

THE VIENNA CONVENTION ON CIVIL LIABILITY FOR NUCLEAR DAMAGE REVISITED: CHALLENGES FOR UPDATING THE CZECH AND SLOVAK LEGAL FRAMEWORK

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Abstract: Both the Czech and Slovak Republic announced their plans to play an important role in the process of “nuclear renaissance” in Central Europe. However, this process cannot be limited to a mere multiplication of nuclear facilities, but must be accompanied by strengthening of the legal and regulatory framework. Taking the potential magnitude of a nuclear incident into regard, strengthening of the existing legal framework for the nuclear third party liability must play an eminent role in this legislation. This paper deals with the current liability frameworks in both countries, analysing the implementation of their commitments arising from the Vienna Convention on Civil Liability for Nuclear Damage of 1963. Further, it points out major challenges for the future development in this field, in particular taking the provisions of the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage of 1997 into regard.

Keywords: Nuclear Third Party Liability, nuclear installations, nuclear damage, nuclear incident, Vienna Convention on Civil Liability for Nuclear Damage of 1963, Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage of 1997

1. INTRODUCTION

Both the Czech and Slovak Republics rank among those countries, being in favour of further development of nuclear energy in their territories.¹ However, governments of both countries are well aware of the fact, that this process cannot be limited to a mere multiplication of nuclear facilities, but must be accompanied by strengthening of the legal framework. Taking potential magnitude of a nuclear incident into regard, strengthening of the existing legal framework for the nuclear liability must play an eminent role in this framework.

A special legal framework for nuclear liability was created in both countries not earlier than after the fall of the “iron curtain”. There was no specific nuclear liability legislation in the former Czechoslovakia and, consequently, the ordinary tort law was applicable to the nuclear industry. Shortcomings arising from absence of any special liability legislation became subject of criticism already in the 1970s.² Absence of any special nuclear liability framework triggered both the attention of the public concerned and - after the fall of the “iron curtain” – also the attention of potential technology sup-

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¹ Currently, the nuclear share of the electricity production is 33 percent in the Czech Republic and 54 percent in the Slovak Republic.

² ELIÁŠ, J., ŠVÁB, J. Mírové využívání jaderné energie – prevence a odpovědnost. *Právník*. 1972, roč. 61, č. 5, pp. 393–410.

pliers from the third countries. At the part of the public, there were concerns over the availability of financial resources to cover damages in the case of an incident in the nuclear power plants, as any mandatory insurance was absent in the former legal framework.³ At the part of the potential technology suppliers, there was lack of certainty concerning who can be held liable for damages arising from operation of a nuclear installation. In particular, potential liability risks of technology suppliers from the Western Europe and the U.S. made them conscious to provide further investments in Czechoslovak nuclear industry. In order to achieve international acceptance for their nuclear programs, both countries acceded to the Vienna Convention on Civil Liability for Nuclear Damage of 1963 (hereinafter: “*the Vienna Convention*” or “*the Convention*”) during the 1990s⁴ and subsequently implemented special nuclear liability rules into the national legislation.

Most currently, the problems of nuclear liability became again a matter of intensive discussions.⁵ Several Contracting Parties to the Vienna Convention have most recently ratified⁶ the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage of 1997 (hereinafter: “*the Protocol of 1997*” or “*the Protocol*”), that was adopted in order to strengthen the liability *régime*, created under the Vienna Convention. A wider accession or ratification to the Protocol of 1997 is being urged by the International Atomic Energy Agency and – most recently - also by the European Union.⁷

This paper aims to deal with these challenges. It will point out, how the commitments arising from the Vienna Convention have been implemented into the national legal frameworks. Further it will also point perspectives of the future development of legislation in this area, in particular with regard to the Protocol of 1997. The aims of this paper is – *inter alia* – to urge the legislators of both countries to initiate necessary steps leading to the ratification of this instrument, in order to strengthen international recognition for the national legal frameworks.

2. INSTALLATIONS COVERED BY THE LIABILITY RÉGIME OF THE VIENNA CONVENTION

In practice, the application of the international nuclear liability *régime* created by the Vienna Convention will be triggered if a nuclear installation causes a nuclear incident. Consequently, the terms ‘*nuclear installation*’ and ‘*nuclear incident*’ form the core of the international nuclear liability regime.

Article I of the Convention defines the term “nuclear installation” in its Paragraph 1, letter /j/. Pursuant to this provision, the Vienna Convention is applicable to:

³ ELIÁŠ, J., ŠVÁB, J. Mírové využívání jaderné energie – funkce pojištění. *Právník*. 1972, roč. 61, č. 10, pp. 854–864.

⁴ The Czech Republic did so in 1994, the Slovak Republic in 1995.

⁵ A study on perspectives of nuclear liability harmonisation in the European Union was published by the European Commission in 2009. In order to tackle the issues of nuclear liability, the Commission subsequently established an „informal“ Working Group in 2011. This Working Group finalised its work in 2013, presenting a set of recommendation for the further steps to the Commission.

⁶ E.g. Poland (2010), Montenegro (2011) and Bosnia and Herzegovina (2013).

