The legal regulations for a special regime of liability and managing a risk at the operation of nuclear facilities is based on a hypothesis at which an accident of nuclear equipment or the transportation of nuclear materials can lead to the origination of big amounts of damage. The legal solution of this problem must provide simultaneously guaranteed compensation to a population, but also must not endanger the competitiveness of the nuclear industry. It is desirable to create and introduce minimal norms for the provision of financial protection against damage, which is a result of several uses of atomic energy for peaceful purposes.

Due to the lack of provisions of international nuclear law for the compensation of cross-border nuclear damage, the only possibility for the national parties, having such business activity, is to harmonize the provisions of their national legislation for civil liability by means of conventions.

International conventions in terms of nuclear damage stipulate the legal regulations dealing with the special regime of liability and managing the risk of the origination of big amounts of damage at accidents of nuclear facilities or the transportation of nuclear materials. The basic principles and contents of the Vienna and Paris Convention on civil responsibility are internationally accepted as legal means, allowing to cope with nuclear risks.

The basic principles of civil nuclear liability are as follows:
− Exceptional liability of the nuclear installation operator;
− Absolute (objective) liability of an operator, which means liability without one’s own fault;
− Limitation of liability in terms of an amount;
− Limitation of liability in time;
− Equivalent options for a financial guarantee of liability.

According to the conventions under review, liability is restricted only to one person, with the exclusion of every other. «A person» means: any individual, partnership, any private or public body whether corporate or not, any international organization, enjoying legal personality under the law of the Installation State and any State or any of its constituent sub-divisions.

This person is «designated or recognized by the Installation State as an operator of that installation». Usually, the operator is a person responsible for security, namely the licensee. However, the nation-state has the power to stipulate every other person, that is associated with the nuclear installation, for example the equipment owner.

Responsibility in case of nuclear damage lies with the nuclear installation operator, even without any fault on his part, adhering to the principle of absolute (objective) liability. It is based on the traditional presumption for responsibility of every person, engaged in dangerous business activity and on the difficulty of proving negligence on the part of an operator under certain circumstances associated with nuclear activities.

In the statement of the motives and reasons for the revision of the Paris Convention on 16.11.1982, one has stipulated two main reasons, which have led to placing the whole liability on the operator, unlike that envisaged by the common law of liability. First, it is so in order to avoid difficulties and time limits, which would exist at many-sided liabilities. Second, to be avoided the accumulation of insurance policies different from these of an operator, associated with the installation or operation of a plant over the years, which otherwise must be at the disposal of an operator, maintained and grouped by capacity.

In scientific circles consensually, it is taken for granted, that the legal channeling of liability is lawfully placed only on the nuclear installation operator. This concept is a main feature of the law of nuclear liability, without any equivalent in the other areas of law. International conventions strengthen the principle of channeling through additional legal means. Thus for example, an operator is held responsible for the transportation of nuclear materials from and to the relevant equipment. If it is not approved in a special procedure, the transporting contractor cannot be held responsible for cases and amounts of damage during transportation and the liability for safe transport is placed on the operator.
Nowadays, legal channeling comprises one of the basic goals of the international harmonization of liability for nuclear damage. One has also stated another opinion in specialized literature – the understanding, that it is unjust to exonerate suppliers from liability, but the summarized views of the legal science anent the legal channeling of liability on the part of an operator has obvious advantages from the viewpoint of the legal certainty for the victims of nuclear damage⁶.

The exceptional and absolute liability of a nuclear operator avoids the search of a responsible person in common law, which may not be the only one. One simplifies and rationalizes the eventual solution for the civil liability for cases and amounts of damage, which is in favor of victims. They do not have doubts as to for whom to make their claims.

