

**A Bridge Between Two Conventions on Civil Liability for Nuclear Damage:
the Joint Protocol Relating to the Application
of the Vienna Convention and the Paris Convention**

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1. The adoption of the Joint Protocol and its signature on 21 September 1988,¹ at the closure of the diplomatic conference jointly convened in Vienna by the IAEA and the NEA, was hailed as a landmark in efforts towards the establishment of a comprehensive civil nuclear liability regime. The importance of liability and compensation for transfrontier damage caused by a nuclear incident is indeed one of the lessons learned from the Chernobyl accident. The present article attempts to describe the history of the Joint Protocol during the many years it took to develop this link between the two conventions, to provide comment on its objectives and content, and to discuss some important questions related to its application.

The long road to the bridge

Retrospect

2. When the International Conference on Civil Liability for Nuclear Damage met in Vienna from 29 April to 19 May 1963, the Paris Convention and the Brussels Supplementary Convention had been signed (on 29 July 1960 and 31 January 1963 respectively) but had not yet come into force. The issue of the relationship between the Paris Convention and the Vienna Convention was obviously raised during the Conference,² which agreed to include two articles in the Vienna Convention dealing with this subject. Article XVI of the Vienna Convention provides that “no person shall be entitled to recover compensation under this convention to the extent that he has recovered compensation in respect of the same nuclear damage under another international convention on civil liability in the field of nuclear energy.” According to Article XVII, the Vienna Convention “shall not, as between the Parties to them, affect the application of any international agreements or international conventions on civil liability in the field of nuclear energy in force, or open to signature, ratification or accession at

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1. The English and French texts of the Joint Protocol are reproduced in *Nuclear Law Bulletin* No. 42 (December 1988). The IAEA and NEA will shortly issue a joint publication containing all authentic texts as well as a short explanatory note. The signatory countries to date are: Argentina, Belgium, Cameroon, Chile, Denmark, Egypt, Germany, Finland, Greece, Italy, Morocco, Netherlands, Norway, Philippines, Portugal, Spain, Sweden, Switzerland, Turkey and United Kingdom.
2. Official Records of the Conference (Legal Series No. 2), IAEA, Vienna, 1964, p. 381 and 383 (Report of the Sub-Committee on Relations with Other International Agreements), p. 199-208, 332-334 (deliberations of the Committee of the Whole), 147 (vote of the plenary).

the date on which this convention is opened to signature.” The only international conventions to which these provisions apply are the Paris Convention and the Brussels Supplementary Convention which were amended by Additional Protocols signed on 28 January 1964 in order to harmonise their provisions with those of the Vienna Convention. The Preamble of the Additional Protocol to the Paris Convention refers to Article XVII of the Vienna Convention and states the desire of the signatories “of ensuring that as far as possible there are no conflicts between the two conventions, thus enabling them to become parties to both conventions if they so decide.”

3. However, no Contracting Party to the Paris Convention has so far ratified the Vienna Convention; the signatures of Spain (6 September 1963) and the United Kingdom (11 November 1964) were not followed by ratifications. This lack of interest in becoming party to the Vienna Convention with a worldwide vocation is probably due to the following reasons. The minimum liability amount of 5 million units of account fixed by Article V of the Vienna Convention is considered unacceptably low by many countries. It is true that Article 7 of the Paris Convention, while fixing a general maximum amount of liability of 15 million Special Drawing Rights (SDRs) of the International Monetary Fund (IMF) which may be exceeded, permits also the establishment of a liability amount of not less than SDR 5 million. It is to be noted in this respect that the OECD Council recommended on 16 November 1982 that Paris Convention Parties taking advantage of the possibility under Article 7(b)(ii) of fixing a lower liability amount than for operators of nuclear installations in general should make public funds available up to the general liability amount in the event of damage exceeding the lower amount. In particular, the liability amounts established by the Paris Convention must be seen in light of the Brussels Supplementary Convention which, through its system of state intervention, actually covers damage up to SDR 120 million and will cover SDR 300 million as soon as the 1982 Protocol has entered into force.³ The Vienna Convention has not been followed by any supplementary agreement, although the International Conference on Civil Liability for Nuclear Damage, in its Resolution of 19 May 1963 on the Establishment of a Standing Committee, charged that committee “to study the desirability and feasibility of setting up an international compensation fund for nuclear damage and the manner in which such a fund would work to enable operators of the Contracting Parties to meet the liability under Article V of the convention, including ways of covering nuclear damage exceeding the amount therein provided”.⁴ Another reason, related to the first one, is probably the absence of a provision in the Vienna Convention similar to Article 7(e) of the Paris Convention which allows Contracting Parties to make the transit of nuclear substances through their territories subject to the condition that the maximum liability of the (sending or receiving) foreign nuclear operator be increased up to the maximum amount applicable to operators within those territories. A proposal to insert such a provision was rejected by the Vienna Nuclear Liability Conference.⁵ The slow progress of ratifications of the Vienna Convention (it took 14 years for its entry into force although only five ratifications were required) did not enhance the interest of the parties to the Paris Convention which have little, if any, geographical or commercial relationship with the present parties to the Vienna Convention. Finally, the parties to the Paris Convention were made aware of the fact that their ratification of the Vienna Convention might lead to a number of conflicts

3. The “Protocol to amend the Convention of 31 January 1963 Supplementary to the Paris Convention of 29 July 1960 on Third Part Liability in the Field of Nuclear Energy, as amended by the Additional Protocol of 28 January 1964” was adopted in Paris on 16 November 1982 and has so far been ratified by eight Contracting Parties to the Brussels Supplementary Convention. It will enter into force on the date when all Contracting Parties, i.e. eleven at present, have ratified it [Article 21].

4. Official Records of the Conference, p. 515.

5. Official Records of the Conference, p. 134, 452 [draft Article IV, paragraph 2].

which were evoked during the 1968 IAEA/NEA Monaco Symposium on Third Party Liability and Insurance in the Field of Maritime Carriage of Nuclear Substances.⁶

4. Despite the extensive harmonisation of the two conventions by means of the 1964 Additional Protocol to the Paris Convention, a number of differences remained and further ones were added after the entry into force of the 1982 Protocol amending the Paris Convention.⁷ These differences concern the membership (the Vienna Convention with a worldwide vocation, the Paris Convention with a *de facto* “regional” character, concluded within the framework of the OECD), the fact that only the Paris Convention contains provisions on its territorial scope of application [Article 2] and the transit of nuclear material [Article 7(e) already mentioned above], the liability amounts, the rules on subrogation and conflicts of jurisdiction, as well as on the settlement of disputes. In particular, the 1982 Protocol has replaced the unit of account of the European Monetary Agreement based on the gold standard by the Special Drawing Rights (SDR) of the IMF, while the unit of account according to Article V.3 of the Vienna Convention is still the gold value of the US dollar on 29 April 1963, which may give rise to different interpretations and does not correspond to the general tendency to replace gold-based units of account by the SDR in international agreements.

5. However, none of these differences touches upon the common principles of both conventions which are well known: the operator of a nuclear installation is absolutely and exclusively liable for nuclear damage; the operator’s liability is limited in amount and in time; the operator must cover his/her liability by insurance or other financial security; the courts of a single Contracting Party are competent for claims against the operator; and the conventions are applied without any discrimination based upon nationality, domicile or residence. Another common feature of both conventions is that they are comprehensive in the sense that they apply to nuclear incidents occurring not only in nuclear installations but also during transport of nuclear material sent thereto or therefrom.

A blueprint is shelved

6. After the hope of the parties to the Paris Convention ratifying the Vienna Convention had virtually been abandoned, the problem of the relationship between the two conventions was taken up again in 1972 by the NEA Group of Governmental Experts on Third Party Liability in the Field of Nuclear Energy. This initiative stemmed from the wish to unify the principles on which civil liability for nuclear damage were based, in light of the continuing growth of the nuclear industry and international trade in nuclear materials, equipment and installations, and at the same time to both improve protection for victims and serve the interests of operators of nuclear installations, carriers and insurers. At this time the Paris Convention had already entered into force (1 April 1968), but neither the Vienna Convention nor the Brussels Supplementary Convention were as yet operative. In collaboration with the IAEA Secretariat, a series of possible solutions were examined which were to achieve two interrelated objectives: first, the removal of difficulties resulting from the simultaneous application of both conventions and, second, the wider acceptance of the basic system underlying both conventions. The solutions discussed with the NEA and IAEA can be summarised as follows:

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6. U.K. Nordenson, “Legal conflicts arising from the simultaneous application of the Paris and Vienna Conventions with regard to nuclear incidents in the course of carriage of nuclear substances”, in *Third Party Liability and Insurance in the Field of Maritime Carriage of Nuclear Substances* (Monaco Symposium), OECD Paris, 1969, p. 427 et seq.
 7. The “Protocol to Amend the Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964” was signed on 16 November 1982 and entered into force on 7 October 1988, according to Article 20 of the Paris Convention.

- I. A single convention:
 - a) termination of the Paris Convention and continuation of the Vienna Convention;
 - b) termination of the Vienna Convention and continuation of the Paris Convention;
 - c) a new convention.

