

The Compensation Convention: Path to a Global Regime for Dealing with Legal Liability and Compensation for Nuclear Damage

by Ben McRae*

Introduction

The adoption of the Convention on Supplementary Compensation for Nuclear Damage (Compensation Convention) opens a new chapter in international nuclear liability law. The Compensation Convention provides the world community with the opportunity to deal with legal liability and compensation for nuclear damage through a global regime that includes all countries that operate nuclear power plants (nuclear power generating countries) and most countries that do not operate nuclear power plants (non-nuclear power generating countries). Such a global regime can remove legal uncertainty as an impediment to (1) ensuring the highest level of safety in nuclear activities and (2) arranging international co-operation in nuclear projects, while guaranteeing the availability of meaningful compensation in the event of a nuclear incident.

This article describes the features of the Compensation Convention that create the opportunity for a global regime. It also discusses some of the provisions in the convention that underlie these features.

Features of the Compensation Convention

Free-standing

The Compensation Convention is a free-standing instrument open to all states. As a free-standing instrument, it offers a country the means to become part of the global regime without also having to become a member of the Paris Convention¹ (Paris State) or the Vienna Convention² (Vienna State).³

* This article was initially published in *Nuclear Law Bulletin* No. 61 (1998). Ben McRae is Assistant General Counsel for Civilian Nuclear Programs in the Office of General Counsel, US Department of Energy. Facts given and ideas expressed in this article are the responsibility of the author alone.

1. The 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy.
2. The 1963 Vienna Convention on Civil Liability for Nuclear Damage, including the amended version established by the 1997 Protocol to Amend the Vienna Convention. Where a reference only refers to the original version or the amended version, the terms “existing Vienna Convention” and “revised Vienna Convention” are used, respectively.
3. Although the Compensation Convention is free-standing with respect to other liability conventions, it is not entirely free-standing. Article XVIII.1 requires a country with one or more civil nuclear power plants on its territory to be a member of the Convention on Nuclear Safety in order to be a member of the Compensation Convention (a member country). Unless otherwise identified, cited articles are those of the Compensation Convention, including the annex.

The free-standing nature of the Compensation Convention is important because many nuclear power generating countries and most non-nuclear power generating countries are not members of the Paris Convention or the Vienna Convention. Of the ten countries with the largest amount of installed capacity⁴ (Canada, France, Germany, Japan, the Republic of Korea, the Russian Federation, Sweden, Ukraine, the United Kingdom, and the United States), only half (France, Germany, Sweden, Ukraine, and the United Kingdom) are either Paris States or Vienna States and only one (Sweden) is a member of the Joint Protocol⁵ that links the Paris Convention and the Vienna Convention. Overall, those nuclear power generating countries that do not belong to the Paris Convention or the Vienna Convention account for more than half of worldwide installed capacity.

The Compensation Convention makes a global regime possible by providing the basis for treaty relations to link Paris States and Vienna States with those countries that do not belong to either liability convention but are willing to accept the basic principles of nuclear liability law in the context of the Compensation Convention.

Balance

Many countries, and especially non-nuclear power generating countries, have been unwilling to join the Paris Convention or the Vienna Convention because they perceive these conventions as not focusing sufficiently on the concerns of those who might suffer nuclear damage in the event of a nuclear incident. The Compensation Convention maintains the basic principles of nuclear liability law set forth in the Paris Convention and the Vienna Convention, while including provisions to ensure more meaningful compensation for nuclear damage. This more balanced approach is fundamental to attracting the broad adherence necessary for a global regime.

Enhancements

The Compensation Convention addresses many of the issues that have discouraged many countries from joining the Paris Convention or the Vienna Convention. Specifically, the Compensation Convention contains enhanced provisions on the amount available to compensate nuclear damage, the definition of nuclear damage, and the treatment of maritime nuclear incidents.

Many countries, and especially non-nuclear power generating countries, are unwilling to enter into treaty relations on the basis of the compensation amounts potentially available under the Paris Convention and Vienna Convention.⁶ The Compensation Convention addresses these concerns by

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4. Installed capacity refers to the thermal power (expressed in Megawatts) of a nuclear power plant authorised by the competent national authorities. See Articles I(j) and IV.2 for the definition of installed nuclear capacity and for the use of that definition in determining contributions to the international fund.
 5. The 1988 Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention. The Joint Protocol is not a free-standing instrument since it requires membership in either the Paris Convention or the Vienna Convention. Although the Joint Protocol has not proven to be the basis for a global regime, it has demonstrated the potential to create a regional arrangement among European nuclear power generating countries. Efforts to link Paris States and Vienna States through the Joint Protocol and to create a global regime through the Compensation Convention are compatible since a Paris State or a Vienna State can be a member of both the Joint Protocol and the Compensation Convention.
 6. Article 7 of the Paris Convention permits a Paris State to limit the liability of an operator (and thus the amount of compensation available) to SDR 15 million. The OECD Steering Committee for Nuclear Energy, which is empowered to adopt recommendations concerning the Paris Convention, has

providing for a substantial increase in the amount that is guaranteed to be available to compensate nuclear damage. First, it requires a member country to ensure the availability of at least SDR 150 million to compensate nuclear damage during the period prior to 29 September 2007, and at least SDR 300 million thereafter. Second, it provides for an international fund of approximately SDR 300 million to supplement the compensation available under national law.⁷ And third, one-half of the international fund is reserved exclusively for transboundary damage.⁸