At the limitation of liability in terms of an amount in case of a big accident, it is possible for the operator and insurance companies to be unable to provide financial security in view of the usual principle of quasi-delicate liability. At the same time, the pragmatic concern about facilitating the development of the peaceful use of nuclear power requires a solution for the limitation of an amount. In this connection, the above-mentioned Paris Convention and Vienna Convention establish and put limitations on liability in a different way. The above-stated Vienna Convention does not fix an upper amount of a limit and leaves the issue to be settled at the discretion of every Installation State, but determines an amount not less than 5 million US Dollars for every single nuclear accident. In the Paris Convention, one distinguishes three areas of liability. The first area is the one, which corresponds to the personal liability of an operator and amounts to at least 5 million USD. As an immediate priority of national legislation, one can determine up to where the operator’s limit of liability can reach, without falling below the established amount. The second area covers the amounts of damage, which exceed the foregoing limit and it is up to 175 million USD. This second area is covered by the nation-state in which the nuclear facility, that has caused the damage, is located. The third area of compensation covers the cases and amounts of damage, exceeding 175 million USD and it reaches up to 300 million USD. This last area is a result of Brussels Supplementary Convention, adopted in year 1963 and it focuses our attention on the matter, that member-countries are responsible for cases and amounts of damage, which exceed the liability of a nation-state (175 million USD) in different proportions, depending on the given in advance formula.

The limitation of liability for nuclear damage in time is subject to the rule that one can exercise the right of compensation within 10 years from the date of a nuclear accident, because after this time limit uncertainty increases and the determination of the cause becomes more difficult. From the viewpoint of an insurer, “the longer is the period of time from the date of every event, the more probable is individual insurance commitments to be fulfilled more difficultly due to consolidation, insolvency or closure. In this way, the shorter period of time gives greater security to victims for the a reliable payment in consequence of claims. At present, nuclear energy pools provide the required coverage under the conventions on liability, but 10 years is the maximal period for a private insurance market, regardless of the fact, that some nuclear legislations nowadays stipulate also longer periods during which one can make a claim⁶.

The mentioned in conventions period of 10 years is a result of a compromise between the interest of victims and the one of the nuclear installation operator. Under reserve as to the clear determination of the starting point for the time limit, this ten-year-long period is insufficient at a nuclear accident in the repository for the geological disposal of radioactive waste, because it is probable for the eventual cases of damage to occur long time after the accident, due to the slow migration of radioactivity up to a surface⁷.

The equivalent options for the financial guarantee of liability are insurance or another financial security, covering the liability of the plant operator. The amount, the type and the conditions are determined by the Installation State.

The Installation State provides the payment of honored claims for the compensation of nuclear damage filed and made against the operator, as it provides the necessary financial means to such amount up to which the amount of insurance or some other financial guarantee is insufficient for the compensation of such claims, but not more than the maximal amount of liability, if such is limited and fixed by the Installation State⁶.

As stated above, the problem of nuclear liability is solved by means of two instruments: the Paris Convention on Third Party Liability in the Field of Nuclear Energy of 29th July 1960, which has been amended by means of
The national parties (countries) have two options at their disposal for the implementation of the conventions on a national level. They can transform the contents of the above-mentioned conventions into a national law concerning liability. This solution gives the advantage to be allowed the use of legislative techniques and a national language, but there is a risk of wrong interpretations as to the contents of the conventions. The other option, which avoids this risk, is to implement the conventions directly by means of the 1997 Protocol, which came into force on the 4th of October year 2001. The above-stated Vienna Convention was amended in order to improve the system for regulating the compensations for nuclear damage. The 1997 Protocol contains, inter alia, also a new definition of nuclear damage, as one expands the geographical scope of the convention under review, extends the time limit during which claims for death and body injuries can be filed and increases the minimal amounts of compensation. One incorporates new levels of competence, which initiate action in the cases when a nuclear accident arises during the transportation of a nuclear material.

Both conventions contain an international reference as to determination whether legislation in terms of nuclear liability is adapted to a risk. National legislators should consider the advantages, which equalize their national legislations to these of the conventions under review at the ratification of the relevant convention. One applies either the Vienna Convention or the Paris Convention to a nuclear accident, as one excludes the implementation of the other convention. Upon the origination of a nuclear accident in a nuclear installation, one applies this convention in any Installation State. At the occurrence of a nuclear accident outside the nuclear installation, associated with a nuclear material during transportation, one implements this convention in any Installation State, whose operator is responsible in conformity with either article III.1 (b) or (c) of the Vienna Convention, or under article IV(a) and (b) of the Paris Convention.