- II. Continuation of both conventions:
 - a) ratification of the Vienna Convention by the Contracting Parties of the Paris Convention;
 - b) extension of the territorial scope of both conventions;
 - c) a “bridge” between the two conventions in the form of a joint protocol or two identical protocols.

During this work, all solutions barring the latter were discarded for various legal, practical or political reasons.⁸ The solution of a joint protocol open to both the Contracting Parties of the Paris Convention and the Vienna Convention was selected as being most satisfactory.

7. This joint protocol was first considered by the Restricted Working Group of the IAEA Standing Committee on Civil Liability for Nuclear Damage, convened in Vienna in May 1974. It was subsequently studied in June 1974 by the NEA Group of Governmental Experts and again in March 1975 when the Group of Experts concluded that a joint protocol was generally the most satisfactory solution from a legal point of view, though certain minor reservations were expressed regarding transit of nuclear material and the question of the application of the Brussels Supplementary Convention. At the same time, however, the national representatives had not decided definitely on the advisability of implementing this solution (the Vienna Convention was not yet in force) and agreed to submit the draft protocol to the IAEA Standing Committee for a formal opinion. However, the latter did not place this item on the agenda of its following meeting, thus putting a (provisional) end to the exercise. The operative provisions of the 1974 Draft Joint Protocol (hereinafter referred to as the 1974 Draft) read as follows:

Article I

- (a) For purposes of application of the Vienna Convention, the Parties to this Protocol which are Parties to the Paris Convention shall be considered as if they were Parties to the Vienna Convention, with the exception of Articles XVI, XVII, XXII, XXIII, XXIV, XXV, and XXVI of the latter convention.

- (b) For purposes of application of the Paris Convention, the Parties to this Protocol which are Parties to the Vienna Convention shall be considered as if they were Parties to the Paris Convention, with the exception of Articles 6(e), 7(e), 17, 18, 19, 20, 21 and 22 of the latter convention.

8. These solutions are analysed by O. von Busekist, “*Haftungsprobleme im Verhältnis zwischen Vertragsstaaten des Pariser und des Wiener Atomhaftungsübereinkommens*”, in Pelzer (ed.), *Friedliche Kernergienutzung und Staatsgrenzen in Mitteleuropa*, Baden-Baden 1987, p. 271 et seq.

Article II

For the purposes of this Protocol and taking into account the provisions of Article I above, either the Paris Convention or the Vienna Convention shall apply to a nuclear incident, to the exclusion of the other. The Convention applicable shall be that to which the Installation State of the operator liable, by virtue of either Convention, is a Party.

Construction

8. It took more than nine years to revive consideration of this problem. In May 1984, the IAEA Standing Committee raised anew the desirability of establishing some formal relationship between the conventions. It was felt that the time had come to reactivate consideration of this matter as further states were considering adhesion to the Vienna Convention (which had come into force on 12 November 1977) and north-south bilateral nuclear co-operation and supply arrangements were increasing. The NEA Group of Governmental Experts endorsed the IAEA proposal for a joint study of the relationship between the Paris Convention and the Vienna Convention, and an informal meeting of experts was therefore convened by both Secretariats in Vienna in September 1986. After having reviewed the problems and solutions already discussed between 1972 and 1975 (see paragraph 6 above), the experts favoured a joint protocol as the most practical and effective solution, but emphasised the need to consider a number of issues related to the effect and content of the portocol. The NEA Group of Governmental Experts equally considered a joint protocol as the best solution to the problem of the relationship between the two conventions, provided that the applicability of the Brussels Supplementary Convention among its Parties was preserved. The Group underlined that adhesion to the Vienna Convention by a greater number of states was a prerequisite for the success of a joint protocol. The IAEA Standing Committee, at its meeting in March 1987, discussed and endorsed the same solution and agreed in principle on a draft preamble as well as two draft articles. In June 1987, the NEA Group of Governmental Experts reviewed the results of the IAEA Standing Committee's work and discussed various draft articles elaborated by the NEA Secretariat.

9. Upon the Standing Committee's recommendation, the IAEA Board of Governors and the OECD Steering Committee for Nuclear Energy agreed to establish a Joint IAEA/NEA Working Group to continue work on the drafting of a joint protocol. Accordingly, the "Joint IAEA/NEA Working Group of Governmental Experts on the Relationship between the Paris and Vienna Convention" met at the IAEA headquarters in Vienna from 27 to 30 October 1987. Relying on the extensive preparatory work described above, the Group succeeded in agreeing on all issues in a remarkable spirit of co-operation. The text of the "Joint Protocol relating to the application of the Vienna Convention and the Paris Convention" was thus adopted by consensus on 30 October 1987 at the end of that meeting (see *Nuclear Law Bulletin* No. 40).

10. At its session in February 1988, the IAEA Board of Governors endorsed the Joint Protocol and agreed to the convening of a one-day conference to be organised jointly by the IAEA and the OECD/NEA in conjunction with the 32nd regular session of the IAEA General Conference in September 1988 for the purpose of adopting the Joint Protocol and opening it for signature. The OECD Steering Committee for Nuclear Energy, at its meeting in April 1988, endorsed the protocol and recommended the convening of the conference; these decisions were approved by the OECD Council in June 1988 (see *Nuclear Law Bulletin* No. 41). Some concern had been voiced that one day might be too short a duration should issues of substance be raised. But this proved not to be the case, due to the solid groundwork laid by the Joint IAEA/NEA Working Group in October 1987, the Diplomatic Conference of 21 September 1988 crowned the work of 16 years.

Basic ideas of the Joint Protocol

11. The preparatory work of the Joint Protocol started with a thorough analysis of the relationship between the two conventions. As both conventions apply to nuclear incidents occurring in nuclear installations and during transport of nuclear materials, possible positive or negative conflicts between them are best illustrated by two groups of cases. The first one concerns nuclear incidents occurring in land-based nuclear installations situated in the territory of Contracting Parties to either the Paris Convention or the Vienna Convention. The second group deals with transport of nuclear material between operators of nuclear installations situated in those territories, such transport may be direct between neighbouring countries or require the transit through the territory of Contracting Parties to either the Paris Convention or the Vienna Convention. Each of these groups and sub-groups has a series of variants depending on where the nuclear incident and damage occurs, which are set out diagrammatically in Annex I. In examining these cases it was assumed that no Contracting State to the Paris Convention has extended the convention to cover nuclear incidents or damage in non-Contracting States and that the Vienna Convention also excludes nuclear incidents and damage occurring in non-Contracting States.⁹ Although this assumption does not always correspond to the actual state of law, particularly in the case of the Paris Convention,¹⁰ it enabled the problem to be presented in a clearer way.

12. This analysis revealed that, despite their common basic principles, there exists no relationship between the Paris Convention and the Vienna Convention. Contracting Parties to the Paris Convention are non-Contracting States within the meaning of the Vienna Convention and vice-versa. This

9. The Standing Committee on Civil Liability for Nuclear Damage took view in April 1964 “having regard *inter alia* to the transport cases referred to in Article II(1), that in the case of a nuclear incident involving the liability of an operator within the meaning of the convention, nuclear damage suffered within the territory of Contracting States and on or over the high seas would be nuclear damage covered by the convention even if the nuclear incident causing such damage occurred on or over the high seas or within the territory of a non-Contracting State. On the other hand, the nuclear damage suffered within the territory of a non-Contracting State would not be nuclear damage covered by the convention even if the nuclear incident causing such damage occurred within the territory of a Contracting Party or on or over the high seas.” This view is in particular disputed by Nordenson, *op cit.*, p. 431, who considers that the Vienna Convention “must be deemed to have left the question whether the Convention shall apply to nuclear incidents occurring outside the territory of the Contracting States or to nuclear damage suffered outside such territory to be governed by national law, i.e. the law of the Contracting Party whose courts are or would be competent under the convention and to be determined in accordance with the rules of private international law of the *lex fori*.”

10. The Steering Committee for Nuclear Energy recommended on 22 April 1971 that the scope of application of the Paris Convention should be extended to damage suffered in a Contracting State, or on the high seas on board a ship registered in the territory of a Contracting State, even if the nuclear incident causing the damage has occurred in a non-Contracting State. This recommendation, which applies in practice only to damage caused by nuclear incidents in the course of carriage, was followed by Belgium, Denmark and Norway. The latter two countries as well as the Netherlands and Sweden have adopted legislation covering nuclear damage suffered in non-Contracting States provided that the nuclear incident occurred in those countries and liability lies with an operator of a nuclear installation situated therein. The Nordic countries provide further that compensation for such damage may be made subject to reciprocity. Germany applies the Paris Convention without territorial restriction and considers the Brussels Supplementary Convention as a self-executing treaty; compensation exceeding SDR 15 million for damage suffered in non-Contracting Parties to the Paris Convention, and SDR 120 or SDR 300 million for damage suffered in Contracting Parties to the Brussels Supplementary Convention, according to whether or not they have ratified the 1982 Protocol, is subject to reciprocity. No territorial extension is foreseen in the implanting legislation of France, Greece, Italy, Portugal, Turkey and the United Kingdom.

situation has the following consequences (neglecting, under the above assumption, the provisions in certain national laws concerning the extension of territorial scope):

- a) either convention applies to nuclear damage suffered in the territory of a Contracting Party to the other convention; this is of particular relevance in cases where the damage originates in land-based installations (Annex I, cases A1 to 4, column 4);
- b) neither convention applies to nuclear incidents occurring in the territory of a Contracting Party to the other convention which is especially relevant in transport cases (Annex I, cases B and C, column 4);
- c) both conventions are applicable to nuclear incidents occurring and nuclear damage suffered on or above the high seas which may result in their simultaneous application (Annex I, cases B1 and 2, column 4).