⁷ Council decision of 15. July 2013 authorising certain Member States to ratify, or to accede to, the Protocol amending the Vienna Convention on civil liability for nuclear damage of 21. May 1963, in the interest of the European Union.

*“any nuclear reactor other than one with which a means of sea or air transport is equipped for use as a source of power, whether for propulsion thereof or for any other purpose; any factory using nuclear fuel for the production of nuclear material, or any factory for the processing of nuclear material, including any factory for the re-processing of irradiated nuclear fuel; and any facility where nuclear material is stored, other than storage incidental to the carriage of such material.”*⁸

Further, according to the Paragraph 1, letter /l/, a ‘nuclear incident’ means “any occurrence or succession of occurrences having the same origin which causes damage.” However, the nuclear third party liability regime of the Vienna Convention is applicable only to those damages, which “arises out of or results from the radioactive properties or a combination of radioactive properties with toxic, explosive or other hazardous properties of nuclear fuel or radioactive products or waste in, or of nuclear material coming from, originating in, or sent to, a nuclear installation.”⁹

Consequently, one of the key issues of the nuclear liability is to identify those facilities, covered by the special *régime* created by the Convention. It is a matter of fact, that this issue presents a not very easy legal exercise. The reason is, that the wording of the Convention quite naturally reflects technological reality of the 1960s, rather than realities of today’s nuclear sector.¹⁰ Following paragraphs will deal with this challenging issue.

Nuclear reactors

Any nuclear reactor other than one with which a means of sea or air transport is equipped for use as a source of power is to be considered as “nuclear installation” and therefore falls under the scope of the Vienna Convention. Article I of the Convention defines the term “nuclear installation” in its Paragraph 1, letter /i/ as “any structure containing nuclear fuel¹¹ in such an arrangement that a self-sustaining chain process of nuclear fission can occur therein without an additional source of neutrons.” Consequently, both nuclear reactors used for the purposes of electricity production (in nuclear power plants)¹² and reactors used for experimental, scientific or educational purposes (in research centres, universities etc.)¹³ are to be covered by the liability regime of the Convention. In this re-

⁸ In relation to the term “nuclear installation”, the Vienna Convention uses the term “Installation State”. This means any “Contracting Party within whose territory a nuclear installation is situated or, if it is not situated within the territory of any State, the Contracting Party by which or under the authority of which the nuclear installation is operated” (Art. I, Par. 1, letter /d/).

⁹ Consequently, the nuclear liability regime created by the Vienna Convention will be not applicable to the damages, arising from a traffic accident that occurred at the site of a nuclear power plant. Neither will it be applicable to the damages, arising from a work accident occurred in the course of maintaining works at the site. Similarly, damages arising from a fire in one of the administrative building at the site are not to be considered as “nuclear damages” pursuant to the Vienna Convention. However, if such a fire “arises out of or results from the radioactive properties”, damages occurred are to be considered as “nuclear” in the sense of the Convention.

¹⁰ This is why the Article 1 deals with “means of sea or air transport, equipped with a nuclear reactor for use as a source of power”, a technology very much discussed in the beginning of the 1960s, however abolished in the decades after.

¹¹ “Nuclear fuel” means “any material which is capable of producing energy by a self-sustaining chain process of nuclear fission” (Art. I, Par. 1, letter /f/).

¹² Temelín and Dukovany in the Czech Republic, Mochovce and Jaslovské Bohunice in the Slovak Republic.

¹³ In the Czech Republic, nuclear reactors are operated for scientific purposes by the *Nuclear Research Institute* in Rež and by the *Czech Technical University* in Prague.

spect, the Article I of the Convention provides that the Installation State “*may determine that several nuclear installations of one operator which are located at the same site shall be considered as a single nuclear installation*” in its Paragraph 1, letter /j/. Both the Czech¹⁴ and the Slovak¹⁵ legislation made use of this provision, which aims at facilitating the conclusion of insurance contracts for these installations.

The Vienna Convention is silent with regard to the nuclear reactors, being in the phase of decommissioning.¹⁶ This issue has been faced by the Installation States only very recently. Scientific literature tends to interpret the applicable provisions in the way, that a facility remains to be covered by the liability *régime* of the Convention until the final removal of any nuclear materials.¹⁷ This is also the way, how the recent Slovak legislation copes with this issue.

Storage facilities

Further, any “*facility where nuclear material¹⁸ is stored, other than storage incidental to the carriage of such material*”, do fall under the scope of the Vienna Convention. Where nuclear materials are stored only as an incidental part of their carriage - for example, on a railway station platform - the facilities used for such storage will normally not be deemed to come within the definition of nuclear installation because of the transitory and fortuitous nature of the storage.

The Vienna Convention is silent regarding what “storage” means, causing discussions on the scope of application of the Convention. Facilities serving for temporary storage of nuclear materials (in particular interim storage facilities for the spent nuclear fuel) are certainly covered by the liability *régime* created by the Convention. However, the Convention does not address *directly* those facilities (repositories), serving for final disposal of nuclear materials, in particular for final disposal of radioactive waste.¹⁹ Consequently, this gap must be addressed by national legislation of the Installation State.