On the 21st of September year 1988, the Conference on the Relationship between the Paris Convention and the Vienna Convention adopted a Joint Protocol relating to the application of both conventions, whereas the Paris Convention (in addition to the Brussels Supplementary Convention) and the Vienna Convention share one and the same principles. The main goal of the 1988 Joint Protocol is to coordinate the application of the above-stated conventions. The Joint Protocol associates the conventions in two basic ways. In the first place, it stipulates the mutual expansion of the liability of an operator under the Paris and Vienna systems (article II). In this way, if a nuclear accident arises for which the operator is responsible simultaneously under the Vienna Convention and the 1988 Joint Protocol, the operator will be responsible under the Vienna Convention on Nuclear Damage, caused not only on the territory of the parties to it, but also on the territory of the parties to the Paris Convention and to the 1988 Joint Protocol. Respectively, if an accident arises for which the operator is responsible simultaneously under the Paris Convention and the 1988 Joint Protocol, the opposite will hold true. In the second place, the 1988 Joint Protocol is conceived to resolve the conflicts, which may arise from the simultaneous implementation of both conventions, especially in the cases during transportation.

The national parties (countries) have two options at their disposal for the implementation of the conventions on a national level. They can transform the contents of the above-mentioned conventions into a national law concerning liability. This solution gives the advantage to be allowed the use of legislative techniques and a national language, but there is a risk of wrong interpretations as to the contents of the conventions. The other option, which avoids this risk, is to implement the conventions directly...
as instruments of automatic application. The structure and the formulation of the dispositions of the Vienna Convention and of the Paris Convention, as well as the Annex to the Convention on Supplementary Compensation for Nuclear Damage envisage this option.

One has preferred the first variant in the Bulgarian legislation. After the ratification of the Vienna Convention and of the Joint Protocol Relating to the Application of the Vienna Convention and of the Paris Convention by the National Assembly with a law passed on 27.07.1994, the provisions of the convention were applied in a national legislation with an amendment dated 04.08.1995 of the Law on the Use of Atomic Energy for Peaceful Purposes (LUAEPP). Chapter Four of the above-mentioned law transforms the contents of the convention under review into articles 33, 34, 35, 36, 36a, 36б, 37 и 38.

Upon the repeal of this legislative act in June year 2002, legislators passed the Safe Use of Nuclear Energy Act (SUNEA). The civil liability for nuclear damage detailed in chapter ten of the new special law does not distinguish itself conceptually from the legal framework of the repealed law, but makes concretizations anent:

− the scope of the concept nuclear installation, in case of several nuclear installations of one and the same operator are located on one and the same platform;
− the conditions and the procedure for the exemption of small quantities of a nuclear material from the application of the Vienna Convention in conformity with its provisions are determined with a regulation10, adopted by the Council of Ministers at the proposal of the Chairman of Bulgaria’s Nuclear Regulatory Agency (NRA);
− the liability of the operator for damage, caused by every nuclear incident is limited to 96 million Bulgarian levs;
− the liability for nuclear damage, in case of the operator gets budget support, is secured through annual allocation of financial means in a national budget.

The use of nuclear energy is a social issue, which has found its reflection in the Constitution of the Republic of Bulgaria11 and as a result of Bulgarian legislation by dint of a law12 one has established state monopoly over the use of nuclear power and the manufacture of radioactive products. In the above-mentioned Constitution, nuclear energy is mentioned generally. The imperative scope, the goal and the basic situations in principle in the course of its use are ascertained in a special law, namely-the Safe Use of Nuclear Energy Act (SUNE).

As a whole, Bulgarian nuclear legal framework is quite detailed and complex. According to our national legislation, nuclear energy and the sources of ionizing radiation emissions can be used by natural or legal persons only after the issue and receipt of a statutory permit and/or a statutory license for the safe performance of the relevant business activity. The licensees and the holders of permits bear full responsibility for providing the safety of the equipment and activities, stipulated in the license or in the permit13.

The state regulation of the safe use of nuclear energy is carried out by the Chairman of Bulgaria’s Nuclear Regulatory Agency, which an independent specialized public body of the executive power and has the competence, determined with SUNEA14.

The legal regime of civil liability at a nuclear incident in Bulgaria is regulated and detailed in two normative sources – the Vienna Convention on Civil Liability for Nuclear Damage and the the Safe Use of Nuclear Energy Act (SUNE).

Under §1, item 32 of the Additional Provisions of SUNEA, „a nuclear installation”, „a nuclear incident”, „a nuclear material”, „a person” and „an operator” are concepts defined in article I of the above-stated Vienna Convention.