13. It followed further from analysis that the distinction of the conventions between “Contracting Parties” or “Installation State” [the latter term is used in the Vienna Convention only but is defined with reference to “Contracting Party” in Article I 1(d)] and non-Contracting States is of particular significance with respect to:

- a) their geographical scope [Article 2 Paris Convention];
- b) the transport of nuclear material [Articles 4(a)(iv) and (b)(iv) Paris Convention, II.1(b)(iv) and (c)(iv) Vienna Convention];
- c) the right of subrogation [Articles 6(d) and (e) Paris Convention, IX.2 Vienna Convention];
- d) the free transfer of compensation and funds provided by insurance or other financial security [Articles 12 Paris Convention and XV Vienna Convention];
- e) the jurisdictional provisions [Articles 13(a) to (c) Paris Convention, XI Vienna Convention];
- f) the enforcement of judgements [Articles 13(d) Paris Convention, XII Vienna Convention] and jurisdictional immunities [Articles 13(e) Paris Convention, XIV Vienna Convention];
- g) the principle of non-discrimination [Articles 14 Paris Convention, XIII Vienna Convention].

The first principle underlying the Joint Protocol is therefore to create a link between the Paris Convention and the Vienna Convention by abolishing this distinction between their respective Contracting Parties as regards the operative provisions of either convention. Consequently, Contracting Parties to the Paris Convention are no longer treated as non-Contracting States within the meaning of the Vienna Convention and vice versa. On the contrary, they are mutually regarded as Contracting Parties whenever the operative provisions of either convention are applicable, notably those referred to above.

14. The second basic principle of the Joint Protocol is the elimination of conflicts between the two conventions by making either the Paris Convention or the Vienna Convention exclusively applicable to a nuclear incident. The choice of the applicable convention can be made in light of the connecting factors established by the first principle.

15. The consequences of this approach are the following:

- a) The territorial scope of the two conventions is extended: operator of nuclear installations situated in the territories of Contracting Parties to either convention are liable for nuclear

damage suffered in such territories and on or over the high seas and resulting from nuclear incidents occurring in those territories on or over the high seas (Annex I, column 6).

- b) In case of transport of nuclear material, the respective provisions of the conventions concerning Contracting Parties [Vienna Convention, Article II.1(b)(i) and (ii), (c)(i) and (ii), Paris Convention, Article 4(a)(i) and (ii), (b)(i) and (ii)] are applicable. Consequently, the transfer of liability between V- and P-operators is determined by the terms of a contract in writing or, in the absence thereof, by taking charge of the nuclear material (Annex I, cases B, column 6).
- c) The jurisdictional provisions [Vienna Convention, Article XI; Paris Convention, Article 13] apply as between Contracting Parties.
- d) The maximum amount of the operator's liability as fixed by the Installation State's legislation pursuant to the convention to which the latter is a Party, covers nuclear damage suffered in V- as well as P-states without discrimination.

If, for example, the operator of a nuclear installation in P, which has ratified the protocol, sends nuclear material to the operator of a nuclear installation in V, which has also ratified the protocol, and a nuclear incident occurs in V (Annex I, case B4, column 6), the operator liable will be determined according to the identical provisions applicable to Contracting States, i.e. in accordance with actual or contractual taking over of the material [Articles 4(a)(i) or (ii) Paris Convention, II.1(b)(i) or (ii) Vienna Convention]. The courts in V have jurisdiction under both conventions [Articles 13(a) Paris Convention, XI.1 Vienna Convention]. The laws of Vienna, the state in which the installation of the operator liable is situated, will determine the amount of liability.

Analysis of the Joint Protocol

Title

16. As indicated by its title, the protocol "joins" the two conventions by means of a single instrument. This solution, already contained in the 1974 Draft, was favoured by both the IAEA Standing Committee and the NEA Group of Governmental Experts as it stresses the reciprocity of the mutual undertakings accepted by the Parties to either convention ratifying the protocol. In addition, this solution had practical advantages: the adoption of the Joint Protocol required only one diplomatic conference, thus avoiding the possible risk of diverging texts between separate protocols to each convention, it was also easier to formulate the entry-into-force clause [Article VII.1], since with two protocols the entry into force of the one would have to be made dependent on the entry of force of the other.

Preamble

17. The reference to the Paris Convention includes the Protocol of 16 November 1982 which at the time of the diplomatic conference had not yet entered into force; it did so on 7 October 1988. On the other hand, no mention is made of the Brussels Supplementary Convention which would have been advisable, had the Joint Protocol contained an article dealing with that convention. The insertion of such a provision was however discarded for the reasons explained below.

18. The preamble evokes further the points mentioned above: the similarity in substance of both conventions, the difficulties resulting from their simultaneous application and the dual purpose of the Joint Protocol.

Article I

19. This article, which did not appear in the 1974 Draft, was inserted by the Joint IAEA/NEA Working Group of Governmental Experts in October 1987 in order to cover future amendments to either convention and avoiding the need to having to amend the Joint Protocol as a consequence thereof. Each Contracting Party to both the protocol and the Vienna Convention or the Paris Convention is therefore bound with respect to the other Parties to the protocol, to apply either convention in the same form as it does in relation to the other Parties to its own convention. Thus the Parties having ratified the 1982 Protocol amending the Paris Convention will have to apply the amended version, while those Parties which have not yet done so will continue to apply the Paris Convention as amended by the 1964 Additional Protocol only. Similarly, should the Vienna Convention be revised, the revised version will be applied to those Parties for which it is in force.

Article II

20. Compared to the 1974 Draft, this article reflects a fundamental change in the drafting philosophy of the Joint Protocol. While the operative provisions of the former were confined to the minimum (they covered only the substance of the present Articles III and IV) and may be called legalistic and even esoteric, the final version spells out directly the extension of the liability and compensation system of either convention to the Parties of the other convention. As pointed out above, the Chernobyl accident has triggered public concern about international civil liability regimes for nuclear damage and has made lawmakers aware of the need not only to enlarge the system but also to state the objectives of such enlargement as clearly as possible.

21. When drafting this basic rule, reflecting the desire expressed in the preamble of mutually extending the benefits under either convention to the Parties of the other convention, the Experts considered two alternatives. Under the first one, the rule would provide for the extension of the scope of application of either convention to cover nuclear damage suffered in the territory of one or more Contracting Parties to the other convention. According to the second alternative, it would be stipulated that nuclear operators shall be liable for such damage, according to the convention to which their installation state is a Party. The first alternative stresses the territorial scope of application of the conventions while the second one emphasises the operator's liability. Both draft alternatives contained the proviso that the nuclear incident causing the damage must have occurred in the territory of a Contracting Party to either convention in order to specify that the Joint Protocol as such does not cover nuclear damage caused in the territories of its Contracting Parties by incidents occurring in non-Contracting States (i.e. in those states which are not Party to either convention nor to the Protocol).

22. It was eventually decided to adopt the second alternative as it was considered to be more in line with the two conventions which also place the emphasis on the operator's liability. It was also felt that the wording of the first alternative ("the scope of application of the Vienna Convention/Paris Convention shall be extended to cover nuclear damage suffered in the territory of a Contracting Party to the Paris Convention/Vienna Convention") might be somewhat vague from the legal point of view. The Experts also agreed to leave out any reference to the place of the nuclear incident which caused the nuclear damage, as they judged this to be a matter of national legislation. If the nuclear incident

occurs in the territory of a Contracting Party to the Joint Protocol, it goes without saying that Article II is applicable. Should nuclear material be carried to, from or through a non-Contracting State and a nuclear incident in its territory cause damage in the territory of a Contracting Party to either Convention and to the Protocol, the operator's liability for such damage is determined by the legislation of its Installation State. This is made clear by the wording that "the operator shall be liable in accordance with that Convention..." which includes national legislation implementing that convention. If, for example, a Contracting Party to the Paris Convention has followed the recommendation of the Steering Committee of 22 April 1971 and extended the scope of the application of that convention to damage suffered in a Contracting State to the Paris Convention, even if the nuclear incident causing the damage has occurred in a non-Contracting State, the Paris Convention-operator will also be liable in such a case for nuclear damage suffered in the territory of a Contracting Party to the Vienna Convention which is also a Party to the Joint Protocol.

23. Neither the Vienna Convention nor the Paris Convention mentions the case of nuclear incidents occurring and nuclear damage suffered on or above the high seas. It was therefore decided not to refer explicitly thereto in Article II of the Joint Protocol. There is, however, general agreement that both conventions apply to such cases. The Steering Committee for Nuclear Energy adopted a recommendation to that effect on 25 April 1968, and the Standing Committee on Civil Liability for Nuclear Damage took the same view in April 1964.

