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LEGAL REGIME OF CIVIL LIABILITY FOR NUCLEAR DAMAGE

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ABSTRACT

Nuclear energy plays a big role in producing electricity as well as many other uses. For this ,countries build more and more nuclear reactors .Some of them have gone very far in that way in that they face many problem with international community ; this is the case of Iran that claims it is practicing its legal right in developing nuclear energy for peaceful uses. Others, have banned using nuclear energy and producing it from nuclear reactors ; that was the case of Austria that built a nuclear reactor that never started working . This was a result of a refusal decided by people in a referendum. Innded , there were a lot of convention that treated the matter of liability on damage caused by nuclear accidents , but are these treaties enough for establishing a regime for civil liability ?

INTRODUCTION

The pacific usage of nuclear energy is nowadays discussed than ever before. It is a matter of fact that the accident of Chernobyl has revolutionized the field of nuclear law, in so far as the regime of nuclear liability is concerned . Japan has decided not to build new nuclear stations in order to reduce the problems resulting from this use. Debates raise about the safety of such a power and the risks that are to be taken in such a choice and most importantly whether these risks deserve to be taken. Asyet , there are still people who are deeply affected by nuclear accidents. Fukushima accident is the latest one but we can presume that it will be the last. Therefore the matter of liability is very important here. In this paper, I am going to try to discuss the legal regime of civil liability for nuclear damage.

OBJECTIVES

This study aims to put the light on a very important subject that is concerned with nuclear damage, and in exactly its legal regime of civil liability. Indeed ,the liability of nuclear damage has

long been considered only as a civil liability , but still there are lots of difficulties in considering international responsibility for nuclear damage. Such difficulties deal with the nature of nuclear damage itself and the problems dealing with it , as well as difficulties related to the international responsibility itself .

METHODOLOGY

In making our research we will use the descriptive approach when we deal with legal articles found in international conventions and treaties. We will also use the analytical approach when explaining and analysing those articles.The use of the comparative approach is also very important when making necessary comparisons between different legal regimes dealing with the subject of nuclear liability.

1/NUCLEAR DAMAGE

It is highly very difficult to determine the nuclear damage because this damage is particular. It can appear just after the accident or after decades. In the united kingdom for example , National Radiological Protection Board made an

estimation that as a result of the Chernobyl accident between 3 000 and 6 000 people outside the former Soviet Union can have a cancer which either they would not otherwise have suffered or which they will suffer earlier than would otherwise have been the case. When we say 3 000 to 6 000 people, we have not to forget that there were population of hundreds of millions. It is a matter of fact that it is impossible to find exactly out what kind of cancers were the result of being exposed to radioactivity from the Chernobyl accident and those that have not.¹The problem of determining accident damages with exactitude and saying for example that a given nuclear accident caused a determined and particular case of cancer. There are compensation mechanisms for repairing the damages that happened to victims. Indeed, the fact that this compensation is paid by the system of insurance established for that purpose or by taxpayers is not of great importance. What really matters here is that there should be a very strict and full regime of liability for nuclear accidents. Michael Trebilcock and Ralph A. Winter say that “The key to improving safety incentives in nuclear power production is the internalization of accident costs to the suppliers of nuclear power, whatever compensation scheme is adopted”.²

One of the major problems that the 1963 convention of Vienna face that it has adopted a quite narrow definition of « nuclear damage”. This definition considers the latter as “loss of life, any personal injury or any loss of, or damage to, property ...”, but also “any other loss or damage ... if and to the extent that the law of the competent court provides”.¹ This definition makes it clear that compensation for any damage other than loss of life, personal injury and loss of or damage to property is subject exclusively to the law of the competent court. But the question that raises here is whether the regime of liability that was established by the 1963 Vienna Convention may also encompass damage to environment is disputable within doctrine, and it has been argued that the civil liability which does not explicitly refer to environmental damage may not apply to goods such as water, soil or air which belong to *res communis omnium*.³

¹ Geoffrey C. Warren(2000),Nuclear Damage under the 1997 Protocol: Conventional Thinking?Reform of Civil Nuclear Liability Budapest Symposium 1999 OECD, France ,p 95.