Mining and milling facilities

However, not all facilities interconnected directly, or indirectly with nuclear sector, do fall under the Vienna Convention. Some facilities, as for example those used for mining,

¹⁴ “*In the event that a single person has been licensed for a number of nuclear installations located within an area, and for which a joint on-site emergency plan has been approved, these installations shall be considered, for the purposes of liability for nuclear damage, as a single nuclear installation. However, a number of nuclear installations for which different persons have been licensed cannot be considered as a single nuclear installation, from the aspect of liability for nuclear damage, even if such installations are directly linked*” (Art. 33, Par. 2 of the Act 18/1997 Coll.).

¹⁵ “*If a single person is a holder of authorisation pursuant to paragraph 2 for several nuclear installations located on a territory, for which common on-site emergency plan was approved, for the purposes of liability for nuclear damage these nuclear installations are deemed to be a single nuclear installation. However, several nuclear installations located on the same territory cannot be deemed as a single nuclear installation if the operators are different authorisation holders, even if these facilities are technically interlinked*” (Art. 29, Par. 3 of the Act 541/2004 Coll.).

¹⁶ Currently, this is the case of two reactors located in Jaslovské Bohunice in the Slovak Republic.

¹⁷ KISSICH, S. *Internationales Atomhaftungsrecht*. Baden Baden: Nomos Verlag, 2004, pp. 141–142.

¹⁸ “*Nuclear material*” means “*nuclear fuel, other than natural uranium and depleted uranium, capable of producing energy by a self-sustaining chain process of nuclear fission outside a nuclear reactor, either alone or in combination with some other material; and radioactive products or waste*” (Art. I, Par. 1, letter /h/).

¹⁹ There are three such repositories currently in operation in the territory of the Czech Republic (Dukovany, Richard near Litoměřice and Bratrství in Jáchymov) and one sealed repository (Hostim near Beroun). In the Slovak Republic, a “national” repository is being operated in Mochovce.

milling and the physical concentration of uranium ores, do not involve high levels of radioactivity. Hence, these activities do not fall within the scope of the Convention.²⁰ Factories for the manufacture or processing of natural or depleted uranium, facilities for the storage of natural or depleted uranium, and the transport of natural or depleted uranium, since the level of radioactivity is low and there are no criticality risks, are also excluded.

“Low risk installations”

Further, installations where small amounts of fissionable materials are to be found, such as *research laboratories*, are likewise outside the Convention. Similarly, risks which arise in respect of radioisotopes usable for any *industrial, commercial, agricultural, medical, scientific* or *educational* purposes are excluded from the scope of the Convention.

Finally, where materials, such as uranium salts, are used incidentally in various industrial activities not related to the nuclear industry, such usage does not bring the plant concerned within the scope of the Convention.

Nuclear materials to be excluded from the Vienna Convention

At last but not at least, the Article I of the Convention provides for the right of an Installation State to exclude small quantities of nuclear material from the scope of application in its Paragraph 2. Maximum limits for the exclusion of such quantities are to be established by the Board of Governors of the International Atomic Energy Agency.

Both the Czech and the Slovak Republic made use of this provision and excluded certain quantities of nuclear material from the scope of liability regime in their territory.

3. KEY FEATURES OF THE LIABILITY RÉGIME OF THE VIENNA CONVENTION

Basically, the Vienna Convention contains some basic liability principles, which differ considerably from the principles of the ordinary tort law:

Each nuclear installation must have a person in charge: *the operator*. In the legal régime of the Vienna Convention, the operator is “*the person designated or recognised as the operator of a nuclear installation by the state.*” The operator of a nuclear installation is exclusively liable for nuclear damage. No other person may be held liable, and the operator cannot be held liable under other legal provisions. Liability is legally channelled solely to the operator of the nuclear installation. In relation to this, the Convention provides for very limited liability relief. The operator will be exonerated from liability only if he proves, for example, that the nuclear incident was directly due to armed conflict, hostilities, civil war or insurrection, or that it resulted wholly or partly either from gross negligence of the victim or from an act or omission of the victim with intent to cause harm.

As a *quid pro quo* for the very strict conditions of the operator’s liability, the Installation State may limit the operator’s liability by the national legislation. However, the Convention provides for a minimum possible liability limit.

²⁰ In the Czech Republic, an uranium mining facility is located in Rožná.

Further, the Vienna Convention requires the operator to maintain mandatory insurance or to provide other financial securities covering its liability for nuclear damage in such amounts, of such types and in such terms, as the Installation State specifies.

At the same time, the Convention provides that courts of the Installation State where the nuclear incident occurred will have exclusive jurisdiction over all actions brought for damages caused by a nuclear incident occurring in their territory. In a case where nuclear material in transport causes damage within the territory of a contracting party, the court where the nuclear material was situated at the time of damage will be exclusively competent.

However, the Convention fails to establish a comprehensive liability system. In many aspects, it merely contains a *renvoi* to national legislation, which is intended for providing more detailed rules of nuclear liability. Following paragraphs will deal with the way, how these rules have been reflected into the Czech and Slovak legislation.