The Vienna Convention on Civil Liability for Nuclear Damage contains legal definitions of these concepts.

“Nuclear installation” means: (I) 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; (II) 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 (III) any facility where nuclear material is kept (stored), other than storage incidental to the carriage of such material; provided 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.

“Nuclear incident” means any occurrence or a series of occurrences, having the same origin, which causes nuclear damage15.

“Nuclear material” means: (I) nuclear fuel, other than natural uranium and depleted uranium,
capable of producing energy by a self-sustaining chain reaction of nuclear fission outside a nuclear reactor, either alone or in combination with some other material; and (II) radioactive products or waste. 16

“Person” means any individual, partnership, any private or public body whether corporate or not, any international organization, enjoying legal personality under the law of the Installation State and any State or any of its constituent sub-divisions. 17

“Operator”, in relation to a nuclear installation means: the person designated or recognized by the Installation State as an operator of that installation. 18

Article IV of the Vienna Convention envisages absolute (objective) liability of an operator for nuclear damage and article 129, paragraph 2 of SUNEA states that the operator of a nuclear installation is solely responsible for the cases and amounts of a nuclear incident, except if the Vienna Convention stipulates something else. It means, that in order to make a compensation claim, it is not necessary to prove the guilt of the operator of a nuclear installation, but one requires a causal (cause-and-effect) relationship between a nuclear incident and nuclear damage. It is not necessary for a victim to prove negligence or whatever kind of fault on the part of an operator, but the operator is responsible only with respect to cases of damage, which have been “provoked” or are „in consequence of“ risk activity, which one performs.

The requirement for the cause-and-effect relationship between the two events – a nuclear incident and nuclear damage is contained in the legal definition of nuclear damage.

“Nuclear damage” means: (I) a 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; (II) any other loss or damage so arising or resulting if and to the extent that the law of the competent court so provides; and (III) if the law of the Installation State so provides, a 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. 19

The claim for nuclear damage is based directly on the consequences of a nuclear incident and contains legally relevant facts, which condition the plaintiff’s claim and its filing against the person, acting in the capacity of an operator of a nuclear installation.

There is no room for whatever liability without damage, even under the legal regime of objective liability, whereas damage is a necessary precondition for compensation. If as a result of a nuclear incident, a victim suffers damage, which cannot be qualified as “nuclear damage”, the same can be compensated under the legal regime of civil liability for nuclear damage.

From the viewpoint of the special competence under article 137 of SUNEA, the claims filed for nuclear damage, with the exception of the cases, when the Vienna Convention stipulates something else, are within the competence of the Bulgarian courts. They are actionable in Sofia City Court, as a court of first instance. Court proceedings are free of charge for Bulgarian citizens and as far as foreigners are concerned, one applies the principle of reciprocity.

Francisco Cruz and Santiago Ferrer unambiguously emphasize, that unlike liability due to guilt, at which it is necessary to ascertain that the misdemeanor is through the respondent’s fault, in the conditions of absolute (objective) liability, the cases and amounts of damage came into existence because of the sole reason, that the business activity of the respondent in a risky sector and the development of the relevant activity is hazardous. 20

By introducing objective liability, as far as the cases at which the operator under review can be exempt from liability (force majeure, gross negligence, or a result of action or inaction of the person to whom one has caused damage) have a very narrow field of application, one achieves process rapidity. The presence of nuclear damage as a result of a nuclear accident is sufficient.

The conditions, which should be fulfilled for establishing the operator’s guilt, are not detailed in SUNEA, but are exhaustively stipulated in article 2 of the ratified with a Bulgarian law Vienna Convention on the Civil Liability for Nuclear Damage. An operator is responsible for nuclear damage, for which one proves, that it has been caused a nuclear incident in his nuclear installation, or is associated with a nuclear material, coming from the installation, manufactured in it or going into it.

The issues, like liability for nuclear accidents, through the fault of the operator of another nuclear installation, as well as liability for nuclear...
damage caused to a site with more than operator, are specific aspects of the legal regime of liability for nuclear damage in Bulgaria, which deserve to be reviewed and are possible areas of a reform.