The Compensation Convention responds to longstanding concerns over the definition of nuclear damage by explicitly identifying the types of damage that are considered nuclear damage. In addition to personal injury and property damage, the enhanced definition includes five categories of damage relating to impairment of the environment, preventive measures, and economic loss. The definition is clear that these additional categories are covered to the extent determined by the law of the competent court.⁹ The enhanced definition thus provides certainty that the concept of nuclear damage includes impairment of the environment, preventive measures, and certain economic loss, while recognising that detailed implementation of this concept is best left to national law.

The Compensation Convention recognises the concerns of coastal states over maritime shipments of nuclear material by providing the courts of a member country with exclusive jurisdiction over a nuclear incident that occurs within its exclusive economic zone (EEZ).¹⁰ The Compensation Convention is clear that this jurisdictional rule is intended only for determining which member countries' courts have jurisdiction for the purposes of the convention (that is, adjudicating claims for

recommended that Paris States limit the liability of an operator to no less than SDR 150 million, but several Paris States have not implemented this non-binding recommendation fully. Article V of the existing Vienna Convention permits an existing Vienna State to limit the liability of an operator to 5 million 1963 United States gold dollars (approximately SDR 60 million). Article V of the revised Vienna Convention permits a revised Vienna State to limit the liability of an operator to SDR 100 million during the first fifteen years after the revised Vienna Convention enters into force and thereafter to limit the liability of an operator to SDR 300 million. The revised Vienna Convention has not yet entered into force.

7. For purposes of this article, unless otherwise specified, references to the amount of compensation available assume that the Installation State has elected to make SDR 300 million available under its national law as the first tier amount and that the international fund provides SDR 300 million as the second tier amount. The exact size of the fund will depend on the installed capacity of the member countries at the time of the nuclear incident that triggers the operation of the fund. See Article IV.2. When most nuclear power generating countries join the Compensation Convention, the fund will provide approximately SDR 300 million.
8. Transboundary damage means damage outside the Installation State, which is the country responsible for regulating the liable operator. See Article XI.1(b). Thus, with respect to a nuclear incident at a nuclear installation, transboundary damage means damage outside the country where the incident occurs. However, with respect to a nuclear incident during transportation outside the Installation State, transboundary damage would include damage in the country where the incident occurs.
9. Article I(k) defines law of the competent court as the national law of the member country whose courts have jurisdiction over a nuclear incident, including any rules relating to conflict of laws. Article I(k) corresponds to Article I.1(e) of the Vienna Convention. See also, Article 14(b) of the Paris Convention.
10. The EEZ is a relatively recent concept in the Law of the Sea that recognises the interest of a coastal state in the maritime area adjacent to its territorial sea. In general, an EEZ is the maritime area between the boundary of a country's territorial sea and 200 miles offshore. An EEZ is not considered part of a country's territory. The Paris Convention and the existing Vienna Convention predate the development of the EEZ concept and thus do not address it. The revised Vienna Convention addresses the EEZ concept in the same manner as the Compensation Convention.

nuclear damage resulting from a nuclear incident). The rule does not permit any exercise of jurisdiction that is inconsistent with the Law of the Sea.

Consistency

The Compensation Convention is consistent with the basic principles of nuclear liability law set forth in the Paris Convention and the Vienna Convention, such as (1) channeling all legal liability for nuclear damage exclusively to the operator, (2) imposing absolute liability¹¹ on the operator, (3) granting exclusive jurisdiction to the courts of the country where a nuclear incident occurs, and (4) limiting liability in amount and in time. The Compensation Convention achieves this consistency by requiring a member country to be either a Paris State or a Vienna State or to have national legislation consistent with the provisions of the Annex to the Compensation Convention (that is, to be an Annex State). The provisions of the annex set forth the basic principles of nuclear liability law in the same manner as the Paris Convention and the Vienna Convention.

Compatibility

To the maximum extent practicable, the Compensation Convention has been developed to be compatible with the Paris Convention and the Vienna Convention.¹² As a result, no change in the Paris Convention or the Vienna Convention is needed in order for a Paris State or a Vienna State to join the Compensation Convention. A Paris State or a Vienna State would have to change its national law only to the extent necessary to reflect the provisions in the Compensation Convention that apply to all member countries. These provisions include (1) ensuring the availability of at least SDR 150 million to compensate nuclear damage until 2007, and at least SDR 300 million thereafter, (2) implementing the enhanced definition of nuclear damage, and (3) extending coverage to include all members countries. None of these actions would be inconsistent with the Paris Convention or the Vienna Convention. Annex States would have to take similar actions, as well as ensure their national laws were consistent with the basic principles of nuclear liability law set forth in the Annex.