Implementation of the Vienna Convention into the national legal framework: Some general remarks

Commitments arising from the Vienna Convention were implemented into the national legislation through the “implementation clause” of the Act 18/1997 Coll.²¹ in the Czech Republic and through a similar provision of the Act 541/2004 Coll.²² in the Slovak Republic.

Due to this “implementation clauses”, nuclear liability matters are to be governed in both countries by the following legal provisions and in the following order:

- 1) *by the provisions of international nuclear liability treaties that are binding for the country, i. e. by the provisions of the Vienna Convention;*
- 2) *by the provisions of the nuclear energy legislation that contain special nuclear liability rules, as foreseen in international treaties;*
- 3) *by the provisions of the Civil and Commercial Codes, governing, in general, issues of liability.*

It is a matter of fact, that in the legislation of both countries, the issues of nuclear liability have been regulated by a special part of an act, which basically contains provisions of public (administrative) law. However, due to special nature of the nuclear liability, its placement into those acts has rather *artificial effect*, without direct link to the remaining administrative provisions. The issue is, that both the Act 18/1997 Coll. and the Act 541/2004 Coll. reflects not only obligations, arising from the Vienna Convention, but also obligations arising from the other international treaties (e.g. Convention on Nuclear Safety of 1994, Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management of 1997 etc.). This situation implicates additional problems. E.g. the Convention on Nuclear Safety of 1994 contains a rather different definition

²¹ “The provisions of the international agreement, which is legally binding on the Czech Republic, shall be applied for the purposes of civil liability for nuclear damage. The provisions of general legal regulations concerning liability for nuclear damage shall be applied only unless otherwise provided for by the international agreement or this Act” (Art. 32 of the Act 18/1997 Coll.).

²² “For the purposes of liability for nuclear damage the provisions of an international treaty, by which the Slovak Republic is bound, shall apply. Provisions of the general rules concerning liability for damage shall apply unless an international treaty or this Act stipulate otherwise” (Art. 29, Par. 1 of the Act 541/2004 Coll.).

of the term “*nuclear installation*”, as compared to the definition of the same term in the Vienna Convention. Naturally, a need to reflect two rather different definitions of the same term in one act causes further inconsistencies in the legal framework.

From systematic point of view it would be more appropriate to include the regulation of nuclear liability to acts regulating tort law, whereas the option is either creation of separate liability provisions within the existing Civil Code²³ or adoption of a separate act, dealing exclusively with the nuclear liability.²⁴ Separate acts, governing the issues of nuclear liability, have been recently issued in several Contracting Parties to the Vienna Convention (e.g. in Ukraine and in Romania). Such approach can be chosen by the legislation also by implementing the requirements of the Protocol of 1997 into the national legislation.

The operator

In the legal *régime* of the Vienna Convention, only the operator (“*the person designated or recognised as the operator of a nuclear installation by the state*”) is liable for damages occurred as result of an incident in a nuclear installation. Consequently, the person liable must be designated by the legislation of the Installation State, or at least recognised by that state as being in charge of the nuclear installation.

Both Czech²⁵ and Slovak²⁶ legislation provide for a direct link between nuclear liability and a license, issued by the national regulatory authority. A person, who is granted a license to operate a “nuclear installation” covered by the liability regime of the Vienna Convention, is to be considered as an operator in the sense of the Convention.

The national legislation of neither country does explicitly exclude liability of third person. However, liability of these persons for any damages arising from an incident that occurred in a nuclear installation is excluded directly by a provision of the Vienna Convention.²⁷ Consequently, any claim for damages issued against a person different than operator must be rejected by both the Czech and Slovak court. Further, the Convention grants to the operator in its Article X only a very limited right of recourse. This is possible

²³ This option was matter of discussion during the re-codification works on the Slovak Civil Code. However, incorporation of nuclear liability into the Civil Code was dismissed due to the very special nature of nuclear liability as compared to the ordinary liability for damages.

²⁴ In 2007, the Government of the Slovak Republic commissioned the Slovak Nuclear Regulatory Authority to submit a draft of a new “*Nuclear Liability Act*” until June 2010. An Interdepartmental Working Group was established in order to tackle the question of nuclear liability. The Working Group submitted a proposal of a new act, which was based on binding provisions of the Vienna Convention. However, also certain provisions of the Protocol of 1997 were introduced into this proposal. From a systematic point of view, the proposal represented in many aspects a significant advance, especially concerning increased liability limits, newly drafted principles of the causal link, precision of the conditions which must be met by entity providing financial security for liability etc. However the proposal was dismissed by Legislation Council of the Government at its session on 2 November 2010. The working Group was re-established very recently.

²⁵ “*The licensee licensed for operation of nuclear installation or performing any practice related to nuclear installation utilisation, or licensed for nuclear material transport shall be the operator liable for nuclear damage under the international agreement which is legally binding on the Czech Republic*” (Art. 33, Par. 1 of the Act 18/1997 Coll.).