The liability for nuclear accidents through the fault of the operator of another nuclear installation is envisaged in connection with the transportation of a nuclear material outside the site of the nuclear installation. If nuclear materials are not moved away by the transport contractor, which from time to time haul nuclear materials 21.

Carlton Stoiber pays attention to the issue of liability at the storage of nuclear materials during transportation. In his opinion, the safe keeping of nuclear materials during transportation is not assignment of liability for transportation, even if this safe keeping is associated with the nuclear equipment of third operator. If nuclear materials are sent to a person situated on the territory of a non-member country, then the operating forwarder remains responsible until the materials are not moved away by the transport vehicle through which they have arrived on the territory of such country. If nuclear materials are sent through a person based on the territory of a non-member country, to an operating recipient located on the territory of a member country, by the written consent of the operating recipient, then the operating recipient is responsible only after the materials under review are unloaded from the transport vehicle through which they should leave the territory of the first country. As far as transport coming from and going to non-member countries is concerned, according to Stoiber the legal situation is more complex: the conventions on the matter of nuclear liability are applied only if the relevant general principles of private international law allow it. Private international law can also be applied, as governing law of a non-member country or it holds true for the law of the country of origin of the accident victims. This situation is a source of legal uncertainty and comprises an additional reason, due to which it is desirable for as many countries as possible to become parties to conventions on the matter of nuclear liability. The conventions on nuclear liability allow countries to make the transporting driver a responsible person, instead of the operating forwarder and/or a recipient on the condition of consent from the operator or operators, which will be substituted and the approval of the regulatory body or competent national institutions. If the transporting driver is held responsible, then he is regarded as a operator of one piece of nuclear equipment. In practice, one does not chooses this option frequently. It is applicable to railway companies and other transporting contractors, which from time to time haul nuclear materials 21.

The above-mentioned circumstances have a direct relationship to the organization of a nuclear-fuel cycle and more precisely, the delivery of fresh fuel for the work of reactors and respectively, spent (nuclear) fuel for subsequent processing and one must mention in this regard the treaty signed between the Government of the Republic of Bulgaria, the Government of the Russian Federation and the Cabinet of the Ministers of Ukraine in the area of the safe transport of nuclear materials between the Russian Federation and the Republic of Bulgaria also across the territory of Ukraine 22.

The above-mentioned treaty complies with applied international contracts and the legislation of countries in the area of the safe transport of nuclear materials.

The issues, related to civil liability for nuclear damage, caused at the time of a nuclear incident, which arises during the transportation of special cargoes, are resolved between the countries in conformity with the Vienna Convention on Civil Liability for Nuclear Damage of 21 May 1963.
According to the treaty, the following legal entities bear responsibility for nuclear damage in the sequence determined in the convention:

- the Bulgarian operator – during the safe transport of special cargoes from the territory of the Republic of Bulgaria to the territory of the Russian Federation, until the moment of giving possession and control of the special cargo on the territory of the Russian Federation at the point, stipulated in the contract between the operators under review.

- the Russian operator – during the safe transport of special cargoes from the territory of the Russian Federation to the territory of the Republic of Bulgaria, until the moment of giving possession and control of the special cargo on the territory of the Republic of Bulgaria at the point, stipulated in the contract between the above-stated operators.

The elimination of consequences of an accident during the safe transport of special cargoes, including also at the moment of a nuclear incident and also the provision of security and connections in the area of the accident are realized by the concerned party on the territory of whose country the accident occurred. In case of an official request for the provision of assistance submitted by the concerned party, on the territory of the country on which the accident under review arose, the other countries should send their staff for elimination of the consequences of an accident in accordance with international obligations and the legislation of the their countries. The Russian or Bulgarian party, depending on the circumstance the operator of the country of whichever of the concerned parties bears responsibility under article 7, paragraph 2 of the treaty, assigns liability for nuclear damage, guarantees the refund by its operator of the expenses, associated with the elimination of the consequences of a nuclear incident (emergency-rescue and other urgent operations, performed at the occurrence of a nuclear accident and aimed at saving the life and protecting the health of people, a decrease in the amounts of material damage and a reduction in environmental pollution and also for the sake of localizing the area of the nuclear accident, termination of the effect of the hazardous factors, characterizing it). The above-stated expenditures are refunded within one month from the date of recognizing the financial requirements of the country, on whose territory an accident occurred, if the parties do not agree on something else. The disputable issues, which arise between the parties concerned in connection with accidents, including also the issues about compensation upon nuclear damage, are solved by the parties through consultations and negotiations.