Article III

24. This article implements the second principle referred to in the preamble by clearly determining the applicable convention. The 1974 Draft [Article II, second sentence] contained only a very short rule: "The convention applicable shall be that to which the Installation State of the operator liable, by virtue of either convention, is a Party." The present wording, as that of Article II, results equally from the wish to indicate clearly the purport of the conflict rule by mentioning the two principal cases involving the nuclear operator's liability. Article III.1 establishes the guiding principle that a simultaneous application of both conventions should be avoided and that only one convention should apply to a nuclear incident to the exclusion of the other convention. This principle is implemented by two conflict rules, the first dealing with nuclear incidents occurring in a nuclear installation [Article III.2] and the second one concerning nuclear incidents involving nuclear material in the course of carriage [Article III.3].

25. As regards these conflict rules in general, there was a unanimous agreement that the applicable convention should be the one to which the Installation State of the operator liable is a Party. The operator would thus be liable under the convention which corresponds to his/her own national law. In transport cases, if the incident occurs in the territory other than that of the liable operator's Installation State, the court having jurisdiction [Article 13(a) Paris Convention, Article XI.1 Vienna Convention] will have to apply a national law different from the *lex fori*, but that is not unusual in conflict of law cases. Moreover, the application of the foreign law will in most cases be limited to the amount of compensation available under the foreign operator's national law, while the nature, form and extent of the compensation as well as the equitable distribution thereof will be governed by the national law of the competent court [Article 11 Paris convention, Article VIII Vienna Convention]. Applying the convention to which state whose courts have jurisdiction is a Party could have resulted in the operator being liable under a convention to which his Installation State is not a Party. This result would have created difficulties: for example, as the provisions of the Paris Convention on the rights of subrogation and recourse are wider than those of the Vienna Convention, Parties to the latter would have had to amend their national laws to provide for the case that an action is brought before a court of a Party to

the Paris Convention against a Vienna Convention-operator under Article 6(d) or (e) of the Paris Convention; such legislation would not be in conformity with the Vienna Convention.

26. The conflict rule in the case of nuclear incidents occurring in nuclear installations [Article III.2] relies on the principle of territoriality: the place of the incident determines the applicable convention.

27. The conflict rule in transport cases [Article III.3] was perhaps the most disputed one during the negotiations, not so much because of its substance but because of its wording. It was argued that conflict rules are drafted in such a way that the choice of law is made on the basis of facts or status (for example, domicile, nationality or, as in Article III.2, place of the incident) and not by reference to legal provisions. The supporters of this argument presented a number of drafting proposals which tried to combine the identical transport provisions of both conventions [Article 4(a) and (b) Paris Convention, Article II.1 Vienna Convention]. While these proposals had the advantage of spelling out the rules determining the liable sending or receiving operator and thus the applicable convention, as well as of avoiding the need to resort to other legal instruments (which might be amended), they had the disadvantage of making the text rather heavy and of carrying the risk of being inconsistent with the transport provisions of either convention. It was finally agreed to make an exception to the usual practice of drafting choice of law rules. This exception was considered to be justified by the fact that the provisions referred to in Article III.3 describe facts, namely the assumption of liability assumed to the express terms of a contract in writing, the taking charge of nuclear material, and the loading on or unloading from a means of transport. It is true that the specific reference to the articles of the Vienna Convention and the Paris Conventions has the inconvenience that Article III.3 has to be amended if these provisions are modified or renumbered. It is, however, unlikely that the substance of these articles or their numbering will be changed; a revision of the Paris Convention is not expected for some time to come, and a possible revision of the Vienna Convention will probably not alter the substance or the numbering of Article II 1(b) and (c).

28. The conflict rule in transport cases is based on the fact that the cited provisions of the Vienna Convention and the Paris Convention are identical in substance and are to be applied “in the same manner as between Contracting Parties” to one and the same convention [see Article IV of the Joint Protocol]. This comprehensive rule allows determining the applicable convention in all transport cases as shown by the following examples:

- a) As pointed out in paragraph 15 above, these provisions apply whenever nuclear material is carried between operators of nuclear installations situated in the territories of Contracting Parties to the Joint Protocol. If a nuclear incident occurs in the course of carriage, the sending P- or V-operator remains liable until the receiving operator has assumed the liability or has taken charge of the nuclear material [Article 4(a)(i) and (ii) Paris Convention, Article II.1(b)(i) and (ii) Vienna Convention]. The liability of the receiving P- or V-operator is determined by the mirror-like provisions of Article 4(b)(i) and (ii) Paris Convention and Article II.1(c)(i) and (ii) Vienna Convention.
- b) When nuclear material is sent to or from a person within the territory of a non-Contracting State (NC) the sending or receiving P- or V-operator is liable according to Article 4(a)(iv) or (b)(iv) of the Paris Convention or Article II.1(b)(iv) and (c)(iv) of the Vienna Convention, respectively. This is obvious when the non-Contracting State is a Party to neither the Paris Convention nor to the Vienna Convention (and consequently not Party to the Joint Protocol, see Article VI.1). The notion of non-Contracting State within the meaning of the abovementioned provisions comes also into play where nuclear material is carried between nuclear operators situated in the territory of Contracting Parties to the Paris Convention and to the Vienna Convention respectively, and neither (P or V) or only one of these Contracting Parties (PP or VP) has ratified the Joint Protocol:

Article IV of the latter does not operate as it is only applicable between its Contracting Parties. The provisions relating to non-Contracting States are therefore applicable in the following cases involving carriage of nuclear material between V and P, V and PP, VP and P, P and NC, and V and NC.

- c) There is one (rather theoretical) case where the Joint Protocol does not automatically avoid the simultaneous application of both conventions, as shown by the following example:¹¹ on the same means of transport (e.g. a ship) nuclear material is carried from or to a P-operator's and from or to a V-operator; in the course of carriage a nuclear incident occurs. Which convention applies is not a problem, where one of the operators has taken charge of the material or has accepted liability in writing. Under the rules described above, the convention will apply whose Contracting Party is the Installation State of the liable operator. Where there is no actual taking of charge or no written acceptance of the liability by one of the operators, the convention applicable is only clear when the nuclear incident is caused exclusively by one of the nuclear consignments. Where it is caused by both consignments or – what is more likely, it is uncertain which one was responsible – both operators will be liable [Article 5(d) Paris Convention, Article II.3(a) Vienna Convention]. Both conventions are applicable, and the Protocol does not point to the exclusive application of one convention. This legal position is however in no way the result of the Protocol and would not be any different without it. The advantage of the Joint Protocol is precisely that it permits agreements between P- and V-operators which excludes the simultaneous application of both conventions.

29. Article 4(a) and (b) of the Paris Convention and Article II.1 of the Vienna Convention are not entirely identical in substance, as the latter provision (*in fine*) covers the case of a nuclear incident occurring in a nuclear installation and involving nuclear material stored therein incidentally to the carriage of such material, whereas the corresponding provision of the Paris Convention is to be found in Article 5(b). The latter article is however applied by virtue of Article IV of the Joint Protocol. The same is true for the case of the operator being substituted by a carrier [Article 5(d) Paris Convention, Article II.2 Vienna Convention] or by a person handling radioactive waste [Article II.2 Vienna Convention].

Article IV

30. As pointed out above, the first principle underlying the Joint Protocol is to create a link between the two conventions by abolishing the distinction between Contracting Parties and non-Contracting States between the Contracting Parties of the Protocol. This mutual recognition as Contracting Parties should however not give the full status of a Contracting Party to the other convention, a result which could only be achieved by ratification and was discarded as pointed out above. A solution had therefore to be found which conveyed the idea of limited recognition in an appropriate manner. The proper wording of such an article caused some drafting problems. There was general agreement that the mutual recognition should cover the operative articles of either convention but should not extend to their “procedural” provisions such as those dealing with signatures, ratifications, accessions, amendments [Articles 17 to 22 Paris Convention, Articles XXI to XXVI Vienna Convention].

11. J. Deprimoz, “*Effets de la Convention de Bruxelles du 17 décembre 1971 sur l’assurance de l’exploitant nucléaire pour les dommages à la cargaison en cours de transport*”, Proceedings of the IAEA/NEA Stockholm Symposium on the Maritime Carriage of Nuclear Materials, IAEA, Vienna, 1973, p. 241 *et seq.*, 246 *et seq.*

31. The 1974 Draft [Article 1] tried to express this idea by enumerating the inapplicable articles of either convention. This choice was mainly determined by the wish not to mention those articles of the conventions which are not directly relevant to the concept of non-Contracting States and to exclude expressly not only the procedural articles but also those articles of either convention which have no counterpart in the other [Article 7(e) and 17 Paris Convention, Article XVI Vienna Convention] or are different in substance [Article 6(e) Paris Convention]. The Joint IAEA/NEA Working Group of Governmental Experts, following proposals by the IAEA Standing Committee and the NEA Group of Governmental Experts, preferred the enumeration of the applicable articles of either convention as this positive formula expressed the positive objective of the Joint Protocol better than a negative formula stating exceptions.

