treaty regimes. The Director General said the Agency Secretariat would respond positively to the invitation to assist the *Ad Hoc* Committee.

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<sup>23</sup> Doc. A/AC.252/L.3 and Corrs. 1 and 2 and Add.1.