Civil liability at the time of safe nuclear transportation is a specific aspect of the legal regime of responsibility for nuclear damage in Bulgarian legislation. Transport plays an important role during a nuclear-fuel cycle and a legislator should demonstrate flexibility regarding the clear and uniform liability at the transportation of a nuclear material, in order not to have any doubt, who assumes insurance liability. At the same time, the process for the settlement of an insurance claim is slow and bureaucratic. A regime requires certificates of financial security, which should accompany a consignment and the limits of financial security are different in different countries.

The requirement for financial security is of considerable importance, in order to be guaranteed, that there are financial means for payment under eventual claims. According to Sebastian Reitsma, a manager at the Swiss pool for insurance of nuclear risks and a director at the directorate of nuclear energy in a Swiss reinsurance company, this requirement lies at the basis of the insurance principle of insurance interest, whenever the obligation of the nuclear installation operator to guarantee security becomes subject to insurance. Reitsma associates the recommendations for an improvement in a national legislation regarding civil liability at nuclear transport with the provision of insurance for nuclear liability to third parties during transportation and more precisely, the assumption of liability by transport companies at the presence of an agreement with the relevant operator. In this case, an actuarial risk is much lower than that of a nuclear power plant operator.

In case of nuclear damage, engaging the liability of more than one operator, it is hard to distinguish the share of every operator. The discussion about this issue is of great importance to the site of “Kozlodui NPP”, where you will see the nuclear installations of two legal entities – “Kozlodui NPP” Single-member JSC, an operator operating the nuclear power station and State Enterprise “Radioactive Waste” (SE “RAW”) – authorized by the nation-state to manage radioactive waste during the utilization of nuclear power.

For the sake of the Vienna Convention, SUNEA stipulates the scope of the concept «a
nuclear installation», as: several nuclear plants of one and the same operator, situated on one and the same site25.

Article 129, paragraph 1 of SUNEAl envisages that the Council of Ministers of the Republic of Bulgaria determines the person, who under the Vienna Convention is an operator of the nuclear installation, as well as the type and the conditions of the financial security, covering the operator’s liability for nuclear damage.

By means of a Council of Ministers’ decision dated 13.11.2013, one designated SE “RAW”, as an operator of two nuclear installations (one on the site of «Kozlodui» Nuclear Power Plant and one on the site of the Permanent Repository for RAW in Novi khan). The above-stated decision stipulates the type and the conditions of the financial guarantee covering liability-«Public Liability of Legal Entities» Insurance. The managing director of the above-mentioned enterprise makes the choice of an insurer after conducted negotiations with insurance companies or with their mergers26.

By dint of a Council of Ministers’ decision, dated 15.01.2015, one designated «Kozlodui NPP» Single-member JSC, as an operator of a nuclear installation (nuclear power reactors and other pieces of equipment, situated on the site of the NPP in Kozlodui, with the exception of the facilities for the management of RAW on the same site, provided for maintenance to SE «RAW»). The above-stated decision specifies the type and the conditions of the financial guarantee, covering liability—«Public Liability of Legal Entities» Insurance, which is taken out annually from 2002 on with an insurer—«Bulgarian National Insurance Pool» Civil Corporation27.

The operator of a nuclear installation is responsible for nuclear damage, if one proves, that it has been caused by a nuclear incident. Liability is absolute, but the economic sanction can be limited by the Installation State up to an amount not smaller than 5 million USD for every single nuclear accident. The US dollar in the convention is a unit of account, equivalent in terms of a value to its gold parity as of 29.04.1963, which means 35 USD for one troy ounce of pure gold28.

The Bulgarian legislator establishes a maximal legal regime of operator’s liability up to 96 mln BGN for every case of nuclear damage29.

The operator under review is obliged to maintain insurance or other financial guarantee to the above-stated amount for the period of nuclear installation operation30.