32. In this context, it is to be noted that, contrary to the 1974 Draft, Articles 6(e) and 7(e) of the Paris Convention are not excluded. As a matter of fact, Article 6(e) is confined to compensation in respect of damage caused by a nuclear incident occurring in the territory of a non-Contracting State, or in respect of damage caused in such territory. This rule remains unaffected if the operator is liable under the Paris Convention but does not apply to incidents occurring and damage suffered in Contracting Parties to the Vienna Convention as they are not considered as non-Contracting States under the terms of Article IV of the Joint Protocol. As regards Article 7(e), it remains applicable among the Contracting Parties to the Paris Convention. As the Joint Protocol establishes the principle of equal treatment and non-discrimination between Contracting Parties to the Joint Protocol, this article applies equally between those Parties. Consequently, if nuclear material is carried between operators whose Installation States are Parties to the Joint Protocol (VP and PP) through the territory of a Contracting Party to the Paris Convention (P) (whether Party to the Joint Protocol or not), the latter may require that the liable operator's amount of liability be increased up to the amount applicable to operators in P. If P is also Party to the Joint Protocol and the VP-operator has assumed liability or taken charge of the nuclear material before the transit, this follows from Article IV of the Joint Protocol. Had the PP operator assumed liability or taken charge of the nuclear material, Article 7(e) of the Paris Convention would be applicable according to Article III.3 and IV of the Joint Protocol. In case P is not Party to the Joint Protocol, VP is a non-Contracting State in relation to P so that the sending or receiving PP-operator is liable until the nuclear material has been unloaded from the means of transport arriving in VP or after it has been loaded on such means destined for PP [cf. paragraph 28(b) above]; Article 7(e) is thus applicable as between Contracting Parties to the Paris Convention.

33. During the final round of negotiations, the question was raised whether Article 15(b) of the Paris Convention should be included in the list of applicable articles. It was finally decided not to do so as this article is not relevant in the context of the Joint Protocol.

34. The wording "... shall be applied (...) in the same manner as between Contracting Parties to the Vienna Convention/Paris Convention" aims at establishing equal treatment as regards the operative articles of either convention without affording the status of a full Contracting Party. This language, proposed by the NEA Group of Governmental Experts, is intended to meet the concern that the wording used in Article I of the 1974 Draft ("... the Parties to this Protocol... shall be considered as if they were Parties to the Vienna Convention/Paris Convention...") might be too far-reaching in light of international treaty practice. The IAEA Standing Committee, at its meeting in March 1987, had proposed the following version: "For the purpose of application of the Vienna Convention/Paris Convention, articles of that convention shall apply (be made applicable) with respect to the Parties to this Protocol which are Parties to the Paris Convention/Vienna Convention." It was considered that this language did not sufficiently convey the idea of mutual treatment as Contracting Parties with respect to the operative articles of either convention.

35. The application of the operative provisions “in the same manner as between Parties” leads to equal treatment as regards the amount of compensation available under the legislation of Contracting Parties to either convention. Consequently, Parties to one convention are not allowed to limit, as far as the Parties to the other convention are concerned, the amount of compensation available under their legislation to the amount available under the legislation of the Parties to the other convention, as long as no public funds are involved [see Articles 7(d) and 15 of the Paris Convention]. Such limitation would also be contrary to the non-discrimination articles of both conventions [Article 14(a) Paris Convention, Article XIII Vienna Convention] made applicable by Article IV of the Joint Protocol.

36. The Joint Protocol could lead to enlarging the number of victims entitled to compensation, to the detriment of victims suffering damage in the territories of Contracting Parties to either convention which are not Parties to the Protocol. For example, if a nuclear incident occurring in P, which has not extended the territorial scope of the Paris Convention, causes damage both in P and V, then the entire amount of compensation under the Paris Convention will be available for victims in P. In the event that the Joint Protocol is in force for both P and V, the P-operator’s amount of liability serves to compensate damage in P and V which could affect the distribution of available funds. However, the Paris Convention (and also the Vienna Convention, according to some authors) may be extended by Contracting Parties to nuclear damage suffered in non-Contracting States without the other Contracting Parties having to consent thereto, and the Joint Protocol does not change this situation (that such consent is required by the Contracting Parties to the Brussels Supplementary Convention as regards the making available of their public funds is a matter to be settled outside the Protocol and is dealt with below). Moreover, it should be borne in mind that protection of victims in the opposite case (a nuclear incident in V, damage in V and P) is also covered by virtue of the Joint Protocol.

Final clauses

37. The final clauses contained in Articles V and XI follow the usual practice. It is to be noted that they do not comprise an amendment clause as it was felt that any required amendments could be dealt with in accordance with the procedures foreseen in Articles 39 and 41 of the Vienna Convention on the Law of Treaties. It was pointed out in this context that Article I of the Joint Protocol covered future amendments to both conventions so that it would not have to be amended in such a case. A proposal was made to insert a clause, similar to Article 16 Brussels Supplementary Convention, providing for consultations between the Parties to the Joint Protocol “on all questions of common interest raised by the application of this Protocol, in particular in case of an amendment to either the Vienna Convention or the Paris Convention”. This provision was also considered to be unnecessary as consultations could always be organised through the normal diplomatic channels.

38. The final clauses do not refer to the Brussels Supplementary Convention, although the Joint Protocol can have certain effects on that convention (see below). The NEA Group of Governmental Experts considered that any problems related to the application of the Brussels Supplementary Convention should be settled outside the Joint Protocol as the latter deals only with the relationship between the Paris Convention and the Vienna Convention. It would have been inappropriate to insert in the Joint Protocol a provision similar to Article XVII of the Vienna Convention stating that the Protocol shall not affect the application of the Brussels Supplementary Convention as between the Parties thereto, as it is necessary to preserve the application of the Paris Convention as a condition for the application of the Brussels Supplementary Convention. The NEA Group of Governmental Experts proposed therefore the insertion of a declaratory article having the following wording: “Nothing in this protocol shall prevent a Party which is Party to the Paris Convention from making provisions preserving the application of the Brussels Supplementary Convention”. At the Joint IAEA/NEA meeting of Governmental Experts in October 1987, this proposal was enlarged by a number of

delegations to cover other agreements, leading eventually to the following draft article: “Nothing in this protocol shall affect the rights and obligations of States Parties under other agreements provided that these rights and obligations are not in conflict with the present protocol.” The Experts finally decided not to adopt such an article as the subject of conflicting treaty obligations was sufficiently covered by other sources of international law [see for example Article 30, paragraph 5 of the Vienna Convention on the Law of Treaties].

Articles V and VI

39. It follows from the nature of the Joint Protocol as a “bridge” between the two conventions that it may be signed only by the states which are at least signatories of either convention [Article V] and that only Parties to the latter are entitled to become Parties to the Protocol [Article VI.1]. In Article VI.2 the Director General of the International Atomic Energy Agency is designated as the depositary of this protocol, as he has the same function with respect to the Vienna Convention which has a universal character.

Article VII

40. The entry-into-force conditions constitute a compromise between the interest of allowing the instrument to become effective within a reasonable period of time on the one hand and that of ensuring its practical application by a sufficient number of adhesions on the other hand. These conditions were discussed to some extent during the preparatory work. Two extreme solutions were rapidly discarded: the first one required the ratification by only one Party to either convention while the second made the entry into force of the Joint Protocol contingent on its ratification by all Parties to either convention. The “minimum” solution would have been incompatible with the goal of establishing a unified system of civil liability for nuclear damage and would have led to the prolonged existence of a “third class” of countries namely the Parties to the Joint Protocol. The “maximum” solution carried the risk of considerably delaying the entry into force of the protocol. To cover future adhesions to the conventions, it would have been necessary to make them conditional on adhesion to the Joint Protocol, a condition implying an amendment to both conventions.

41. In search of a compromise two proposals were considered. The first one relied on the 1974 Draft which had proposed that ratification by five Parties to either convention should bring the protocol into force which corresponds to the number of ratifications necessary for the entry into force of either convention [Article 19(b) Paris Convention, Article XXIII Vienna Convention]. The second proposal suggested ratification by two-thirds of the respective Contracting Parties, using Article 20 of the Paris Convention as a guideline which requires this number for the entry into force of amendments and underlining the change of circumstance since 1974: the entry into force of the Vienna Convention having meanwhile ten Parties and the increase from ten to 14 of the Contracting Parties to the Paris Convention. The first proposal was eventually adopted as the wish to bring the Joint Protocol into force as quickly as possible prevailed over the concern that the number of ratifications required (one-half of the Contracting Parties to the Vienna Convention and about one-third of those to the Paris Convention) might be too small a foundation for the bridge between the conventions.

Articles VIII and IX

42. The period required for a denunciation of the Joint Protocol to become effective [Article VIII.2] is the same as that fixed by both conventions [Article 22(a) Paris Convention, Article XXV.1 Vienna

Convention] and is intended to allow the other Contracting Parties to take account of that situation sufficiently in advance. For the same reason, Article IX.1 requires a Contracting Party to notify the depositary of the termination of the application to it of either the Vienna Convention or the Paris Convention and to state the effective date of such termination. Article IX.2 stipulates the obvious consequences of such termination.

Articles X and XI

43. Article X provides for the usual functions of the depositary of an international agreement. The Secretary-General of the OECD is mentioned in Articles X and XI as he is the depositary of the Paris Convention and therefore interested in all matters related to the Joint Protocol.