The Compensation Convention also takes into account the special situation of the United States whose national law on legal liability and compensation for nuclear damage predates both the Paris Convention and the existing Vienna Convention.¹³ Although the national law of the United States is generally consistent with the basic principles of nuclear liability law set forth in the Paris Convention and the Vienna Convention, it uses a different legal theory to achieve the same practical result of

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11. Absolute liability means that liability is imposed without the need to demonstrate fault or negligence.
 12. The relationship of the Compensation Convention to the Brussels Convention is beyond the scope of this article. However, discussions during the development of the Compensation Convention indicated that it might be possible to use the Brussels Convention either to supply part of the first tier of compensation required by the Compensation Convention (that is, the Brussels Convention could act as a regional pooling arrangement to assist Brussels States in ensuring the availability of SDR 300 million under their national laws) or to provide compensation in addition to that provided under the Compensation Convention (that is, the Brussels Convention could be used to compensate nuclear damage in Brussels States that was not fully compensated through the operation of the Compensation Convention). Article XII.3(a) provides for both possibilities.
 13. The United States national law is the Price-Anderson Act, which is section 170 of the Atomic Energy Act of 1954. The Price-Anderson Act was adopted in 1957 and currently provides the basis for commercial arrangements that cover more than 100 nuclear power plants in the United States.

making the operator exclusively responsible for nuclear damage.¹⁴ This difference prevents the United States from satisfying all the requirements of the Paris Convention or the Vienna Convention and thus becoming a Paris State or a Vienna State.

The Compensation Convention addresses this situation through Article 2 of the annex (the “grandfather clause”) under which the national law of the United States is deemed to satisfy certain requirements of the annex. By permitting the United States to join the Compensation Convention as an Annex State, the grandfather clause removes a major impediment to achieving a global regime.¹⁵

Major provisions of the Compensation Convention

Compensation

The Compensation Convention provides for a substantial enhancement in the compensation of nuclear damage as compared to the Paris Convention and the Vienna Convention. Specifically, the Compensation Convention will guarantee the availability of approximately SDR 600 million to compensate nuclear damage, of which approximately SDR 150 million will be reserved exclusively for transboundary damage.

Article III.1(a) provides that the Installation State must ensure the availability of the first tier of compensation. The Compensation Convention does not specify how a country should ensure the availability of the first tier amount. Thus, a country has the flexibility to choose the funding mechanism from options such as private insurance, an operator pool, or a regional agreement.¹⁶ Although a country does have the obligation to use public funds to ensure the availability of the first tier amount if other funding mechanisms are insufficient, there is no obligation to set aside any public funds for this purpose prior to the time, if ever, that the first tier amount is needed to compensate nuclear damage.

Article III.1(a)(i) establishes SDR 300 million as the first tier amount. Article III.1(a)(ii), however, permits a country to establish a transitional first tier amount of no less than SDR 150 million during the period prior to 29 September 2007. This transitional amount reflects the current availability of private insurance and the liability limits in many existing national laws.

Article III.1(b) provides that the second tier of compensation will come from an international fund to which member countries contribute. This international fund should provide approximately SDR 300 million to compensate nuclear damage if its operation is triggered by a nuclear incident.

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14. The primary difference between the national law of the United States and the provisions of the Paris Convention and the Vienna Convention relates to how responsibility for nuclear damage is channelled exclusively to the operator. The Paris Convention and the Vienna Convention prescribe legal channelling under which an operator is the only person legally liable for nuclear damage. The national law of the United States provides for economic channelling under which the operator bears all the economic consequences for nuclear damage, even though other persons might be legally liable. Persons other than the liable operator are indemnified if they incur costs because of legal liability.
 15. The United States has been a major proponent of the Compensation Convention as a means to achieve a global regime that includes all nuclear power generating countries and most non-nuclear power generating countries. On 29 September 1997, it became the first country to sign the Compensation Convention.
 16. Article XII.3(a) explicitly recognises the possibility of regional agreements being used to fulfil the funding obligations under Article III.1(a).

Article IV.1(a) establishes a contribution formula under which more than 90% of the contributions come from nuclear power generating countries on the basis of their installed nuclear capacity, while the remaining portion comes from all member countries on the basis of their United Nations rate of assessment.¹⁷ Since nuclear power generating countries generally have high United Nations rates of assessment, this formula should result in more than 98% of the contributions coming from nuclear power generating countries.

Article VII.1 provides that a member country shall make contributions to the international fund only to the extent and when such contributions are actually needed. There is no obligation to set aside public funds for this purpose prior to the time they are needed.