² Michael Trebilcock and Ralph A. Winter(1997),*Economics of nuclear accident law ,International Review of Law and Economics ,New York , ,p 225.*

³Vedran Soljan (2000), The New Definition of Nuclear Damage in the 1997 Protocol to Amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage ,Reform of Civil Nuclear

It is here very important to note that the definition of nuclear damage has known great progress and many changes have been added, as in the revision of convention of Vienna. The Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage from 1969 was examined as a possible model for a new definition of nuclear damage. This Protocol broadened civil liability in its definition of “pollution damage” to encompass environmental damage.⁴

Definition of nuclear damage in the 1997 Protocol to amend the 1963 Vienna Convention:

We have to focus upon the fact that the development of environmental liability regimes has influenced the notion of nuclear damage. The definition adopted in the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage is a good solution. This definition includes all the facts: environmental damage, economic loss and preventive measures, but still, it leaves it to the law of the competent court to decide to what extent these aspects of damage may qualify for compensation.

Article 2, Paragraph 2 of the Protocol defines “nuclear damage” as “loss of life or personal injury and loss of or damage to property” (*damnum emergens*) resulting from the nuclear incident. The definition also includes, but only to the extent determined by the law of the competent court:

1. Economic loss arising from death, personal injury or damage to property (if incurred by a person entitled to claim in respect of such loss of damage).

2. 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 the category of “economic loss”.

3. Loss of income deriving from an economic interest in any use or enjoyment of the environment, incurred as a result of significant impairment of that environment.

4. The cost of preventive measures and further loss or damage caused by such measures.

5. And 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.

Here, we are to put out that this article gives a very high competence for the competent court to evaluate the losses and whether or not they present damage.

Liability Budapest Symposium 1999 OECD, France ,p 61

⁴Ibid,p63.

2/THE AMERICAN REGIME FOR LIABILITY

After having a look to the Vienna Convention and its protocol, it is very important to study the American regime for liability, in so that it represents a regime that deserves to be studied.

The Price-Anderson Act incorporates a number of provisions which are not to be found in the international conventions. It has many characteristics that can be stated as follows:

1- It is a tort-based regime – expanding to “strict” liability only after the declaration of an Extraordinary Nuclear Occurrence.

2- The insurance limit is a life-time aggregate limit which includes defense costs, interest awards and claims handling expenses within the indemnity limit.

3- Insurers are permitted to establish tax-free funds, not as a multiple of premiums as is the case in Western Europe but as a multiple of the indemnity limit.⁵

The Belgian regime for nuclear liability:-

The liability for the licensee of a nuclear plant has been introduced in Belgian law through the implementation of several international treaties. Most of these conventions were initiated by the European Nuclear Energy Agency (ENEA) of the OECD. The Belgian Act of July 18, 1966 implemented the Convention of Paris of July 29, 1960 and the Protocol of Paris of January 28, 1964 in Belgian law. This Act put out a system of liability for the licensee of a nuclear reactor and an obligation to have insurance for the reactor. Furthermore, the amount of liability was limited to 500million BEF. However, Article 6.3 of the Act gave the King the power to raise the amount of liability by Royal Decree. This was done by Royal Decree on May 13, 1980 whereby the amount was raised to 1 billion BEF. Such a modification was argued by the fact that there was an inflation in the counter in that time.

Another bill was introduced in the Belgian Senate on November 8, 1983 to adapt Belgian law to the Convention of Brussels of January 3 1, 1963 and an additional protocol to this treaty and to two protocols signed in Paris on November 16, 1982. These protocols and the Convention of Brussels were ratified by the Act of July 3, 1985. The bill led to the Act of July 22, 1985. This act now is the statute that rules the liability and insurance system for nuclear accidents in Belgium.