The determined in SUNEAl amount of compensation coming to 96 mln BGN (more than 54 mln USD) does not contradict the established limitation in the convention of at least 5 million USD and supplements and develops article 5, paragraph 1 of it, as one limits operator’s liability to an amount ten times more than the one stipulated in the convention. At the same time, article 132, paragraph 2 of the same law envisages for the operator to maintain insurance or a financial guarantee to this amount for the period of nuclear plant operation. In this way, the legislator binds the financial liability of an operator with the number of the nuclear installations operated by him and requires insurance or a financial guarantee for each of them.

It means, that for the site of „Kozlodui NPP”, each of the legal persons on this site, that operate the nuclear plant, respectively „Kozlodui NPP” Single-member JSC and SE „RAO” have the obligation to maintain insurance or other financial guarantee for nuclear damage, each to the amount of 96 million BGN. The accumulation of exposures from several insurance policies, at the occurrence of one and the same insurance event is a problem at nuclear insurance and mostly a problem of the victims how and against whom to make and file their claims.

Insurance in the nuclear industry is much more different than the insurance of other facilities. The complexity at the functioning of nuclear equipment and the amounts of damage, which can be caused, require specific insurance principles at nuclear insurance. One of the most important ones is the exclusion of subrogation. Subrogation allows insurers to exercise the rights of the operator, that has suffered a loss and to refund the coverage of the damage from the contractors and suppliers, which have worked on the site.

If there is only one operator on a nuclear site with regard to a nuclear installation, then he is responsible for the amounts and cases of damage resulting from a nuclear accident and liability is legally placed on him. However in the cases when the nuclear damage under review engages the liability of more than one operator and the share of each of them in the above-mentioned damage cannot be substantiatively differentiated, then these operators are jointly and severally liable for nuclear damage31.

It makes an impression on us, that the persons licensees under SUNEAl, respectively «Kozlodui NPP» Single-member JSC and SE «RAW»
are stipulated as persons operating the nuclear installation under the Vienna Convention in the above-stated government decisions under article 129, paragraph 1. It is a common practice of the countries, which have joined the Convention, whereas exactly the licensee is the person responsible for the nuclear installation security. However, the Convention gives countries the power to designate also another legal person as a nuclear installation operator, which person is associated with the equipment, without the same being a licensee for the equipment operation. Under article I, item 1 (c) of the Vienna Convention „an operator in relation to a nuclear installation” means the person designated or recognized by the Installation State as an operator of that installation.

For the sake of the present research, it is expedient to review the definition of the concept „person” given in article I, item 1 (a) of the Convention: „Person means any individual, partnership, any private or public body whether corporate or not, any international organization, enjoying legal personality under the law of the Installation State and any State or any of its constituent sub-divisions”. In the countries, having several nuclear facilities, this formulation gives operators an opportunity to unite their financial capabilities with a view to provide jointly the cost for the coverage. This solution has been used in Germany and USA and it is applicable, whenever a financial guarantee different from insurance is used as liability coverage. Theoretically, there are also other financial means of covering the operator’s liability (for example, bank guarantees and capital securities), which may be evaluated from the viewpoint of security and reliability by regulatory bodies32.

Regarding the nuclear damage of the installations situated on one and the same site (for example, the site of Kozlodui NPP), but with different operators (“Kozlodui NPP” Single-member JSC and SE „RAO”), under article II, item 3(a) of the Convention, it engages the liability of more than one operator and these operators involved shall, in so far as the damage attributable to each operator is not reasonably separable, be jointly and severally liable. In this case, there is a legal basis for the joint provision of the cost for the coverage or the provision of the coverage by the nation-state against the payment of the relevant fee by the operators.

The regime of civil liability for nuclear damage is a specific area of legal regulation. Nuclear liability is a protective measure against an eventual undesirable result and a way of risk management. Its basic function is to achieve and keep balance between the interests of affected persons after an occurred incident and the development of the nuclear industry. In order to be sufficiently efficient on an international level, it is necessary for the regime of civil liability to be successfully integrated on a national level, through techniques of national legal regulation of the risks associated with the utilization of nuclear energy.

The insurance of nuclear risks plays a special role during the interaction of international and internal law, because the regime of civil liability for nuclear damage is an international regime in terms of nuclear liability, introduced through conventions and the relevant national legislation.

In view of the above-stated circumstances, one comes to the conclusion, in Bulgarian legislation one establishes a legal framework of the regime of civil liability for nuclear damage, which depending on certain factors, provides a real behavioral model, by means of which legal entities react to normative legal acts. On the other hand, one has stipulated specific aspects concerning the regime of liability for cases and amounts of nuclear damage, which deserve the legislator’s attention and are possible areas of a reform.

