

## **Effectiveness of Existing International Nuclear Liability Regime**

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### **1. Introduction**

There is a set of international conventions which are adopted to provide compensation for damage arising from nuclear accidents. These conventions were adopted under auspices of the International Atomic Energy Agency (IAEA)<sup>1</sup>, and the Organization for European Economic Co-operation (OEEC), which was later reconstituted as the Organization for Economic Co-operation and Development (OECD)<sup>2</sup>. The first convention was the Paris Convention on Third Party Liability in the Field of Nuclear Energy (the Paris Convention) had been adopted on 29 July 1960 under the auspices of the OECD, and entered into force on 1 April 1968. In 1963, the Brussels Convention – supplementary to the Paris Convention – was adopted in to provide additional funds to compensate damage as a result of a nuclear incident where Paris Convention funds proved to be insufficient. The IAEA's first convention was the Vienna Convention on Civil Liability for Nuclear Damage (the Vienna Convention) which adopted on 21 May 1963, and entered into force in 1977. Both the Paris Convention and the Vienna Convention laid down very similar nuclear liability rules based on the same general principles. The broad principles in these conventions can be summarized as follows:

- 1- The no-fault liability principle (strict liability)
- 2- Liability is channeled exclusively to the operator of the nuclear installation (legal channeling)
- 3- Only courts of the state in which the nuclear accident occurs would have jurisdiction (exclusive jurisdiction)

- 4- Limitation of the amount of liability and the time frame for claiming damages (limited liability)
- 5- The operator is required to have adequate insurance or financial guarantees to the extent of its liability amount (liability must be financially secured).
- 6- Liability is limited in time. Compensation rights are extinguished after specific time.
- 7- Non-discrimination of victims on the grounds of nationality, domicile or residence.

Even though Vienna Convention and Paris convention share the fundamentals, they are clearly distinct. In order to reduce the differences between them, the Paris Convention was first amended, even before its entry into force, by the Additional Protocol of 28 January 1964, however, after the Paris Convention entered into force, it was further amended by the Additional Protocol of 16 November 1982, which added new differences between the two Conventions. On 12 September 1979, the Protocol to Amend the Vienna Convention on Liability for Nuclear Damage (the Vienna Protocol) and also a Convention on Supplementary Compensation for Nuclear Damage were adopted. Although the need to harmonize the provisions of the Vienna Convention with those of the Paris Convention was taken into account, significant differences were added. In 2004, Paris Convention was further amended by the Protocol of 12 February 2004, which is not yet in force.

The main remaining difference between the Paris Convention and the Vienna Convention (both in its 1963 version and as amended by the 1997 Vienna Protocol) is the regional character of the Paris Convention, which is only open to OECD member, whereas Vienna Convention is open to all Member States of the United Nations, its specialized agencies or the IAEA, and the 1997 Vienna Protocol is open to all States. Another differences between the legal regimes

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<sup>1</sup> For more details on IAEA Convention see <http://ola.iaea.org/ola/treaties/multi.html>

<sup>2</sup> For more details on OECD conventions see <http://www.oecd-neo.org/law/legal-documents.html>

laid down by the existing conventions, in particular, the different limits envisaged for the amount of the operator's liability. The 1997 Protocol sets the possible limit of an operator's liability at not less than 300 million special drawing rights (SDR)<sup>3</sup>, which is a significant increase from the previous limit of \$5 million in Vienna Convention. The Paris Convention sets a maximum liability of 15 million SDR provided that the installation State may provide for a greater or lesser amount but not below 5 million SDRs taking into account the availability of insurance coverage. The Brussels Supplementary Convention established additional funding beyond the amount available under the Paris Convention up to a total of 300 million SDRs, consisting of contributions by the installation State and contracting parties.