Article IV.1(c) provides for a cap on the contributions from any one member. This cap is intended to ensure that countries with relatively large amounts of installed capacity are not obligated to provide an inordinate share of the international fund during the early stages of the growth to a global regime.¹⁸ To minimise the effects of the cap, Article IV.1(c) provides for the cap to phase-out as more nuclear power generating countries join the Compensation Convention¹⁹ and further provides that the cap shall not operate to benefit the member country that is the Installation State with respect to a nuclear incident that triggers the operation of the fund.

Article XI.1(a) provides that half of the international fund will be used to compensate nuclear damage either in the Installation State or outside the Installation State (transboundary damage).²⁰ Article XI.1(b) provides that the other half of the international fund will be allocated exclusively to cover any transboundary damage not compensated under Article XI.1(a).²¹ The reservation of half of the international fund exclusively for transboundary damage recognises the importance that the international community attaches to compensating transboundary damage. Moreover, it provides an important incentive for joining the Compensation Convention to non-nuclear power countries, as well as any nuclear power generating country that does not expect one of its operators to be responsible for a nuclear incident that triggers the operation of the fund.

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17. Article IV.1(a)(i) provides that each member country with one or more nuclear reactors shall contribute SDR 300 for each Megawatt (thermal) of installed capacity. Article IV.1(a)(ii) provides that an amount equal to ten percent of the contributions under Article IV.1(a)(i) will come from contributions allocated among all member countries on the basis of their United Nations rate of assessment. Article IV.1(b) provides that no contribution will be required from member countries on the minimum United Nations rate of assessment with no nuclear reactors.
 18. Article IV.1(c) provides that the contribution of a member country to the international fund shall not exceed a specified percentage of what the total fund would be in the absence of the cap. The specified percentage is a member country's United Nations rate of assessment expressed as a percentage plus eight percentage points.
 19. Article IV.1(c) provides for the phase-out by increasing the specified percentage as the total installed capacity of member countries increases, that is as more nuclear power generating countries join the Convention. Specifically, the specified percentage increases by one percent when total installed capacity reaches 625 000 Megawatts and thereafter by one percent for each additional 75 000 Megawatts increase in total installed capacity.
 20. Article XI does not use the term "transboundary damage". Instead, Article XI.1(b) refers to "nuclear damage outside the territory of the Installation State."
 21. Article XI.1(c) contains a special rule for the case where an Installation State uses the transition rule in Article III.1(a)(ii) to make available a first tier amount of less than SDR 300 million. In such a case, Article XI.1(c) provides for adjustments in the amounts identified in Article XI.1(a) and (b) that result in more than half of the international fund being reserved exclusively for transboundary damage.

The reservation of half of the international fund exclusively for transboundary damage also reflects the fact a first tier amount of SDR 300 million is considerably lower than many countries would have preferred. In order to give member countries an incentive to provide a larger first tier amount, Article XI.2 eliminates the reservation for transboundary damage if the Installation State ensures the availability of a first tier amount of no less than SDR 600 million. The combination of such a first tier amount and the second tier international fund would make almost SDR 1 billion available to compensate nuclear damage.

Article XII.2 recognises the right of a member country to establish a third tier of compensation in addition to the first and second tiers. With one minor exception, the Compensation Convention does not govern the distribution of this third tier.²²

Definition of nuclear damage

The Compensation Convention enhances the definition of nuclear damage by explicitly identifying the types of damage that are considered nuclear damage.²³ Article I(f) is the same as the definition of nuclear damage in Article I.1(k) of the revised Vienna Convention, which enhances the definition in Article I.1(k) of the existing Vienna Convention. The Paris Convention does not refer to nuclear damage, but incorporates a similar concept through the definition of nuclear incident in Article 1(a) and the identification in Article 3(a) of damage for which the operator is liable. In addition to personal injury and property damage, the enhanced definition identifies five categories of damage relating to impairment of the environment,²⁴ preventive measures,²⁵ and economic loss²⁶ that must be

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22. Article XII.2 provides that a member country cannot use lack of reciprocity as a basis to exclude damage from compensation under the third tier if such damage occurs in another member country having no nuclear installations on its territory.
 23. Article I(f) defines nuclear damage to include: (i) loss of life or personal injury, (ii) loss of or damage to property; and each of the following to the extent determined by the law of the competent court: (iii) economic loss arising from loss or damage referred to in (i) or (ii), insofar as not included in (i) or (ii), if incurred by a person entitled to claim in respect of such loss or damage; (iv) the costs of measures of reinstatement of impaired environment, unless such impairment is insignificant, if such measures are actually taken or to be taken, and insofar as not included in (ii); (v) loss of income deriving from an economic interest in any use or enjoyment of the environment, incurred as a result of a significant impairment of the environment, and insofar as not included in (ii); (vi) the costs of preventive measures, and further loss or damage caused by such measures; and (vii) any other economic loss, other than any caused by the impairment of the environment, if permitted by the general law on civil liability of the competent court. The definition is clear that damage within all these categories, except preventive measures, must be caused by the release of radiation.
 24. Subsections (iv) and (v) of the definition of nuclear damage deal with damage resulting from impairment of the environment. The Compensation Convention does not define impairment of the environment. Article I(g) does define measures of reinstatement as reasonable measures which aim to reinstate or restore damaged or destroyed components of the environment, or to introduce, where reasonable, the equivalent of these components into the environment. Article I(g) requires that the measures be approved by the competent authorities of the state where the measures are taken and that the measures be taken by a person entitled to take such measures under the law of the state where the measures are taken.
 25. Subsection (vi) of the definition of nuclear damage deals with preventive measures. Article I(h) defines preventive measures as reasonable measures taken by a person after a nuclear incident has occurred to prevent or minimise other nuclear damage. The taking of these measures is subject to approval by competent authorities if such approval is required by the law of the state where the measures are taken.
 26. Subsections (iii) and (vii) of the definition of nuclear damage deal with economic loss.