Effects of the Joint Protocol on the Brussels Supplementary Convention

System of the Brussels Supplementary Convention

44. This convention constitutes a collective implementation of Article 15 Paris Convention which authorises Contracting Parties to take measures providing for an increase in the amount of compensation specified in the Paris Convention and to apply them under conditions derogating from the Paris Convention insofar as such compensation involves public funds and exceeds SDR 5 million. The system of compensation established by Article 3 of the Brussels Supplementary Convention consists of three tiers (stages). The first tier is provided by financial security held by the operator, usually according to the maximum amount of liability established by national legislation; the second tier covers damage exceeding this amount to an upper limit of SDR 70/175 (1982 Protocol) million and is provided by the government of the country where the installation of the responsible operator is located; the third tier covers damage beyond 70/175 to an upper limit of SDR 120/300 million and is provided jointly by the Contracting Parties to the convention in accordance with a formula based on the gross national product and the thermal power of the reactors installed in the territory of each Contracting Party. This system is supplementary to that of the Paris Convention as indicated by the titles of the Brussels Supplementary Convention and expressly stated in its Article 1 which provides further that it “shall be subject to the provisions of the Paris Convention”. The Brussels Supplementary Convention is thus a dependant treaty and can operate only on condition that the “mother treaty”, the Paris Convention, is applicable.

45. The application of the Brussels Supplementary Convention depends on several conditions which must be satisfied concurrently [Article 2]:

- a) the operator of a nuclear installation must be liable under the Paris Convention;
- b) this nuclear installation must be:
 - i) situated in the territory of a Contracting Party to the Brussels Supplementary Convention,
 - ii) used for peaceful purposes,
 - iii) appear on the list according to Article 13 of the Brussels Supplementary Convention.
- c) the courts of a Contracting Party to the Brussels Supplementary Convention must have jurisdiction pursuant to the Paris Convention [Article 13];

- d) the nuclear incident must have occurred at least partly in the territory of a Contracting Party to the Brussels Supplementary Convention or on or over the high seas;
- e) the nuclear damage must be suffered in the territory of Contracting Parties, or on or above the high seas by their nationals; in the latter case, nationals of non-Contracting States are entitled to compensation only if the damage was suffered on board a ship or aircraft registered in the territory of a Contracting Party.

46. The Joint Protocol does not in any way change the scope of application of the Brussels Supplementary Convention as it deals only with the relationship between the Paris Convention and the Vienna Convention (see also paragraph 38 above). The public funds to be made available by the Contracting Parties to the Brussels Supplementary Convention will be used exclusively for compensation of nuclear damage if the criteria of Article 2 described above are met. These criteria exclude nuclear damage suffered in non-Contracting States (e.g. Parties to the Vienna Convention whether Parties to the Joint Protocol or not) even if the nuclear incident causing the damage occurred in the territory of a Contracting Party to the Brussels Supplementary Convention (see Annex I, cases A1, B6, C8); they equally exclude nuclear damage suffered in such territories of the nuclear incident occurred entirely in a non-Contracting State (e.g. in the course of transport of nuclear material to an operator of a nuclear installation situated in the territory of a Contracting Party to the Brussels Supplementary Convention, see Annex I, cases B5, B8, C11, C12).

47. The geographical scope of the Brussels Supplementary Convention is thus narrower than that of the Paris Convention which allows Contracting Parties to extend by legislation its scope to nuclear incidents occurring and nuclear damage suffered in non-Contracting States [Article 2]. As such an extension may affect the system of joint intervention by public funds established by the Brussels Supplementary Convention, its Article 14(b) stipulates that “any provisions made by Contracting Parties pursuant to Article 2 of the Paris Convention as a result of which the public funds referred to in Article 3(b)(ii) and (iii) are required to be made available may not be invoked against any other Contracting Party unless it has consented thereto”. It is to be noted that none of the Contracting Parties to the Brussels Supplementary Convention which have extended the territorial scope of the Paris Convention¹² has so far asked for such consent.

Effects on the system of compensation

48. According to Article II(b) of the Joint Protocol, the operator of a nuclear installation situated in the territory of a Party to the Paris Convention and to the Joint Protocol (PP) shall be liable in accordance with the Paris Convention for nuclear damage suffered in the territory of a Party to both the Vienna Convention and the Joint Protocol (VP). The territorial scope of the Paris Convention is thus extended by means of the Joint Protocol. Without the Protocol in force, damage suffered in a Contracting Party to the Vienna Convention (V) would only be covered if the Installation State Party to the Paris Convention (P) had extended its scope to such damage. Thus, if a nuclear incident occurs in PP and causes damage in PP and in VP, the amount of compensation available under the Paris Convention will have to be distributed between victims in PP and in VP. It could happen that the insurance or other financial security to cover the PP-operator’s liability is insufficient to fully compensate victims in both PP and VP, whereas victims in P would have obtained full compensation had the Joint Protocol not been in force. The drafters of the Joint Protocol were aware of this consequence (see paragraph 36 above) which does not change the actual situation as each Contracting Party to the Paris Convention is free to extend its scope to nuclear damage suffered in non-Contracting States.

12. See note 9 for the Contracting Parties to the Paris Convention having made use of this possibility.

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49. However, the exhaustion of the PP-operator's financial security assumed in the above example has certain consequences for the system of compensation established by the Brussels Supplementary Convention, in other words, if PP is also a Contracting Party to that convention. The effects of the Joint Protocol on this system are illustrated by the following examples assuming that the Joint Protocol is not in force (a) or is in force (b) between the countries concerned:

- a) A nuclear incident occurs in a nuclear installation situated in the territory of a Contracting Party to the Brussels Supplementary Convention (B) and causes damage amounting to SDR 200 million each in B and in a Contracting Party to the Vienna Convention (V). B has limited the operator's liability to SDR 100 million and has not extended the territorial scope of the Paris Convention. The Paris Convention and the Brussels Supplementary Convention are inapplicable to the damage in V, a non-Contracting State.
- b) The situation is different if, in the example under (a), B and V are Parties to the Joint Protocol (BP and VP). The Paris Convention is applicable by virtue of Articles II(b), III.2 and IV.2 of the Joint Protocol to the damage suffered in VP. The Brussels Supplementary Convention, however, is applicable only to damage in BP. If the damage in BP cannot be fully compensated by the operator's financial security because half of it has to be used for the compensation of victims in VP, the Contracting Parties to the Brussels Supplementary Convention are obliged to intervene collectively with their public funds under the third tier if they have all consented to the extension of the territorial scope of the Paris Convention by virtue of the Joint Protocol. In the absence of such consent, they can limit their contribution to the amount which they would have to make available without this extension.

50. The compensation scheme in the above examples is illustrated by the following Table:

Source of funds	Distribution of compensation (million SDRs)					
	<u>Without Joint Protocol</u>		<u>With Joint Protocol</u>			
			With consent		Without consent	
	B	V	BP	VP	BP	VP
1	2	3	4	5	6	7
B(P)-operator's financial security	100	–	50	50	50	50
Public funds of B(P)	75	–	75	–	75	–
Public funds of all Parties to BSC	25	–	75	–	25	–
TOTALS	200	–	200	50	150	50

A comparison between the two examples shows that in case of collective consent (columns 4 and 5), the additional public funds to be made available by all Contracting Parties to the Brussels Supplementary Convention, namely SDR 75 million instead of 25 million, correspond to the damage suffered in V. In other words, although these funds are used exclusively to compensate damage suffered in the territory of a Contracting Party to the Brussels Supplementary Convention, they serve indirectly to cover damage falling outside the scope of that convention. In case of collective refusal of such consent (columns 6 and 7), the result would be that the damage suffered in BP amounting to

SDR 200 million would not be fully compensated under the system of the Brussels Supplementary Convention, unless additional public funds were made available by the Installation State BP.

51. The NEA Group of Governmental Experts examined this problem and agreed that the solidarity among the Contracting Parties to the Brussels Supplementary Convention should be maintained by requesting them to give their collective consent to such extension according to Article 14(b) of the Brussels Supplementary Convention. This consent should be given by all Contracting Parties regardless of whether or not they have ratified the Joint Protocol. To request such consent only from the Parties to the Protocol would create two classes of Contracting Parties to the Brussels Supplementary Convention and run counter to the principle of collective intervention and thus against the interest of the largest possible adherence to the Joint Protocol by those Parties.

52. Article 14(b) of the Brussels Supplementary Convention does not prescribe any particular form which the required consent should take, nor does it specify the point in time at which this consent should be given (for example adoption of the relevant legislation, date of the nuclear incident, date of the request to the other Contracting Parties to make available their public funds). The NEA Group of Governmental Experts reported this effect of the Joint Protocol on the Brussels Supplementary Convention to the Steering Committee for Nuclear Energy and recommended that the latter report in turn to the OECD Council which would be invited to “take note of the declared intention of the governments of all Contracting Parties to the Brussels Supplementary Convention to undertake the necessary steps to give their consent, according to Article 14(b) of that convention, to the extension of the scope of application of the Paris Convention resulting from the Joint Protocol”. Although not expressly stated, there is an understanding that the consent should actually be given no later than the entry into force of the Protocol. In order to ensure that this situation will be maintained in the future, the Group of Governmental Experts recommended further that states which are currently signatories of the Brussels Supplementary Convention but have not yet ratified it declare the intention to give this consent when ratifying the convention. Finally, in the same spirit, the Contracting Parties and Signatories of the Brussels Supplementary Convention should declare that they will require, as a condition for their assent to accessions to the convention according to its Article 22(b), that any government requesting accession to the convention will have given such consent. At its meeting of 28 April 1989, the Steering Committee for Nuclear Energy supported these recommendations. The OECD Council is expected to take note of the declarations in the near future.