Article 5 of the Act holds the licensee of a nuclear plant liable for all the damage caused by a nuclear accident. The liability is strict and the licensee is bound to compensate even if the accident was caused by an exceptional natural disaster. The strict liability is channeled to the licensee of the nuclear reactor. This means, on the

⁵Geoffrey C. Warren, op cit, p 95.

one hand, that the victim can only sue the licensee and, on the other hand, that the licensee of a nuclear plant who is held liable has only a very limited right of redress against liable third parties. During the parliamentary proceedings, it was stressed that, as a consequence, a suit by the victim, based on the common-fault rule of tort law against either the licensee or a liable third party is now excluded.

As yet, those dispositions can be argued in the point that we cannot exactly predict the damages that can be caused by natural disasters, nor can we find out exactly whether or not a damage has been caused by exactly that disaster or another cause that can be known only later.

3/GEOGRAPHICAL SCOPE IN THE VIENNA CONVENTION

One of the questions on which there was a wide divergence of views between participants in the negotiations was that concerning the “geographical scope” of the Convention. The fundamental importance of this issue for the Convention arises from the fact that the 1963 Vienna Convention establishes a civil liability regime rather than a regime of state to state compensation. Under this regime, victims who suffer loss or injury as a result of a nuclear incident in an installation situated in a state which is a party to the Convention (the Installation State) are entitled to legal redress in the courts of the Installation State under the terms set out in the Convention. The question of which victims are so entitled is determined by the question of the “geographical scope” of the Convention.⁶

The Chernobyl disaster made the world aware of the huge potential for transboundary damage in the case of serious nuclear accidents. Even the far western fringes of Europe were covered by radioactive clouds within the week after the incident and experienced greatly increased levels of radioactivity in rainfall a few days after the initial explosion.⁵ Chernobyl put paid to any comfortable illusion that the effects of a disaster could be combined within the frontiers of the state where it has happened, or even its immediate neighbours.

In the ten years since Chernobyl the effects of that disaster have been reflected in a huge loss of public confidence in the nuclear industry throughout the developed world.⁷

The Convention confers rights on persons who are not nationals of, or residing in, a Convention State. This may create problems. While

⁶James Hamilton (2000), Access by Victims to the Compensation Regime of the Vienna Convention on Civil Liability for Nuclear Damage – the Question of “Geographical Scope”, Reform of Civil Nuclear Liability Budapest Symposium 1999 OECD, France, p 101.

⁷Ibid, p102

it would seem that an individual who suffers damage in a non-nuclear installation state which is not a party to the Convention must, under the terms of the Convention, be entitled to sue for damages in the courts of the Installation State, the question arises how he can assert that right if the Installation State denies it to him and his own state is not a party to the Convention. While the possibility of an international claims tribunal was canvassed during the negotiations this proposal was not accepted. The text contains a provision relating to arbitration or judicial settlement of disputes, but this procedure is not compulsory since states may opt out of the new Article XXA of the revised Vienna Convention (as inserted by Article 17 of the Protocol).⁸

4/THE LIABILITY AMOUNT UNDER THE VIENNA CONVENTION

As the following examples of the amounts set by national legislation as the lowest limits for liability of operators show, the 1963 Vienna limits are very low from today's point of view. So in Bulgaria, the limit for nuclear power stations is equivalent to 15 million SDRs (for other types of nuclear facilities equivalent to 5 million SDRs); in the Slovak Republic, the limit is 2 billion Slovak crowns (approximately 35 million SDRs); in Ukraine, the amount of operator's liability is limited to the equivalent of 50 million SDRs; as may be determined by the laws of Ukraine; in Lithuania, liability is limited to the amount equivalent to the minimum set in the Article V of the 1963 Vienna Convention, *i.e.* USD 5 million, and shall be calculated in accordance with the official USD exchange rate at the day when the damage was inflicted (today approximately equivalent to 15 million SDRs); in Slovenia, starting on 1 January 1999, an increased amount has been introduced equivalent to USD 42 million per nuclear incident; in Hungary the liability of the licensee is limited to 100 million SDRs for nuclear plants and 5 million SDRs for nuclear accidents in other nuclear facilities or during the transportation or storage of nuclear fuel. Nuclear damage in excess of these sums shall be compensated by the State of Hungary to a total amount not higher than 300 million SDRs; in the Czech Republic, the liability of licensees for nuclear damage is limited for nuclear installations used for power generation purposes, storage facilities and repositories of spent fuel assigned to these installations, to 6 billion Czech crowns (CZK) (today approximately 125 million SDRs) and regarding other nuclear installations and shipment of nuclear materials to the amount of CZK 1 500 million.⁹

⁸James Hamilton, *opcit*, p108.