treated as nuclear damage. The definition is clear that national law determines the extent to which these additional categories are covered.

The Compensation Convention also revises the definition of nuclear incident²⁷ to make clear that, in the absence of an actual release of ionising radiation, preventive measures can be taken only in response to a grave and imminent threat of a release of radiation that could cause other types of nuclear damage. The use of the phrase “grave and imminent” makes clear that preventive measures cannot be taken on the basis of speculation that radiation might be released and that some damage might occur. Rather, there must be a credible basis for believing that a release of radiation with severe consequences is impending and likely to occur in the very near future.

The Compensation Convention is explicit that preventive measures and measures of reinstatement relating to impairment of the environment must be reasonable. The importance of reasonableness is confirmed by the inclusion of a definition of reasonable measures.²⁸ This definition is clear that the competent court is responsible for determining whether a measure is reasonable under its national law, taking into account all relevant factors.

Exclusive jurisdiction

Article XIII of the Compensation Convention reaffirms the basic principle of nuclear liability law that exclusive jurisdiction over a nuclear incident lies with the courts of the member country where the incident occurs or with the courts of the Installation State if the incident occurs outside any member country.²⁹ Article XIII is, in effect, the primary linking mechanism in the Compensation Convention because it commits all member countries to recognise the jurisdiction of the courts of other member countries and provides that only one member country’s courts will have jurisdiction over a nuclear incident.³⁰

Article XIII enhances the jurisdiction provisions in the Paris Convention and the existing Vienna Convention by recognising recent developments in the Law of the Sea and the concerns of coastal States over maritime shipments of nuclear material. Specifically, it provides that the courts of a member country will have exclusive jurisdiction over claims for nuclear damage resulting from a

27. Article I(i) defines nuclear incident as any occurrence or series of occurrences having the same origin which cause nuclear damage or, but only with respect to preventive measures, creates a grave and imminent threat of causing such damage. Article I(i) is the same as the definition in Article I.1(l) of the revised Vienna Convention, which enhances the definition in Article I.1(l) of the existing Vienna Convention through the addition of the concluding clause relating to preventive measures. This enhancement is necessary to permit preventive measures to qualify as nuclear damage in the case where there is no release of ionising radiation but there is a grave and imminent threat of such a release. See also, Article 1(a)(i) of the Paris Convention.

28. Article I(l) defines reasonable measures as measures which are found under the law of the competent court to be appropriate and proportionate. In making this determination, the competent court must take into account all the circumstances, including but not limited to: (i) the nature and extent of the damage incurred or, in the case of preventive measures, the nature and extent of the risk of such damage; (ii) the extent to which, at the time they are taken, such measures are likely to be effective; and (iii) relevant scientific and technical expertise.

29. Article XIII corresponds Article XI of the Vienna Convention and Article 13 of the Paris Convention.

30. Article XIII also sets forth the rules on enforcement of judgements. These rules correspond to the rules in Article XII of the Vienna Convention and Article 13 of the Paris Convention.

nuclear incident in its EEZ.³¹ Article XIII is clear that the EEZ jurisdiction is only for purposes of the Compensation Convention and relates only to the adjudication of claims for nuclear damage. Article XIII does not create any rights or obligation concerning actual shipments.

Although Article XIII grants jurisdiction over a nuclear incident to the member country in whose EEZ the incident occurs, the liability of the operator is determined by the national law of the Installation State.³² Since the EEZ is not part of the territory of a coastal state, a member country cannot make transit through its EEZ subject to the acceptance of a higher liability amount.³³

Article XIII was placed in the main body of the Compensation Convention to make clear that Article XIII applies to all member countries and takes precedence over similar jurisdictional provisions in the Paris Convention and the Vienna Convention.³⁴ The likelihood of a different jurisdictional outcome is very slight and can only occur in a situation where a nuclear incident occurs in the territory or EEZ of a member country during the transportation of nuclear material. Giving precedence to the provisions of the Compensation Convention in these situations ensures that jurisdiction will lie with the member country most affected by a nuclear incident, namely the country where the incident occurs.

Scope

Article II.2 restricts the scope of the Compensation Convention to nuclear incidents involving nuclear installations used for peaceful purposes. The Compensation Convention establishes no rights or obligations with respect to military installations.

