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# INTERNATIONAL LEGAL LIABILITY PROBLEM ON THE USE OF NUCLEAR POWER

**Formulation of the problem.** There are legal and institutional mechanisms for states during the use of nuclear energy for nuclear damage and it is interesting that the authors of the International Treaty on Environment and Development decided to include a nuclear damage liability regime in the aforesaid draft document. İt is stipulated in this Treaty that the regimes of « states responsibility and liability» and «international responsibility" should serve as an addition to the civil-legal responsibility regime as it is considered in regard to nuclear damage [4, 153-154]. We consider that this is not an entirely accurate approach to the current regime of liability for nuclear damage, so it is advisable to study the basic terms and provisions of nuclear damage liability regime.

A few international legal documents in the field of liability for nuclear damage are in force. Among them: the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy, the 1963 Vienna Convention on Civil Liability for Nuclear Damage, 1963 Supplementary to the Paris Convention and 1962 Convention On The Liability Of Operators Of Nuclear Ships.

Neither of these conventions provides for direct liability for environmental damage. According to the Vienna Convention, «nuclear damage» means «death, any bodily injury or any loss of property or any damage to property that it is caused by the use of radioactive substances or wastes or nuclear material in nuclear installations, with toxic, explosive radioactive properties or combinations of radioactive properties or other hazardous properties of nuclear fuel [3, 184].

**The main results of the study.** One of the main tasks of Standing Committee on Nuclear Responsibility established by the International Atomic Energy Agency (IAEA) was to expand the scope of the Vienna Convention, including the issues on damages to environment, as well as the other necessary changings and amendments to this Convention. This position was fulfilled at the Diplomatic Conference held in September 1997 at the IAEA Headquarters. Thus, the Conference adopted the Supplementary Protocol to the 1963 Vienna Convention on Civil Liability for the Nuclear Damage, as well as the Convention on Additional Compensation for Nuclear Damage [2, 2]. Pursuant

to the Paris Convention, the operator of a nuclear plant is responsible for: a) death or personal injury; b) Loss or damage of property, if proved that such damage or loss is as a result of nuclear accident or nuclear fuel, radioactive products or wastes.

The Convention on the Responsibility of Nuclear Ship Operators states that «nuclear damage» means the death or personal injury, loss or damage of a radioactive compound or combination of toxic, explosive and other hazardous substances; any other loss, damage or expenses arising from these processes shall be reimbursed only in such cases and to such extent as is required by national law.

The 1960 Paris Convention is considered the first international legal document in the field of nuclear liability. This document is of regional character. The operator of nuclear facilities is an entity of responsibility as per the Convention and thus the responsibility on the Convention is directed to the operator of nuclear facility in the case of nuclear accident. The mechanism of liability is implemented through civil lawsuits, in accordance with civil legislation which provides the means of securing special claims against the operators of nuclear facilities on national ships. Responsibility is serious, but not absolute [10].

Notwithstanding the civil-legal nature of the liability, the States may also be included in the scope of entities of responsibility as per Convention, provided that the State acts as a nuclear facility operator, not the enterprise. In this case, it is directly stated in the Convention that the claim is not only against the operator of a nuclear facility, but also directly to the agreeing party. There is an issue of exception to this Article which concerns the fact that, in filing a lawsuit against the State, the State concerned should not refer to any immunity from judicial jurisdiction. Most likely, a claim to the «agreeing party» would mean only in that case when the operator of the nuclear facility is the State itself.

Besides, the Convention provides for another scheme of responsibility with the participation of State. Thus, Annex II to the Convention provides that the Convention shall not be interpreted in such a way that the Agreeing Party which has suffered a loss in its territory shall not seek international remedies for damages inflicted on another Agreeing Party.

Thus, the issue of liability can be raised by the affected State at the interstate level, as part of civil law liability. It is also important to note that the international law does not, however, imply a liability for damages in such cases, since the harm afflicting State has not violated its international legal obligations but does not prohibit further determination of such a norm. In this

case, the international law doesn't prevent the States from taking securing measures in regard to a particular case of harm.