Table 1: Convention Limitation Amounts

Convention Party	Operator liability	State	contracting parties
Paris 1960	SDR 5-15 million		
Paris 2004 and Brussels (NIF) <sup>6</sup>	€700 million	€500 million	€300 million
Brussels supplementary 1963		SDR 175 million	SDR 300 million
Vienna 1963	\$ 5 million		
Vienna 1979	SDR 150 million	SDR 300 million	
CSC <sup>7</sup> (NIF)			SDR 300 million

Source: Currie 2008

These difference raised the issue of harmonization because, in general, no country could be a party to both conventions, because the exact details were not consistent and could lead to potential conflict in their simultaneous application. Thus, at the initiative of the IAEA and the OECD, in 1988 the two main conventions were linked by the Joint Protocol relating to the Application of the Vienna Convention and the Paris Convention (1988 Joint Protocol), which came into force in 1992. Parties to the 1988 Joint Protocol are

<sup>3</sup> SDR means Special Drawing Rights which is an international type of monetary reserve currency, created by the International Monetary Fund (IMF) in 1969

treated as if they are parties to both conventions. Therefore, if an incident in a country bound by the Paris Convention causes damage in a country bound by the Vienna Convention, the victims in the Vienna Convention country could claim compensation under the laws of the Paris Convention country[1-2-3].

All these convention and protocol form the International nuclear liability regime which aims to provide adequate compensation payments to victims of a nuclear accident. The purpose of this paper is to assess the effectiveness of existing liability regime in term of exclusive jurisdiction and membership of the Conventions and how nuclear liability regime could be applied to countries in the Middle .

## 2.Exclusive jurisdiction

Under the nuclear liability regime, victims of transboundary accidents should sue in foreign state because of the exclusive jurisdiction is provided only to Installation State<sup>4</sup> (the country where the nuclear accident accrued). This rule makes the procedure for bringing claim impractical, and may force victims to give up their claims. Requiring such a rule is totally put the victims at disadvantage. Firstly, based on what standards the court in the installation State is competent to hear the claim, in other ward, how the competence and neutrality of the court can be measured. Secondly, law and regulations differ from one country to another, therefore, there is potential what is considered damage in the victim's country it is not in the installation country. Moreover, hardship that may face the victims to afford to travel to foreign country. Grant the exclusive jurisdiction to country only because the accident accrued there is ineffective. Currie said " It is clear that victims need access to a tribunal that would be neutral and not linked economically to the nuclear industry, and which is applying law and procedure independent of the Installation State. This may be contrasted with the IAEA's claim that "the principle of non discrimination and equal treatment of victims is often considered to be one of the basic principles of the nuclear liability regime"(p.95).

Another rule under the nuclear liability regime is coupled with the exclusive jurisdiction that rule is channeling of liability, which means only the operator liable for nuclear accident, who alone can bring claim against him to receive the compensations<sup>5</sup>[4]. This

<sup>4</sup> Paris convention Art 13(a);Vienna convention Art XI.1; CSC Art XIII(1).

<sup>5</sup> Paris convention Art 4;Vienna convention Art II(3)(b).

coupling could be an advantage or disadvantage according to the consequences of the nuclear accident whether are transboundary or not. In event of nuclear accident, victims in the same Installation state can bring claim against the operator in their own country, and the only difficulty could be faced in this case if the operator is a foreigner because of the possibility of disputes arising out of enforcement of court awards against a foreign utility. The coupling of exclusive jurisdiction and channeling of liability could be disadvantage in event of transboundary impact of nuclear accident because victims have to sue in a foreign country and foreign utility in that country. A typical example of this scenario is United Arab Emirates (UAE). UAE as a new entrant to nuclear power relies totally on foreign technology from South Korea, Korea Electric Power Co. (KEPCO), thus in event of nuclear accident KEPCO which is a foreign utility will be the only liable, because UAE is a contracting party to Revised Vienna Convention (1997 Protocol). Moreover, the national law on nuclear liability of UAE has been drafted completely in sync with the provisions of the Vienna Convention, thus the law provides for exclusive channeling of liability to the operator[6]. The complexity of the procedure of receiving compensation may put victims at disadvantages in the light of the shortcoming of the existing liability regime. Further amendments are needed, in term of granting exclusive jurisdiction only to installation state, to take into account foreigner victims.

### **3. Membership of the Conventions**

The effectiveness of the nuclear liability regime with respect to provision adequate compensation payments to victims affected by a nuclear accident has been occurred. That is applicable if a nuclear state is obligated to pay the compensation, and any nuclear state is obligated to do that only after ratifying the nuclear liability convention, however, nuclear states are not obligated to ratify nuclear liability convention. As a result of that, membership of the conventions is a critical issue in the absence of real incentive for countries to ratify the nuclear liability conventions especially the joint protocol whether nuclear countries or non-nuclear countries.