Article XV makes it clear the Compensation Convention deals only with civil liability. It does not address or affect the rights and obligations, if any, of a member country under the general rules of public international law.³⁵

Article III.2(a) provides that the first tier amount shall be distributed equitably without discrimination on the basis of nationality, domicile or residence.³⁶ Article III.2(a), however, permits the exclusion of nuclear damage in a non-member country from compensation under the first tier

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31. Article XIII provides that if the exercise by a member country of jurisdiction over nuclear damage resulting from a nuclear incident in its EEZ is inconsistent with its obligations under the Paris Convention or the Vienna Convention to a non-member country, then jurisdiction shall be determined as if the nuclear incident occurred outside the territory or the EEZ of any member country.
 32. Article 7(d) of the Paris Convention, Article V of the Vienna Convention, and Article 6.1 of the annex provides that the maximum amount of liability of the operator shall be governed by the national law of the Installation State.
 33. See Article 7(e) of the Paris Convention and Article 6.2 of the annex, which provide for the possibility of a higher liability amount in the case of transit through the territory of a Contracting Party.
 34. The Vienna Convention on the Law of Treaties deals with this issue in Article 30 on the application of successive treaties relating to the same subject matter. The rules in Article 30 are clear that a member country will be bound by the jurisdictional provisions in the Compensation Convention rather than the corresponding provisions in the Vienna Convention or the Paris Convention.
 35. Article XV corresponds to Article XVIII of the Vienna Convention.
 36. Article III.2(a) corresponds to Article XIII of the Vienna Convention and Article 14 of the Paris Convention.

amount.³⁷ A Paris State or a Vienna State that is a non-member country cannot be excluded to the extent such an exclusion would be inconsistent with the treaty obligations of the Installation State under the Paris Convention or the Vienna Convention.

Article III.2(b) provides that the second tier amount shall be distributed equitably without discrimination on the basis of nationality, domicile or residence, subject to the conditions in Article V on the geographic scope of nuclear damage covered by the second tier.³⁸ Specifically, nuclear damage must be suffered (1) in the territory of a member country, (2) in or above the EEZ of a member country or on the continental shelf of a member country in connection with the exploitation or exploration of natural resources therein, or (3) (a) in or above maritime areas beyond the territorial sea of any country and (b) (i) by a national of a member country or (ii) on board or by a ship flying the flag of a member country, or on board or by an aircraft registered in the territory of a member country, or on or by an artificial island, installation or structure under the jurisdiction of a member country.

Annex

Article II.3 makes it clear that the annex constitutes an integral part of the Compensation Convention. The provisions of the Annex, however, only apply to those member countries that join the Convention as Annex States.

The introduction to the annex obligates a member country that is not a Paris State or a Vienna State to ensure its national law is consistent with the provisions of the annex. The introduction permits the provisions of the annex to be incorporated directly into the national law of a member country as self-executing treaty obligations to the extent a member country recognises this concept. It also provides that a member country with no nuclear installations on its territory is required to have only those provisions in its national law that are necessary for that country to give effect to its obligations under the Compensation Convention.

Article 1 of the annex sets forth certain definitions for use in applying the provisions of the Annex.³⁹ The definitions in Article I of the Compensation Convention also apply to the annex.⁴⁰

Article 2 of the annex is the grandfather clause. Article 2.1 deems the provisions in Articles 3, 4, 5 and 7 of the annex to be satisfied so long as certain conditions were met on 1 January 1995 and

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37. Article III.2(a) provides that the national law of the Installation State determines the extent, if any, to which nuclear damage in non-member countries is excluded.
 38. Article III.2(b) also recognises that Article XI.1(b) reserves a portion of the second tier amount exclusively for transboundary damage if the Installation State establishes a first tier amount of less than SDR 600 million.
 39. These definitions are the same as the corresponding definitions in Article I of the Vienna Convention.
 40. The definitions in Article I apply to all the provisions in the Compensation Convention, including the annex. The definitions of nuclear damage and nuclear incident in Article I are the same as the corresponding definitions in the revised Vienna Convention and represent an enhancement of the definitions in the existing Vienna Convention. The definitions in Article I apply to all member countries, whether they are Paris States, Vienna States, or Annex States. Thus, the enhanced definitions of nuclear damage and nuclear incident must be implemented by all member countries, including Paris States and existing Vienna States.

continue to be met with respect to nuclear incidents involving certain specified nuclear installations.⁴¹ In general, these conditions are that (1) absolute liability applies in the event there is substantial nuclear damage off the site where a nuclear incident occurs, (2) all persons other than the liable operator are indemnified for any legal liability they might incur, and (3) compensation for nuclear damage is available in an amount of no less than SDR 1 billion for a nuclear incident at a civil nuclear power plant and in an amount of no less than SDR 300 million for a nuclear incident at any other nuclear installation.