²⁶ “*The holder of a authorisation for commissioning of a nuclear installation, for operation of nuclear installations except repositories, and authorisation holder for the decommissioning phase or holder of authorisation for transport of radioactive materials is liable for nuclear damage pursuant to the international treaty, by which the Slovak Republic is bound pursuant to paragraph 1*” (Art. 29, Par. 2 of the Act 541/2004 Coll.).

²⁷ “*Except as otherwise provided in this Convention, no person other than the operator shall be liable for nuclear damage*” (Art. II, Par. 5).

only, if this is expressly provided for by a contract in writing; or if the nuclear incident results from an act or omission done with intent to cause damage, against the individual who has acted or omitted to act with such intent.

Limitation of operator's liability

The Vienna Convention provides that any Installation State may limit operator's liability in its national legislation.²⁸ Similar to other Central and Eastern European countries that acceded to the Vienna Convention in the 1990s, also the Czech and the Slovak Republic used this provision and introduced limits of liability. The amounts do basically depend on type of nuclear installation and on the magnitude of risk, which this installation does represent. Current liability limits in both national legislations are to be found in the Table 1.

The Vienna Convention provides for a “floating” limit of operator's liability, when fixing the minimal limit to the price of one troy ounce of fine gold.²⁹ This constitutes a particular challenge for national legislation, which has to avoid providing for a minimal limit that may become too low due to the diversions of the price of gold. This problem has been addressed by the Protocol of 1997, which provides for a liability limit in the Special Drawing Rights.

Consequently, limitation of operator's liability is to be considered as right of the Installation State, which is guaranteed under the international law. This right of both Czech and Slovak Republics has been “grandfathered” also Treaty establishing the European Atomic Energy Community.³⁰ Consequently, any legislation of this Community, interfering with the liability limit provided by the Convention, or introducing higher minimal limits, will be in direct contradiction with that Treaty.

It is a matter of fact that, from the very early beginning, the Contracting Parties to the Vienna Convention have been allowed to introduce unlimited liability. The provisions of the Convention do not contain any obligatory maximum limit of liability. Therefore, limitation of operator's liability is a right of an Installation State, rather than an obligation.³¹ However, neither Installation State has opted for this possibility so far.

Congruence of liability and insurance or other financial security

The Vienna Convention provides in its Article VII, that the operator shall be required to maintain insurance or other financial security covering his liability for nuclear damage in such amount, of such type and in such terms as the Installation State shall specify in its

²⁸ “The liability of the operator may be limited by the Installation State to not less than US \$5 million for any one nuclear incident” (Art. V, Par. 1).

²⁹ “The United States dollar referred to in this Convention is a unit of account equivalent to the value of the United States dollar in terms of gold on 29 April 1963, that is to say US \$35 per one troy ounce of fine gold” (Art. V, Par. 3).

³⁰ “The provisions of this Treaty shall not be invoked so as to prevent the implementation of agreements or contracts concluded before its entry into force by a Member State, a person or an undertaking with a third State, an international organization or a national of a third State where such agreements or contracts have been communicated to the Commission not later than 30 days after the entry into force of this Treaty” (Art. 105 of the Treaty establishing the European Atomic Energy Community).

³¹ IAEA (ed.): *The 1997 Vienna Convention on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation: Explanatory Texts*. Vienna: IAEA, 2007, pp. 13–14.

national legislation.³² This *renvoi* to national legislation makes the amounts to be insured by the operator depending on the Installation State, rather than on a binding provision of the Convention. However, the Convention requires the Installation State to “*ensure the payment of any claims which have been established against the operator by providing the necessary funds to the extent that the yield of insurance or other financial security is inadequate to satisfy such claims, but not in excess of the limit, if any, established in national legislation.*”

Consequently, it is a matter of national legislation to provide for applicable rules on insurance, or other means of financial security covering operator’s liability. Current rules in both national legislations are to be found in the Table 2.

Heads of damages

The Vienna Convention provides for heads of damages covered in its Article I. In general, loss of life, any personal injury or any loss of, or damage to, property which arises out of or results from the “*radioactive properties or a combination of radioactive properties with toxic, explosive or other hazardous properties of nuclear fuel or radioactive products or waste in, or of nuclear material coming from, originating in, or sent to, a nuclear installation*” are to be covered by the *régime*, created by the Convention.

Also in this respect, the Convention contains a *renvoi* to national legislation. Installation State may provide in its legislation, that the operator is liable also for other “*loss or damage so arising or resulting*” and for “*loss of life, any personal injury or any loss of, or damage to, property which arises out of or results from other ionizing radiation emitted by any other source of radiation inside a nuclear installation.*” Consequently, both the Czech³³ and the Slovak³⁴ legislation made use of this possibility and enlarged the scope of damages covered.

Rules of jurisdiction

At last, but not least, the Vienna Convention provides for specific rules on jurisdiction in its Article XI. Basically, jurisdiction over all actions shall lie only with the courts of the Contracting Party within whose territory the nuclear incident occurred.³⁵ In this respect, the Convention does not contain any *renvoi* to national legislation and consequently, the principle of exclusive jurisdiction cannot be modified by any Installation State.

³² However, the Contracting Party itself, or any of its constituent sub-divisions, such as States or Republics, are not required to maintain any insurance or other financial security to cover their liability as operators under the Convention.