⁹Frantisek Suransky (2000), *Increased Liability Amounts under the 1997 Vienna Protocol and elsewhere, Reform of Civil Nuclear Liability Budapest Symposium 1999 OECD, France*, p118.

Under national legislation, it is possible to provide for the operator's unlimited liability. To reconcile the unlimited liability under the national legislation with the Vienna Convention provisions fixing the amount of financial security, the Protocol contains Article 9.1. This provision adds an amendment to Article VII of the 1963 Vienna Convention, providing that where the liability of the operator is legally unlimited, the Installation State may establish a limit of financial security of the operator liable (but not lower than 300 million SDRs).

Taking into account the risks involved, a lower amount of liability may be established, but not less than 5 million SDRs according to revised Article V of the Vienna Convention (Article 7.1 of the Protocol). If the actual damage exceeds the reduced liability amount, the Installation State must ensure the availability of public funds up to the general liability limit, *i.e.* at least 300 million SDRs. In order to ensure that the operator's liability is always covered by financial security, the liability amounts fixed by the Installation State of the liable operator would apply regardless of the place of the nuclear incident.

5/THE PARIS CONVENTION

In September 1997, following eight years of negotiations within the IAEA's Standing Committee on Nuclear Liability, the 1963 Vienna Convention on Civil Liability for Nuclear Damage was amended by the adoption of the Protocol to Amend the Vienna Convention (Vienna Protocol). At the same time, a new Convention on Supplementary Compensation for Nuclear Damage (CSC) was adopted, providing for additional compensation for nuclear damage over and above that called for under the Paris Convention, the Vienna Convention, or national legislation reflecting the principles contained in those two Conventions.

Delegations from countries belonging to the western European regional liability regime constituted by the Paris Convention and the Brussels Supplementary Convention, took an active part in these negotiations. Their aim was to contribute, as much as possible, to the improvement of the international nuclear liability regime covered by the Vienna Convention, a matter of particular importance in light of the 1988 Joint Protocol linking the Paris and Vienna Conventions¹⁰.

¹⁰Håkan Rustand, (2000) *Progress Report on Negotiations to Revise the Paris Convention on Third Party*

Liability in the Field of Nuclear Energy, Reform of Civil Nuclear Liability Budapest Symposium 1999 OECD, France p 141.

6/LIABILITY AMOUNT UNDER THE CONVENTION OF PARIS

One of the most important issues is, of course, the amount of the operator's liability. Under the existing Convention, that amount may vary between 5 and 15 million Special Drawing Rights (SDRs), notwithstanding that today, most of the Contracting Parties have established much higher amounts under their national legislation. In 1990, the NEA Steering Committee adopted Recommendation to fix the operator's liability amount at a level not less than 150 million SDRs. Many Contracting Parties have already followed that Recommendation, and some have gone even further than that. However, there still remain a few countries whose national legislation establishes fairly modest and probably insufficient liability amounts to offer reasonable compensation in the case of a nuclear incident. This is a situation that the Contracting Parties are examining very closely.¹¹

7/UNLIMITED LIABILITY UNDER THE CONVENTION OF PARIS

Another positive achievement is that the Paris Convention countries have agreed, in principle, that the revised Convention will contain a provision expressly permitting a Contracting Party to establish the unlimited liability of its operators. One Paris Convention country has already adopted that approach and it is reflected in its national legislation. However, over the years questions have been raised as to whether unlimited liability is in conformity with the Convention's requirement that the liability amount must be covered by insurance or other form of financial security.¹²

8/THE RELATIONSHIP (BRIDGE) BETWEEN THE TWO CONVENTIONS

At the time the conference of Vienna on civil liability met from April 29th to May 19th 1963, the Paris convention and the Brussels supplementary convention had been signed on July 29th, 1960 and January 31st 1963 respectively. The issue of the relationship between the two conventions was highly discussed. Article XVI states 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". Article XVIII states that "This Convention shall not be construed as affecting the rights, if any, of a Contracting Party under the general rules of public international law in respect of nuclear damage".