Although the grandfather clause does not refer specifically to the United States, it is the only country that met the conditions set forth in Article 2.1 on 1 January 1995 and thus the only country that can use the grandfather clause to qualify as an Annex State. Moreover, since the conditions in the grandfather clause only apply to a country that is making use of the clause to qualify as an Annex State, these conditions apply to no Annex State other than to the United States.

For the most part, the substantive provisions in Articles 3-11 of the Annex repeat the comparable provisions in the Vienna Convention and the Paris Convention. To the extent practicable, Articles 3-11 consolidate overlapping provisions in the Vienna Convention and the Paris Convention and elucidate the essential requirements for national nuclear liability law in a more streamlined manner.

Article 3 of the annex sets forth the requirements relating to the liability of the operator.⁴² In particular, it imposes on Annex States two of the basic principles of nuclear liability law, namely legal channeling and absolute liability.

The channelling of legal liability exclusively to the operator is established by Article 3.1, which makes the operator solely liable for nuclear damage, and Article 3.9, which provides that any right to compensation for nuclear damage may be exercised only against the liable operator. Article 3.9 makes it clear that no person can be held legally liable for nuclear damage other than the operator who is exclusively liable under Article 3.1. No additional provisions are necessary to establish the exclusive

41. Article 2.3 defines nuclear installations for purposes of applying the grandfather clause. It includes civil nuclear reactors and civil facilities for processing, reprocessing or storing spent fuel or radioactive waste resulting from reprocessing spent fuel or containing transuranic elements.

In order to qualify for using the grandfather clause, these conditions must be met in the national law that applies within the territory of a member country. It is not mandatory for these conditions to be met in the national law that applies to nuclear incidents outside the territory of a member country. To the extent these conditions are not met in the national law that applies to a nuclear incident outside the territory of a member country (such as a nuclear incident in its EEZ), Article 2.4 provides that the provisions of Articles 3-11 of the annex shall apply and prevail over any inconsistent provisions of such national law.

42. Article 3 of the Annex is based on Articles II and IV of the Vienna Convention and Articles 3, 4, 6 and 9 of the Paris Convention. Article 3.1 corresponds to Article II.1 of the Vienna Convention; See also, Article 3(a) and (b) of the Paris Convention. Article 3.2 corresponds to Article II.2 of the Vienna Convention; See also, Article 4(d) of the Paris Convention. Article 3.3 corresponds to Article IV.1 of the Vienna Convention; See also, Articles 3 and 4 of the Paris Convention. Article 3.4 corresponds to Article IV.4 of the Vienna Convention; See also, Article 3(b) of the Paris Convention. Article 3.5 corresponds to Article IV.3(a) and (b) of the Vienna Convention; See also, Article 9 of the Paris Convention. Article 3.6 corresponds to Article IV.2 of the Vienna Convention; See also, Article 6(c)(i)(1) of the Paris Convention. Article 3.7(a) and (b) correspond to Article 3(a)(ii)(1) and (2) of the Paris Convention; See also, Article IV.5 of the Vienna Convention. Article 3.7(c) corresponds to Article IV.6 of the Vienna Convention. Article 3.8 corresponds to Article IV.7 of the Vienna Convention. Article 3.9 corresponds to Article 6(a) of the Paris Convention; See also, Article II.5 and II.7 of the Vienna Convention. Article 3.10 corresponds to Article 6(c)(ii) of the Paris Convention.

legal liability of the operator for nuclear damage and to ensure that no legal actions may lie against any other person and, in particular, any person who has supplied any services, materials or equipment in connection with the planning, construction, modification, maintenance, repair or operation of a nuclear installation.

Article 3.3 provides that the liability of the operator shall be absolute. In other words, an operator is liable, irrespective of fault, for nuclear damage resulting from a nuclear incident involving a nuclear installation of the operator. It is only necessary to demonstrate that the nuclear damage is caused by the nuclear incident.

Article 4 of the Annex establishes SDR 300 million as the minimum amount to which an Annex State can limit the liability of an operator.⁴³ Article 4.2 provides for the possibility of a two-tier approach under which an Annex State can limit the liability of an operator to no less than SDR 150 million, provided that the Annex State makes available public funds for the difference between SDR 300 million and the limit on the liability of the operator.⁴⁴

Article 4 is explicit that the SDR 300 million requirement is “subject to Article III.1(a)(ii)”. Article III.1(a)(ii) establishes the transitional rule for the Compensation Convention as to when a member country must ensure the availability of at least SDR 300 million to compensate nuclear damage. Thus, an Annex State can limit the liability of an operator under Article 4 to no less than SDR 150 million during the period prior to 29 September 2007, without having to make public funds available to cover the difference between SDR 300 million and the limit on the liability of the operator.⁴⁵

Article 5 of the annex sets forth the requirements on financial security to cover the liability of an operator and the obligation of an Annex State to satisfy claims if the financial security is insufficient to cover claims up to the limit on liability established pursuant to Article 4 of the annex.⁴⁶ Article 5 makes it clear that if an Annex State imposes unlimited liability on an operator, it may limit the financial security requirement to SDR 300 million and thereby limit its obligation to satisfy claims for which the financial security is insufficient.⁴⁷

43. Article 4 differs significantly from the comparable provisions in Article V of the existing Vienna Convention and Article 7 of the Paris Convention with respect to the minimum amount to which a country can limit the liability of an operator. The SDR 300 million minimum amount established by Article 4 is the same as the amount established by Article V of the revised Vienna Convention, but comes into effect sooner.