The Paris Convention defines the limit as the maximum amount of «substitution totality» [5, 42]. In fact, this rule was one of the main targets of signing the Convention, because one of the initial efforts of the authors of Paris Convention was to protect the nuclear industry of their countries from unlimited liability that could undermine nuclear activity as a whole. However, after the adoption of the Paris Convention, it was decided to enhance the operator's liability, and in 1964 the Supplementary Brussels Convention was signed.

Pursuant to the Supplementary Brussels Convention, the liability of a nuclear facility operator has been increased to 120 million Special Drawing Rights (SDR) per each nuclear event, even as per the 1982 Protocol it increased to 300 million. Currently, a three-step scheme of compensation of damages has been established in accordance with the Paris Convention, as well as the Brussels Supplementary Convention and the 1982 Protocol. The scheme contains the following rules: each party must determine, in accordance with its national legislation, the limits of liability of the operator of a nuclear facility in its territory (between 5-150 million SDRs) which must be secured with insurance or other financial security. This is the first step of the scheme.

If such compensation does not fully reimburse for damage, then compensation may be provided in the second stage. For this purpose the funds of the state-created public fund are used, which is located on the territory of a nuclear facility that causes damage. These funds should be sufficient. Funds should be at least 175 million SDR together with the previous total of compensation. If it is not possible to pay the damages incurred in this case, the affected party applies to joint public funds created and maintained by all Member-States of the Brussels Supplementary Convention. In this third stage of the scheme, the affected party can use up to 125 million SDRs. The payments of the Member States to the Supplementary Convention are determined based on the gross national product and the formula established by taking into account the thermal energy of the reactors in each Agreeing Party.

According to Natalie Khorbakh, a researcher who is responsible for the Paris Convention, the responsibility of the Paris Convention has been «incorporated» into the regime of responsibility of the Paris Convention [6, 11]. Other researchers believe that the states' "second liability" is dealt with here. Besides, a group of authors, as the authors of the International Covenant on Environment and Development, propose to create a two-stage structure of international responsibility for damage: 1) nuclear responsibility

and 2) responsibility for environmental damage. This structure envisages the «primary responsibility» of nuclear plant operators and the «second responsibility» of states [7, 65 - 67]. However, the authors believe that the principle of the State's «second responsibility» for nuclear damage has already been enshrined in the Brussels Supplementary Convention. Apparently, the same issue was addressed by the authors of the draft Covenant on Environment and Development. As such, the authors argued that the scheme of international liability for environmental damage provided by them, which is a supplement to the civil liability regime of the State, is in line with the regime, stipulated in the 1960 Convention in Paris.

However, the provisions of the Paris and Brussels Conventions concerning the regime of responsibility are sometimes ambiguous in the legal literature and differing opinions are also encountered. For example, L.V. Speranskaya considers that the State acts as a guarantee of operator' liability (as the state provides the payment compensation). The idea of State's responsibility arises when it acts as an operator of the ship [l, 119-120].

The Vienna Convention on Civil Liability for Nuclear Damages and the Brussels Convention on the Responsibility of Operators of Nuclear Ships have no fundamental differences with the Paris Convention on liability before the third party for Nuclear Energy. However, some differences between them still draw attention. .

The Vienna Convention was developed in 1963 under the auspices of the IAEA to cover all the participating States, regardless of their regional affiliation. Most of its provisions are consistent with the Paris Convention, but the Vienna Convention doesn't stipulate any additional provision concerning the compensation regime as set out in the Brussels Supplementary Convention. The Vienna Convention envisages the State's participation in damages only in such cases if compulsory insurance is insufficient to secure the claims for damages.

Such participation of the State shall be confined to the limits at the discretion of that State. The lack of additional funds was considered as a major shortcoming of Vienna Convention. This deficiency remained unresolved even after the 1988 Protocol to the Vienna and Paris Conventions was incorporated. That Protocol combined the geographical application of the scope of both Conventions. In the event of a nuclear event in a State being a party to both conventions, any of the conventions, that is the Vienna Convention or the Paris Convention may apply.