The membership issue can be discussed from three aspects. First aspect, nuclear country is not a party to any convention and its neighboring country is a party.

In this regard, the need to take action at the international level to obligate the nuclear countries to join the liability conventions is essential. It appears that in the

absence of obligation to join the conventions by international law, countries will not do that. As the national regulations by regulatory bodies in any country obligate the operator of any nuclear power plant to demonstrate the safety of operation of that plant in order to ensure the nuclear safety at the national level, international law must ensure the application of nuclear liability at the international level. Chernobyl accident in 1986 is illustrated that clearly. The accident caused serious transboundary impact for many countries in Europe, despite, no country at that time could sue Union of Soviet Socialist Republics (USSR) to receive compensation for the damage and the economic loss resulting from the accident, because USSR was not party to either the Paris Convention or the Vienna Convention. In fact, the countries with the largest capacity of nuclear power have not ratified any of the international conventions currently in force such as Canada, the United States, Japan, India, South Korea and China[6-5].

Second aspect, both the nuclear country and the neighboring country are not party to any convention. Third aspect, nuclear country and its neighboring country ratified different conventions due the variety of the convention, that may arise non-harmonization issue. An example, in 2005, Russia ratified the Vienna Convention because it is not a member of the OECD, thus if a situation similar to Chernobyl will arise, Russia may have no difficulty to avoid compensating neighboring Paris Convention states[6]. As it was mentioned in literature review, 1988 joint protocol was adopted to reduce the differences between Vienna Convention and Paris Convention thus solve the non-harmonization issue, because no country could be a party to both conventions, nevertheless, it is unlikely that all nuclear countries and neighboring non-nuclear countries will ratify same conventions or the 1988 joint protocol. Lastly, in the event of nuclear accident, victims in the three situations may not be able to receive any compensations, or face difficulties to receive that compensations.

### **4. Nuclear Liability in Middle East**

In middle East, there are four emerging nuclear power countries which are UAE, Saudi Arabia, Jordan and Egypt[7]. Power reactors in UAE are under construction, and supposed to be commissioned by 2020, thus the need to apply the nuclear liability convention in the middle East is vital. In order to ensure optimum application of these convention, cooperative agreement for Arab states for nuclear energy

applications is required. Under this kind of agreement all Arab States will ratify same convention, therefore, non-harmonization issue will be avoided. Establishment such agreement is possible under the auspices of League of Arab States. Initiative for this action should be taken by UAE neighboring countries, because of two reasons which are the potential transboundary impact of nuclear incidents, and League of Arab States will take action only at request from Member States. In this regard, Arab Atomic Energy Agency (AAEA) can play a main role to establish such agreement as one of the Arab League Organizations concerning the peaceful uses of Atomic Energy and the development of Nuclear Sciences and their Technological Applications. One of the advantages of establishing such a regional agreement is to have its own law and regulations. Of course the adoption of that law will be consistent with the provisions of the international conventions, nevertheless, it will take into account tackling the gaps in the existing nuclear liability regime to ensure the effectiveness of that law and regulations. However, ARASIA agreement can have a role in the short-term concerning nuclear liability at least in Arabian peninsula. ARASIA is Co-operative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology was established under the auspices of IAEA. Since nine Arab states under ARASIA, three of them are emerging nuclear power countries UAE, Saudi Arabia and Jordan, and the rest are neighboring countries or countries in the region. Proposal for application of nuclear liability conventions and ratify same convention from any Member of ARASIA to IAEA is possible, and will be taken into consideration. Such Proposal could be initiative to apply nuclear liability regime in Middle East.

## 5. Conclusion

Nuclear liability conventions objective is to provide adequate compensation payments to victims of a nuclear accident. Procedures for receiving these compensation are controlled by some rules such as exclusive jurisdiction, that rule need a further amendment to ensure the effectiveness of the existing nuclear liability regime.

Membership of the Conventions is a critical issue, because the existence of the conventions without being party to them especially from nuclear countries is ineffective, or in term of ratifying different conventions from neighboring countries.

Optimum application of nuclear liability in Middle East could be achieved by establishing cooperative agreement for Arab states for nuclear energy applications to ensure that the issues of existing regime such as non-harmonization will be solved.

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