³³ “*Nuclear damage shall also be damage arising in the form of costs of interventions necessary to prevent or reduce exposure or restore the original or equivalent State of the environment, if these interventions were made necessary by a nuclear event and the nature of the damage thus permits*” (Art. 34, Par. 5 of the Act 18/1998 Coll.).

³⁴ “*A nuclear damage shall also mean damage, which occurred by incurring costs of necessary measures to avert or to reduce exposure or to restore the previous or similar state of the environment, if these actions were triggered as a result of nuclear event and the nature of the matter allows it*” (Art. 29, Par. 5 of the Act 541/2004 Coll.).

³⁵ Further, the Convention provides that where the nuclear incident occurred outside the territory of any Contracting Party, or where the place of the nuclear incident cannot be determined with certainty, jurisdiction over such actions shall lie with the courts of the Installation State of the operator liable.

4. PERSPECTIVES OF THE FUTURE NUCLEAR LIABILITY FRAMEWORK

Most currently, both the International Atomic Energy Agency and the European Union urged Contracting Parties to the Vienna Convention to strengthen their nuclear liability framework by accession, or ratification of the Protocol of 1997. The European Commission identified the Protocol as being “*particularly important, in the interest of the European Union and its Member States, because it improves compensation for damage caused by nuclear incidents.*”³⁶

However, neither the Czech, nor the Slovak Republic is currently Contracting Party to the Protocol. Nevertheless, due to circumstances outlined above, it will be useful to examine the relation of the current nuclear liability framework with the requirements arising from the Protocol.

The Protocol of 1997 and the basic principles of nuclear liability

It should be stressed that the Protocol did not affect the basic liability principles of the Vienna Convention, as outlined above (operator’s exclusive liability, limitation of operator’s liability, congruence of operator’s liability with insurance, or other financial security, exclusive competence of the court). It merely creates a new, Amended Vienna Convention. This Convention entered into force in 2003. Since then, the Amended Vienna Convention exists together with the (original) Vienna Convention, being in force in the most of the Central and Eastern European States.³⁷

Basically, the provisions of the Protocol may be divided into three main groups.³⁸ Some of the new and revised provisions deal with the matter of substance. These will be analysed below in a more detail. Other revised provisions deal with the issues of procedural nature. The third group contains no new issues, either substantive or procedural, and essentially serves to refine the existing provisions of the Convention.

Installations covered

The Protocol does not amend the definition of “nuclear installation” directly. However, it contains a new competence of the Board of Governors of the International Atomic Energy Agency in its Article I, Paragraph 1, letter /j/, which shall from time to time determine, that other installations in which there are nuclear fuel or radioactive products or waste are to be covered by the liability *régime* of the Amended Vienna Convention.

In this way, the liability cover of final repositories of spent nuclear fuel and installations in the stage of decommissioning may be addressed by the Amended Vienna Convention in the future.³⁹

³⁶ Council Decision. op. cit. sub 7, p. 8.

³⁷ A list of Signatories and Contracting Parties to the Protocol of 1997 is to be found in the Table 3.

³⁸ LAMM, Vanda. The Protocol Amending the Vienna Convention of 1963. In: OECD (ed.): *International Nuclear Law in the Post-Chernobyl Period*. Paris: OECD, 2006, pp. 171–172.

³⁹ IAEA (ed.): *The 1997 Vienna Convention on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation: Explanatory Texts*. op. cit. sub 34, pp. 26–27.

Limitation of operator's liability

Perhaps the most important amendment of the Vienna Convention affected by the Protocol is a severe increase of minimal liability limits. This can be explained by the fact, one of the main motives for amending the Vienna Convention was the consideration, that the minimal liability limit laid down in 1963 had become unrealistic in the meantime.

Consequently, the Protocol provides for increased limits of operator's liability in its Article VII. Pursuant to this provision, the liability of the operator may be limited by the Installation State for any one nuclear incident, either to not less than 300 million Special Drawing Rights, or to not less than 150 million Special Drawing Rights provided that in excess of that amount and up to at least 300 million Special Drawing Rights public funds shall be made available by that State to compensate nuclear damage.⁴⁰

Further, the Protocol introduced the so called "*phase-in mechanism*", enabling the Contracting Parties to fix the liability amount to 100 million Special Drawing Rights for a transitional period of 15 years after the entry into the force.⁴¹ Therefore, fixing the liability amount to this amount is a rather provisional measure, intended basically to attract as much as possible new Contracting Parties to the liability *régime*, created by the Amended Vienna Convention. However, even the "*phasing-in*" amount of liability is over 40 times higher than the minimal amount required in the of the (original version) Vienna Convention.

Consequently, increased liability limits will constitute main challenge for the national legislation, implementing the Protocol of 1997. Table 4 shows the gaps between existing liability amounts in national legislation and amounts required by the Protocol.⁴²

Congruence of liability and insurance or other financial security

The Protocol does not amend the rules for congruence between the liability and insurance or other financial security. Also under the Amended Vienna Convention, the operator shall be required to maintain insurance or other financial security covering his liability for nuclear damage in such amount, of such type and in such terms as the Installation State shall specify.