44. Article V of the revised Vienna Convention provides for a similar two-tier approach.

45. The provisions of Article III of the Compensation Convention apply to all member countries. Thus, all member countries must ensure the availability of SDR 150 million to compensate nuclear damage during the period prior to 29 September 2007, and SDR 300 million thereafter. This obligation is not affected by the possibility of lower limits on the liability of an operator under the Paris Convention, the existing Vienna Convention, or the revised Vienna Convention.

46. Article 5 corresponds to Article VII of the Vienna Convention; See also, Article 10 of the Paris Convention.

47. The treatment of an Annex State that imposes unlimited liability on its operators is the same as that of a revised Vienna State under Article VII.1(a) of the revised Vienna Convention.

Article 6 of the annex sets forth certain rules concerning the operation of the annex with respect to the transportation of nuclear material.⁴⁸ Article 6.1 provides that the liability of the operator for a nuclear incident during the transportation of nuclear material shall be determined by the national law of the Installation State. Article 6.2 provides that a member country can make transit through its territory subject to the acceptance of a higher liability limit.⁴⁹ A member country cannot impose a higher liability limit than it imposes on operators situated within its territory. Article 6.3 makes it clear that the restriction in Article 6.2 does not apply to maritime transport involving the right of entry in cases of urgent distress or the right of innocent passage or to air transport where there is a right to fly over the territory of a member country by agreement or under international law.

Article 7 of the annex deals with nuclear incidents where more than one operator is liable.⁵⁰

Article 7 makes it clear that the involvement of more than one operator does not have the effect of increasing the amount of public funds that a member country is obligated to make available under Article 4 of the annex.

Article 8 of the annex addresses several issues relating to compensation under national law. Article 8.1 provides that the amount of compensation is determined without regard to interest or costs.⁵¹ Article 8.2 establishes the rule that compensation for transboundary damage must be provided in a form freely transferable among member countries.⁵² Article 8.3 states that national law shall determine the relationship between compensation under the Compensation Convention and compensation under national or public health insurance, social insurance, social security, workmen's compensation or occupational disease compensation systems.⁵³

Article 9 of the annex limits the time period during which an operator is liable.⁵⁴ In general, the period of liability is the ten years after the date of the nuclear incident. A member country can establish a longer period to the extent the liability of the operator is covered by insurance or other financial security or public funds for a longer period. If a member country establishes a longer period, its national law must contain provisions for the equitable and timely satisfaction of claims for loss of life or personal injury filed within the ten year period after the nuclear incident. Article 9 also permits a member country to limit the time period further by requiring a person to bring a claim for nuclear

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48. Article 6 corresponds to Article 7(d), (e), and (f) of the Paris Convention. Article V of the Vienna Convention provides that the liability of the operator is determined by the national law of the Installation State, but the Vienna Convention has no comparable provisions to Article 7(e) and (f) of the Paris Convention.
 49. This provision only applies to transit through the territory of a member country and thus does not apply to transit through its EEZ.
 50. Article 7 corresponds to Article VII of the revised Vienna Convention. See also, Article II.3 of the existing Vienna Convention and Article 5 of the Paris Convention.
 51. Article 8.1 corresponds to Article V.2 of the existing Vienna Convention, Article VA.1 of the revised Vienna Convention, and Article 7(g) of the Paris Convention.
 52. Article 8.2 corresponds to Article 12 of the Paris Convention. See also, Article V.4 of the existing Vienna Convention and Article VA.2 of the revised Vienna Convention.
 53. Article 8.3 corresponds to Article IX.1 of the Vienna Convention and Article 6(h) of the Paris Convention.
 54. Article 9 of the Annex corresponds to article VI of the existing Vienna Convention and Article 8 of the Paris Convention. See also, Article VI of the revised Vienna Convention.

damage within three years of the date on which the person had knowledge or should have had knowledge of the damage and its cause.

Article 10 of the annex makes it clear that national law may provide an operator with a right of recourse against a supplier or other person only in certain identified situations.⁵⁵ Specifically, an operator can be granted a right of recourse only where a written contractual provision explicitly provides for such a right or where a nuclear incident results from an act or omission with the intent to cause damage.

Article 11 of the annex provides that national law shall govern the nature, form, extent and equitable distribution of compensation, subject to the explicit provisions of the Compensation Convention.⁵⁶

55. Article 10 corresponds to Article X of the Vienna Convention and Article 6(f) of the Paris Convention.

56. Article 11 corresponds to Article VIII of the Vienna Convention and Article 11 of the Paris Convention.