Nuclear liability after Fukushima:-

The Fukushima accident showed that, despite the efforts to improve nuclear safety that were made after Chernobyl, nuclear accidents can still take place, even in the developed world. The questions now are whether the treaties that were adopted as a result of the Chernobyl accident provide an effective basis for nuclear safety and emergency preparedness and response and whether improvements are necessary. This is particularly true for the conventions relating to nuclear safety, which fall short of making the IAEA safety standards binding on Contracting Parties; in addition, they are often labeled as 'incentive conventions' because the obligations they create for Contracting Parties are mainly "obligations de moyens" rather than obligations of result, and much of their effectiveness depends on the peer-review mechanism they have established. But the conventions relating to emergency preparedness and response also have their flaws and are currently under scrutiny, and so are the various conventions relating to nuclear liability, which have so far failed to establish a truly global legal regime.

In light of the serious consequences of the Fukushima accident, a Ministerial Conference on Nuclear Safety took place in Vienna under the auspices of the IAEA in June 2011, in order to direct, under the leading role of the IAEA, the process of learning and of acting upon lessons to strengthen nuclear safety, emergency preparedness and radiation protection of people and the environment worldwide. On 20 June 2011, the conference adopted a Declaration²² which inter alia reiterated 'the importance of universal adherence and effective implementation and continuous review of the relevant international instruments on nuclear safety' and considered 'the possibility of strengthening the international legal framework in this area'; the Declaration also recognized 'the need for a global nuclear liability regime that addresses the concerns of all States that might be affected by a nuclear accident with a view to providing appropriate compensation for nuclear damage'. As requested by the Declaration, the IAEA Secretariat drew up an Action Plan on Nuclear Safety,²³ which was approved by the Agency's Board of Governors and endorsed by the IAEA General Conference at their September 2011 meetings. The Action Plan envisages a number of actions, one of which focuses on the improvement of the international legal framework, including in the area of nuclear liability.

It is a well-known fact that the use of nuclear energy in most States is a matter of public concern, and in many States people are skeptical or even strongly opposed to this form of energy. However, whereas some States have decided not to use or to phase out nuclear energy, other States still consider nuclear power as a viable option in meeting their energy needs, as was recognized in the June 2011 IAEA Ministerial Declaration in the

¹¹Håkan Rustand, op cit, p 142.

¹²Ibid, P 144.

aftermath of the Fukushima accident. Taking this into account, the current efforts, in particular under the auspices of the IAEA ,to enhance the existing international legal framework are seen by many States as essential in order to enhance nuclear safety throughout the world and regain public confidence in the safety of nuclear activities.¹³

RESULTS

This research has led us to the following results :

- 1- The regime of nuclear damage liability is insufficient in the way it is treated.
- 2- There is much work to do in the field of nuclear damage liability.

CONCLUSION

As a conclusion, one can say that even though it is true that there have been a great development in the field of civil liability for nuclear damage but there is much more to do because the nuclear damage is very difficult to identify in a precise way. We have seen how difficult it was to assess the damages that were caused to the environment from nuclear disasters, starting from the most important one, Chernobyl, coming to the last one, Fukushima. One can come to a conclusion that there cannot be a safe reactor for one hundred percent. Another thing that goes with this analysis is that nuclear reactors are refused by people than ever before, in Germany, in France..etc.

¹³Andrea Gioia A. de Guttry et al. (2012.), International Disaster Response Law, DOI: 10.1007/978-90-6704-882-8_4,, Nuclear Accidents and International Law T.M.C. ASSER PRESS, The Hague, The Netherlands, and the author(s), P 101.102