Effects of the Joint Protocol on the Brussels Supplementary Convention in certain transport cases

53. In case of nuclear incidents occurring in nuclear installations, the operation of the Brussels Supplementary Convention will not be affected by the Joint Protocol: the applicable convention will always be that to which the state is a party within whose territory the installation concerned is situated [Article III.2 of the Joint Protocol]. If this state is a Party to the Paris Convention and to the Brussels Supplementary Convention, the latter will apply only to damage suffered in the territories of its Contracting Parties, although public funds may have to be made available at an earlier stage as pointed out above.

54. In certain cases involving the transport of nuclear material, on the other hand, the operation of the Joint Protocol may result in the inapplicability of the Brussels Supplementary Convention. As explained in paragraphs 15 and 28 above, the transport provisions of either convention relating to Contracting Parties are made applicable by means of Articles III and IV of the Joint Protocol, so that those concerning non-Contracting states are no longer relevant between Parties to the Joint Protocol.

The consequences of this principle are illustrated by the following examples dealing with situations without the Joint Protocol in force (a) and with the Joint Protocol in force (b) respectively:

- a) The operator of a nuclear installation situated in B sends nuclear material to a nuclear operator in V. Before the substances are unloaded from the means of transport, a nuclear incident occurs in B and causes damage in B. The B-operator is liable for the damage suffered in B according to Article 4(a)(iv) of the Paris Convention and compensation for that damage is to be paid under the Brussels Supplementary Convention as the conditions of its Article 2(a) are met (see Annex I, case B3, column 5).
- b) On the other hand, if in the above example the nuclear material is sent from a BP-operator to a VP-operator (both installation states are thus party to the Joint Protocol which is in force), the unloading from the means of transport is irrelevant. Which of the two operators is liable is determined by the express terms of a contract in writing (the normal case) or by the taking charge of the nuclear material. If the VP-operator has assumed liability in writing or taken charge of the material before the incident in B occurred, he is liable according to Article II.1(c)(i) or (ii) of the Vienna Convention in conjunction with Article III of the Joint Protocol. Consequently, the Brussels Supplementary Convention is inapplicable, as there is no operator liable under the Paris Convention, a condition for the application of the Brussels Supplementary Convention according to its Article 2 (see Annex I, case B3, column 8).

The Joint Protocol will thus make it possible to render the Brussels Supplementary Convention inapplicable in certain transport cases (including incidents occurring and damage suffered on or above the high seas) when it would be applicable without the Protocol being in force.

55. The example given in paragraph 54(b) above may appear rather theoretical if one looks at the present parties to either convention and the extent of trade in nuclear material, if any, between them. However, it will gain practical importance if the Joint Protocol fulfills the hope of attracting more adhesions to the Vienna Convention, particularly in Europe. In this case, the Contracting Parties to the Brussels Supplementary Convention would be ill-advised if they did not take measures to preserve its application in the interest of their nationals. The public in those countries will hardly understand that the ratification of the Joint Protocol as a means to enhance the enlargement of the international nuclear liability regime might be counterproductive in depriving potential victims of a nuclear incident of additional compensation.

56. In order to resolve this problem, the Contracting Parties to the Brussels Supplementary Convention could agree to make public funds available in case the convention were applicable according to its Article 2 but for the fact that an operator of a nuclear installation is liable according to the Vienna Convention in conjunction with Article III of the Joint Protocol and the VP-operator's financial security (and possibly public funds made available by the operator's Installation State) proves to be insufficient to cover the nuclear damage in BP. However, this solution would deviate from the principle that the Brussels Supplementary Convention is supplementary to, or dependent on, the applicability of the Paris Convention and always presupposes a liable P-operator. For this reason alone, this solution may require an amendment to the Brussels Supplementary Convention. In addition, serious problems would arise as regards the system of intervention of public funds established by the Brussels Supplementary Convention. Articles 10 and 11 of the latter convention set up a well-balanced framework in this respect which works between its Contracting Parties only and would have to be amended if the Installation State of the operator liable is an outsider of that system.

57. The NEA Group of Governmental Experts concentrated therefore on another solution which, without requiring amendments to the Brussels Supplementary Convention, would preserve its application in the example given in paragraph 54(b) above. The consequences for the Brussels Supplementary Convention illustrated by that example could have been avoided if BP had obliged the sending operator under its jurisdiction to assume liability by contract for any nuclear damage which may be caused by a nuclear incident occurring during carriage of nuclear material between his installation and installations of a VP-operator and for which the Brussels Supplementary Convention would be applicable. This solution would fit into the concept of Article III of the Joint Protocol. By making the BP-operator liable, the Paris Convention and consequently the Brussels Supplementary Convention would be rendered applicable. In practice, this would mean that the BP-operator must assume liability as long as nuclear material sent to or from his installation remains on the territory of Contracting Parties to the Brussels Supplementary Convention (the latter being inapplicable to incidents occurring in non-Contracting states). In addition, the BP-operator must assume liability in case of transport on or over the high seas in order to preserve the applicability of Article 2(a)(ii)(2) and (3) of the Brussels Supplementary Convention. The proposal was therefore made that the Contracting Parties to the Brussels Supplementary Convention which ratify the Joint Protocol should take appropriate measures to ensure that the operators of nuclear installations, or carriers under their jurisdiction, assume liability in all cases involving transport of nuclear substances between such installations and those of operators situated in the territory of Contracting Parties to the Vienna Convention and to the Joint Protocol, to the extent that nuclear incidents occurring during the transport would, were it not for the operation of the Joint Protocol, lead to the application of the Brussels Supplementary Convention according to its Article 2.

58. It is true that imposing the assumption of liability on the P-operator limits the freedom of contractual arrangements between P- and V-operators made possible by Article III.3 and IV of the Joint Protocol. The proposed solution returns in practice to the situation existing before the entry into force of the Joint Protocol where the sending or receiving P-operator is liable according to the provisions on carriage to or from non-Contracting States [see the example in paragraph 54(a) above]. The return to the situation *ex ante* would, however, be limited as the P-operator would not be obliged to assume liability during the entire carriage but only until, or from the moment where, the conditions related to the place of the nuclear incident and the damage suffered specified in Article 2 of the Brussels Supplementary Convention would be met. The infringement on the freedom of contract following from the proposal would not appear to be contrary to the letter and spirit of the Paris Convention as paragraph 32 of the Exposé des Motifs allows such measures to be taken by the Contracting States.¹³

59. As regards the legal form of the solution, the NEA Group of Governmental Experts preferred that consisting of a recommendation of the OECD Council. This proposal was submitted to the Steering Committee for Nuclear Energy which approved it at its meeting of 28 April 1989 and invited the OECD Council to adopt the recommendation. The Council is expected to do so in the near future.

60. As soon as the Joint Protocol has entered into force and its practical application comes into play, it is important that all Contracting Parties to the Brussels Supplementary Convention which are also Parties to the Joint Protocol have taken the proposed measures. If one or more of them were not to

13. Paragraph 32 of the Exposé des Motifs (which remained unchanged when the 1982 Protocol was adopted) reads as follows: "For transport of nuclear substances to or from installations situated in its territory, a Contracting Party may require the operators of the installations for whom the substances are carried from abroad to take the substances in charge the moment the substances reach its territory or even earlier. Similarly, in the case of nuclear substances sent by operators of nuclear installations in its territory to a foreign destination, a Contracting Party may require that the nuclear substances shall remain in the charge of such operators until they have left its territory or even longer".

follow the recommendation, the uniformity of the application of the Brussels Supplementary Convention and the solidarity between Contracting Parties might be jeopardised. There might indeed be cases leading to different treatment of victims and creating two classes of Parties to the Brussels Supplementary Convention, as shown by the following example: The Joint Protocol has entered into force. An operator of a nuclear installation situated in a Contracting Party to the Brussels Supplementary Convention and to the Joint Protocol (BP) receives nuclear material from an operator of a nuclear installation situated in a Contracting Party to the Vienna Convention and to the Joint Protocol (VP). The VP-operator has assumed liability during the entire transport. A nuclear incident occurs on the territory of BP and causes damage in BP as well as in another Contracting Party to the Brussels Supplementary Convention which has not ratified the Joint Protocol (B). As regards the relationship between BP and VP, the Vienna Convention is applicable by virtue of Article III.3 of the Joint Protocol. The Brussels Supplementary Convention is inapplicable as there is no operator liable under the Paris Convention [Article 2(a)(i) Brussels Supplementary Convention]. The total amount of compensation is determined by the VP-operator's national legislation. If the operator's financial security is exhausted, the legislation of BP could provide for additional compensation, but the other Contracting Parties to the Brussels Supplementary Convention are not obliged to intervene with their public funds according to Article 3(b)(iii) Brussels Supplementary Convention. The legal situation is different as regards the relationship between BP and B. As B has not ratified the Joint Protocol, the assumption of liability by the VP-operator does not come into play; for B the nuclear substances have been sent from a person within the territory of a non-Contracting State so that the BP-operator is liable according to Article 4(b)(iv) of the Paris Convention. Consequently, the Brussels Supplementary Convention is applicable so that the victims in B can claim the full benefits of the Brussels Supplementary Convention which might put them in a much better position than the victims in BP. This example shows that there are two operators liable for damage resulting from one and the same nuclear incident – the VP-operator for damage in BP and the BP-operator for damage in B. This result runs clearly counter to the intention of the Joint Protocol to avoid the simultaneous application of the Vienna Convention and of the Paris Convention and could have been avoided if BP had taken measures recommended.