However, the Protocol does address the issue of insurance for the case, a Contracting Party will opt for operator's unlimited liability.⁴³ In that case, the Installation State may establish a limit of the financial security of the operator liable, provided that such limit is not lower than 300 million Special Drawing Rights. The Installation State shall ensure the payment of claims for compensation for nuclear damage which have been established

⁴⁰ Further, Protocol's Article VD addresses the adjustments of liability amounts in view of inflation and other factors via a relatively simplified procedure. Pursuant to this provision, a meeting of the Contracting Parties shall be convened by the Director General of the International Atomic Energy Agency to amend the limits of liability referred to in Article V if one-third of the Contracting Parties express a desire to that effect.

⁴¹ The Protocol entered into force in 2003. The possibility to fix the special transitional liability limit will therefore cease in 2018.

⁴² However, the Table also shows, that both countries currently do comply with the temporary „*phase-in*“ liability limit.

⁴³ IAEA (ed.): *The 1997 Vienna Convention on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation: Explanatory Texts*. op. cit. sub 34, pp. 13–14.

against the operator to the extent that the yield of the financial security is inadequate to satisfy such claims, but not in excess of the amount of the 300 million Special Drawing Rights.

Heads of damages

The concept of covered damages is considered to be one of the most significant changes introduced by the Protocol of 1997. In strict contrast to a rather *laconic* definition of damages covered in the of the (original version) Vienna Convention, the list of covered damages in the Amended Vienna Convention is more impressive.

In addition to loss of life, any personal injury, loss of or damage to property, which were already covered in the (original) Vienna Convention, also following damages are to be covered, each of them to the extent determined by the law of the competent court:

- 1) *economic loss arising from of life, any personal injury, loss of or damage to property, if incurred by a person entitled to claim in respect of such loss or 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,*
- 3) *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 that environment,*
- 4) *the costs of preventive measures, and further loss or damage caused by such measures;*
- 5) *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.*

Further, the Protocol introduced very detailed definitions of the terms “measures of reinstatement”⁴⁴, “preventive measures”⁴⁵ and “reasonable measures.”⁴⁶

Rules of jurisdiction

At last, but not least, the Protocol of 1997 introduced also a change in the area of jurisdiction. The Article XI provides for this change in its Paragraph 4. Pursuant to this provision, the Contracting Party whose courts have jurisdiction shall ensure that only *one* of its courts shall have jurisdiction in relation to any one nuclear incident.

Consequently, implementation of the Protocol into the Czech, or Slovak legislation will constitute also a need to amend the existing rules on the competence of courts.

⁴⁴ “Measures of reinstatement” means any reasonable measures which have been approved by the competent authorities of the State where the measures were taken, and 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. The law of the State where the damage is suffered shall determine who is entitled to take such measures (Art. I, Par. 1, letter /m/).

⁴⁵ “Preventive measures” means any reasonable measures taken by any person after a nuclear incident has occurred to prevent or minimize damage referred to in sub-paragraphs (k)(i) to (v) or (vii), subject to any approval of the competent authorities required by the law of the State where the measures were taken (Art. I, Par. 1, letter /n/).

⁴⁶ “Reasonable measures” means measures which are found under the law of the competent court to be appropriate and proportionate having regard to all the circumstances, for example 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; the extent to which, at the time they are taken, such measures are likely to be effective; and relevant scientific and technical expertise (Art. I, Par. 1, letter /o/).

5. KEY MESSAGES

What are the main benefits, the Czech and the Slovak Republic may achieve through the ratification of the Protocol of 1997? First of all, this step will certainly lead to strengthening of position of potential victims, and also to confirming the legitimacy of nuclear programme in the eyes of general public.

Further, ratification of the Protocol by the Czech and by the Slovak Republics will be certainly motivation also for other countries of the region to join the liability *régime* of the Amended Vienna Convention.⁴⁷ It is also a matter of fact, that wider accession to the Protocol of 1997 in the countries of Central Europe will represent a considerable step towards strengthening of nuclear third party liability regime in this area.

At last but not at least, one of the main benefits of the Protocol's ratification will also be strengthening of legitimacy of national legal frameworks *vis-à-vis* those neighbouring states, which are opposing peaceful use of nuclear energy. Protocol's ratification can be a sign, showing that the Czech and Slovak "nuclear renaissance" is not restricted only to a mere multiplication of nuclear installations, but goes hand-by-hand with further development of legislative framework.

Table 1: Limits of operator's liability in the current legislation

<i>Czech Republic (Act 18/1997 Coll.)</i>	<i>nuclear installations operated for purposes of electricity production storage facilities and repositories of spent nuclear fuel and of nuclear materials generated by processing of this fuel</i>	<i>limit of operator's liability is CZK 8,000 million</i>
	<i>other nuclear installations (e.g. research reactors) and shipments</i>	<i>limit of operator's liability is CZK 2,000 million</i>
<i>Slovak Republic (Act 541/2004 Coll.)¹</i>	<i>nuclear installations operated for purposes of electricity production</i>	<i>limit of operator's liability is EUR 300 million</i>
	<i>other nuclear installations, shipments and all nuclear installations being decommissioned</i>	<i>imit of operator's liability is EUR 185 million</i>

Explanations:

¹ Act 541/2004 Coll. as Amended by the Act 143/2013 Coll. (in force since 1st January 2014).