In recent years, some initiatives to revise the Vienna Convention were made within the frame of IAEA. The main purpose of the revision is to

broaden the understanding of the Convention on Nuclear Damage, which includes environmental damage, as well as the expansion of the geographical application of the Convention and additional compensation mechanism as stipulated by the Supplementary Brussels Convention. As a result of this work, two new documents were adopted. According to the Protocol, the ultimate liability for the operator was set at least 300 million SDR. The Additional Compensation Convention sets out additional compensation totals (amounts) [11]. Any state may join the Convention, no matter whether they are parties to any of the existing conventions, nor does it have any nuclear facilities on their territory [8].

One of the positive results of the revision of 1963 Vienna Convention was that the Protocol to the Vienna Convention changed a new definition of nuclear damage which included environmental damage. According to the Protocol, nuclear damage includes the following features defined by the right of competent court: 1) death or injury, 2) loss or damage of property 3) cost of measures to improve environmental quality, an exception is insignificant deterioration, and if such measurements are in fact acceptable or to be accepted; 4) The benefits not included in I and II subclauses and lost due to the deterioration of the quality of the environment, provided that it is determined by the competent court; 5) prevention of losses and damages resulting from such measures, provided that such losses and damages are due to the combination of radioactive substances or toxic, explosive or other hazardous substances [9, 146].

Brussels Convention on the Responsibility of Operators of Nuclear Ships, as well as the Paris and Vienna Conventions, imposes responsibility for nuclear damage to the operator of a nuclear ship. Pursuant to the Brussels Convention, the operator of a ship may be a private company or a State. Accordingly, in the latter case, the State will act as an entity of the Convention itself. The mode of responsibility defined by the Convention resembles the Paris and in particular the Vienna regime. The Brussels Convention stipulates that the operator must have the compulsory insurance for the amount determined by the state that issued the license. If the amount of damage exceeds this amount, the difference must be paid by the state itself. There is a special guarantee of state compensation here as it is envisaged by the Paris Convention.

**Conclusion.** Referring to the aforementioned, it can be concluded that the regime of liability of states in relation to nuclear damage acts as an addition to their civil-legal liability regime. Proposed in the draft International Covenant on Environment and Development, this provision opens the way for controversy and divergence. We believe that a civil-legal responsibility

regime has been established in relation to nuclear activities and that the responsibility of the state arises only when it is an operator of nuclear facility or a nuclear ship. In our opinion, the provisions of a joint interstate fund set forth in the Brussels Supplementary Convention are more desirable to define as interstate guarantees for compensation of nuclear damage, as it is the main purpose of compensation. Admittedly, there is extensive experience in states' responsibility for transboundry environmental damage. However, although the issue of liability for transboundry nuclear damage in the field of nuclear activity is resolved within the framework of civil law, this does not mean that the existing practice of transboundry liability of States in international law does not end with positive changes. It is no exception that in the future, the norms on procedures for transboundry nuclear damage to the environment will be adopted. Such norms have also been proposed in the draft International Covenant on Environment and Development which envisages the responsibility of States.


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**Ali Khalafli. International Legal Liability Problem On The Use Of Nuclear Power**

The issues on international legal responsibility for environmental damage caused during the use of nuclear energy have been investigated in this article. The regime of liability of states in regard to the nuclear damage arising from the use of nuclear energy has been formed by the civil-legal liability regime. This issue has led to controversy and differences in the scientific literature. According to international legal documents and the rules set in the international practice, a civil-legal responsibility regime has been established in regard to nuclear activities, and the responsibility of the state arises only when they are an operator of nuclear facility or a nuclear ships. It is also noted in the article that transboundry environmental damage.

There is no extensive experience in the area of state responsibility for the strike. However, while the responsibility for transboundary nuclear damage in states in the area of nuclear activity is resolved within civil law, the existing experience in this area needs to be improved. In the future, the adoption of norms on transboundary nuclear damage liability procedures has become an objective necessity. Limiting and preventing possible harm to the environment during peaceful use of nuclear energy is of particular importance. There are mechanisms in this area. However, the damage to these mechanisms may still occur, and therefore, legal mechanisms for compensation for such damage should be developed.

**Keywords:** nuclear energy, atom, environment, nuclear damage, international law, responsibility, IAEA, operator, transboundry, compensation