Conclusions and outlooks

61. It took 25 years from 1963 to 1988 to settle the relationship between the two conventions, but after consideration of this problem had been resumed in 1986 a result achieved in the remarkably short period of two years. The task was facilitated by the solid groundwork already laid between 1972 and 1975. The Chernobyl accident occurred after the new initiatives taken by the IAEA in 1984 and 1985 but demonstrated the importance of the problem and helped to accelerate the work with the continuous support of the governing bodies of the IAEA and OECD/NEA.

62. At first sight, the present number of 20 signatures apposed to the Joint Protocol looks impressive; it represents about two-thirds of the 31 states entitled to sign according to Article V. A closer look reveals however that the signatories are unevenly divided between those of the respective conventions. As regards the Paris Convention, the Joint Protocol was signed by 13 Contracting Parties (this includes all Contracting Parties to the Brussels Supplementary Convention, except France) and one signatory (Switzerland) i.e. 14 out of 17 or 82% of possible candidates. On the other hand, only six signatories of the Vienna Convention (60%) were in a position to sign so far. None of the Eastern European countries with centrally planned economy took the opportunity to sign the Vienna Convention on 21 September 1988 which would have qualified them for signature of the Joint Protocol.

63. Adhesion to the Vienna Convention by those countries is indeed a *conditio sine qua non* for the success of the Joint Protocol. Representatives of the Contracting Parties to the Paris Convention have made it abundantly clear that they would consider ratification of the Joint Protocol only if that condition is met. Annex II shows the difference between nuclear power plants covered by the Paris Convention on the one hand and by the Vienna Convention on the other. The geographically almost closed group of Parties to the Paris Convention/ Brussels Supplementary Convention contrasts with the dispersed Parties to the Vienna Convention, most of which are far from each other and use nuclear energy for peaceful purposes to a far less extent than the first group of countries. This difference is particularly striking in densely populated Europe where the “white patches on the map” indicate a clear borderline between East and West. This situation, which was presumably one of the reasons that prevented Parties to the Paris Convention from ratifying the Vienna Convention, still exists, with the exception of Yugoslavia which ratified the Vienna Convention in 1977. Paragraph 3 of the Exposé des Motifs to the Paris Convention states: “The effects and repercussions of a nuclear incident will not stop at political or geographical frontiers and it is highly desirable that persons on one side of the frontier should be no less protected than persons on the other side.” The Chernobyl incident has confirmed this forecast along with the urgent need for general acceptance of an international civil liability regime. As a first step in this direction, ratification of the Vienna Convention by a large number of countries, in particular in Eastern Europe, is highly desirable. The General Conference of the IAEA expressed the hope on 28 September 1984 that more Member States would consider becoming parties to the convention.¹⁴ This hope has so far been deceived.

64. There are some other problems to be resolved. The Vienna Convention has to be modernised; above all, the present gold-based unit of account needs to be replaced by the SDR of the IMF in order to bring the Vienna Convention in line with the 1982 Protocol amending the Paris Convention and this to provide common “currency” within the framework of the Joint Protocol. According to Article XXVI of the Vienna Convention, the convocation of a revision conference requires the request from one-third of the Contracting Parties, i.e. actually four. Some Parties have shown an interest in such a conference, but no official steps have been taken thus far. Second, the Contracting Parties to the Brussels Supplementary Convention will have to take the recommended measures; it is hardly conceivable that their parliaments will consider ratification of the Joint Protocol if there is a risk that it will render the Brussels Supplementary Convention inapplicable and thus lead to depriving potential victims of their benefits.

65. The adoption of the Joint Protocol is indeed a remarkable achievement, but this bridge between the two conventions will be opened only after its entry into force, and a lot of water may still have to flow under it before this will happen. The many years it took for the entry into force of the Paris Convention (eight years), the Brussels Supplementary Convention (11 years), the Vienna Convention (14 years) and the 1982 Protocol amending the Paris Convention (six years) is not particularly encouraging in this respect, let alone the obstacles mentioned above. Some cautious optimism will be in place if the Joint Protocol fulfills the hope of attracting more adhesions to the Vienna Convention. Even after the Protocol has entered into force, the bridge will be rather small as in the beginning it will only link five Contracting Parties to either convention, and complications could arise through outsiders, i.e. those Contracting Parties to the Paris Convention/Brussels Supplementary Convention or Vienna Convention which have not ratified the Joint Protocol. The bridge will pass its full load test only if it is accepted as a means of creating a unified civil liability regime at least in Europe.

14. IAEA document GC(XXVIII)/RES/431, reproduced in *Nuclear Law Bulletin* No. 34, p. 51.

ANNEX I

			Applicable Conventions					
			Without Protocol		With Protocol			
			PC/VC without Territorial extension	BSC	PC/VC	BSC applicable?		
P-operator liable	V-operator liable							
Cases	Place of Incident ¹⁵	Place of Damage	4	5	6	7	8	
1	2	3	4	5	6	7	8	
A Fixed Installations	(1)	P	V	None	No	PC	No	-
	(2)	V	P	None	No	VC	-	No
	(3)	P	P + V	PC to damage in P	To damage in P	PC	To damage in P	-
	(4)	V	V + P	VC to damage in V	No	VC	-	No
B Direct Transport P->V V->P	(1)	High seas	High seas	Both	Yes	PC or VC	Yes	No
	(2)	High seas	High seas P and/or V	PC + VC to damage on high seas PC to damage in P, VC to damage in V	To damage on high seas and in P	PC or VC	To damage on high seas and in P	No
	(3)	P	P	PC	Yes	PC or VC	Yes	No
	(4)	V	V	VC	No	PC or VC	No	No
	(5)	V	P	None	No	PC or VC	No	No
	(6)	P	V	None	No	PC or VC	No	No
	(7)	P	P + V	PC to damage in P	To damage in P	PC or VC	To damage in P	No
	(8)	V	P + V	VC to damage in V	No	PC or VC	No	No
	(9)	P or V	P + V	PC to damage in P VC to damage in V	To damage in P	PC or VC	To damage in P	No
C Transit V->P->V	(1)	V	V	VC	No	VC	-	No
	(2)	V	P	Non	No	VC	-	No
	(3)	V	V + P	VC to damage in V	No	VC	-	No
	(4)	P	P	None	No	VC	-	No
	(5)	P	V	None	No	VC	-	No
	(6)	P	V + P	None	No	VC	-	No
P->V->P	(7)	P	P	PC	Yes	PC	Yes	-
	(8)	P	V	None	No	PC	No	-
	(9)	P	P + V	PC to damage in P	To damage in P	PC	To damage in P	-
	(10)	V	V	None	No	PC	No	-
	(11)	V	P	None	No	PC	No	-
	(12)	V	P + V	None	No	PC	No	-

15. In transport cases it is assumed for the result referred to in column 4 that the nuclear incident occurred before the nuclear substances had been loaded onto or unloaded from the means of transport. [See Articles 4(a)(iv) and (b)(iv) PC, Article II.1(b)(iv) and (c)(iv) VC].

ANNEX II

Nuclear Liability Conventions and Nuclear Power Plants

Situation in January 1989
Source: Atomwirtschaft March 1989

	Power plants		Capacity	
	Number	%	MWe (gross)	%
A Worldwide				
Total	414	100.00	331 094	100.00
Covered by VC	3	0.72	1 652	0.50
Covered by PC/BSC	139	33.58	118 467	35.78
Not covered by Conventions ¹⁶	272	65.70	210 975	63.72
B Europe (incl. USSR)				
Total	223	100.00	170 026	100.00
Covered by VC	1	0.45	664	0.39
Covered by PC/BSC	139	62.33	118 467	69.68
Not covered by conventions ¹⁷	83	37.22	50 895	29.93

16. Brazil (1 plant/657 MWe), Canada (18/12381), India (6/1330), Japan (38/29445), Korea, Rep of (8/6758), Pakistan (1/137), South Africa (2/1930), Taiwan (6/5144), USA (109/102298), Europe, see below (83/50895).

17. Bulgaria (5/2760), CSSR (8/3520), German Democratic Republic (5/1830), Hungary (4/1760), Switzerland (5/3034), USSR (56/37991).