⁴⁷ This will be in particular the case of Hungary, Lithuania and Ukraine, which – similarly to the Czech Republic – signed the Protocol in 1997, but did not ratify it until now.

Table 2: Insurance or other financial cover of operator's liability in the current legislation

<i>Czech Republic (Act 18/1997 Coll.)</i>	<i>nuclear installations operated for purposes of electricity production</i>	<i>operator's obligation to provide insurance covering CZK 2,000 million¹</i>
	<i>storage facilities and repositories of spent nuclear fuel and of nuclear materials generated by processing of this fuel</i>	<i>state guarantee covering CZK 6,000 million</i>
	<i>other nuclear installations than identified above (e.g. research reactors) and shipments</i>	<i>operator's obligation to provide insurance covering CZK 300 million</i>
		<i>state guarantee covering CZK 1,700 million</i>
<i>Slovak Republic (Act 541/2004 Coll.)²</i>	<i>nuclear installations operated for purposes of electricity production</i>	<i>operator's obligation to provide insurance covering EUR 300 million</i>
	<i>other nuclear installations, shipments and all nuclear installations being decommissioned</i>	<i>operator's obligation to provide insurance covering EUR 185 million</i>

Explanations:

¹ Further, the Ministry of Finance has been entrusted to issue a decree by the Act 18/1997 Coll., specifying exceptions from the mandatory insurance and those cases, where alternative financial security is to be held instead of maintaining obligatory insurance. However, such exceptional regulation has to serve the purpose of effectiveness of spending of the public finances.

² Act 541/2004 Coll. as Amended by the Act 143/2013 Coll. (in force since 1st January 2014).

Table 3: The Protocol of 1997 Amending the Vienna Convention on Civil Liability for Nuclear Damage of 1963

<i>Signatory State</i>	<i>Ratification/Accession (Date of deposit)</i>	<i>Entry into force</i>
Argentina	Ratification (14. 11. 2000)	04. 10. 2003
Belarus	Ratification (04. 07. 2003)	04. 10. 2003
Bosnia and Herzegovina	Accession (01. 03. 2013)	01. 06. 2013
Kazakhstan	Accession (29. 05. 2011)	29. 06. 2011
Latvia	Ratification (05. 12. 2001)	04. 10. 2003
Montenegro	Accession (04. 05. 2013)	01. 06. 2013
Morocco	Ratification (06. 07. 1999)	04. 10. 2003

<i>Signatory State</i>	<i>Ratification/Accession (Date of deposit)</i>	<i>Entry into force</i>
Poland	Ratification (21. 09. 2010)	21. 12. 2010
Romania	Ratification (29. 12. 1998)	04. 10. 2003
Saudi Arabia	Accession (17. 03. 2013)	17. 06. 2011
United Arab Emirates	Accession (29. 05. 2012)	29. 08. 2012

Explanations:

Further, following Signatory States did not ratify the Protocol yet: the Czech Republic, Hungary, Indonesia, Italy, Lebanon, Lithuania, Peru, Philippines and Ukraine.

Table 4: Existing limits of operator's liability as compared with the requirements of the Protocol of 1997

Existing liability limit under the Act 18/1997Coll.	Liability limits required by the Protocol of 1997	Differences between the limits
8. 000. 000. 000,- CZK 272. 953. 700,- SDR	8. 792. 700. 000,- CZK 300. 000. 000,- SDR	(-) 792. 700. 000,- CZK (-) 27. 046. 300,- SDR
8. 000. 000. 000,- CZK 272. 953. 700,- SDR	4. 396. 350. 000,- CZK (x 2) 150. 000. 000,- SDR (x 2)	(-) 792. 700. 000,- CZK (-) 27. 046. 300,- SDR
8. 000. 000. 000,- CZK 272. 953. 700,- SDR	2. 930. 900. 000,- CZK 100. 000. 000,- SDR	(+) 5. 069. 100. 000,- CZK (+) 172. 953. 700,- SDR

Existing liability limit under the Act 541/2004Coll.	Existing liability limit under the Act 18/1997Coll.	Differences between the limits
300. 000. 000,- EUR 261. 000. 000,- SDR	367. 068. 000,- EUR 300. 000. 000,- SDR	(-) 67. 068. 000,- EUR (-) 39. 000. 000,- SDR
300. 000. 000,- EUR 261. 000. 000,- SDR	183. 534. 000,- EUR (x 2) 150. 000. 000,- SDR (x 2)	(-) 67. 068. 000,- EUR (-) 39. 000. 000,- SDR
300. 000. 000,- EUR 261. 000. 000,- SDR	122. 356. 000,- EUR 100. 000. 000,- SDR	(+) 177. 644. 000,- CZK (+) 161. 000. 000,- SDR

Explanations:

Authors used the exchange rates, as published by the National Bank of the Czech Republic on 01. 07. 2013.