References

1 The Paris Convention on Third Party Liability in the field of Nuclear Energy of 29.07.1960 and the Vienna Convention on Civil Liability for Nuclear Damage of 21.05.1963 establish many full and almost identical regimes of civil liability for nuclear damage. The additional agreement, signed on 31.01.1963 in Brussels City has the goal to envisage additional compensation through national and international funds in the cases when the compensation by dint of the above-mentioned Paris Convention is not sufficient to cover all cases and amounts of damage. The Convention on Supplementary Compensation for Nuclear Damage, which is based either on the above-stated
Vienna Convention, or on the above-mentioned Paris Convention, or on a national legislation in strict conformity with the annex of a convention, envisages the same additional compensation through international public funds. The Unified Protocol of 16.11.1982 ascertains a connection between the above-mentioned Vienna Convention and Paris Convention with a view to spread the advantages of the one convention also over the members of the other convention.

2 Vienna Convention on Civil Liability for Nuclear Damage, ratified with a law of the National Assembly, passed on 27.07.1994 (promulgated in Official Gazette (OG), issue 64 dated 09.08.1994) article 1, paragraph 1(a)

3 Also there in article 1, paragraph 1(c)

4 Stoiber, C., Baer, A., Pelzer, N., Tonhauser, W., Manuel de droit nucleaire, AIEA, Viene 2006, p.125

5 Stoiber, C., Baer, A., Pelzer, N., Tonhauser, W., Manuel de droit nucleaire, AIEA, Viene 2006, p.126


8 Vienna Convention on Civil Liability for Nuclear Damage, ratified with a law of the National Assembly, passed on 27.07.1994 (promulgated in Official Gazette (OG), issue 64 dated 09.08.1994) article VII, item 1

9 Joint Protocol for the application of Vienna Convention and Paris Convention, ratified by the National Assembly with a law, passed on 27.07.1994, Promulgated in OG, issue 64 of year 1994. It has been in force for Bulgaria since 24.11.1994, please see article III

10 Regulation on the terms and procedure for the exemption of small quantities of a nuclear material from the application of the Vienna Convention on Civil Liability for Nuclear Damage, adopted by dint of a Council of Ministers’ Decree № 201 dated 4.08.2004, promulgated in OG issue 72 dated 17.08.2004.

11 Constitution of the Republic of Bulgaria (promulgated in OG, issue 56 dated 13.07.1991, the latest amendment made on 18.12.2015.), please see article 18, paragraph 4

12 Safe Use of Nuclear Energy Act (promulgated in OG, issue 63 dated 28.06.2002, as its latest amendment was made on 20.02.2015)

13 Safe Use of Nuclear Energy Act (promulgated in OG, issue 63 dated 28.06.2002, as its latest amendment was made on 20.02.2015), please read article 14, paragraph 1 and paragraph 3

14 Safe Use of Nuclear Energy Act (promulgated in OG, issue 63 dated 28.06.2002, as its latest amendment was made on 20.02.2015), please read article 4, paragraph 1 and paragraph 2

15 Also therein, article I (l)

16 Also therein, article I (h)

17 Also therein, article I (a)

18 Also therein, article I (c)

19 Vienna Convention on Civil Liability for Nuclear Damage, ratified with a law of the National Assembly, passed on 27.07.1994 (promulgated in Official Gazette (OG), issue 64 dated 09.08.1994) article I (k))

20 Cruz, F. Ferrer, S. Revision critica del estatuto de responsabilidad civil por daños nucleares en Chile, Revista chilena de derecho, vol.40 no.1 Santiago abr.2013, ISSN 0718-3437

21 Stoiber, C., Baer, A., Pelzer, N., Tonhauser, W., Manuel de droit nucleaire, AIEA, Viene 2006, p.132


23 Treaty between the Government of the Republic of Bulgaria, the Government of the Russian Federation and the Cabinet of the Ministers of Ukraine in the area of the safe transport of nuclear materials between the Russian Federation and the Republic of Bulgaria and across the territory of Ukraine (promulgated in OG, issue 83 dated 16.10.2006), please read article 7 and article 8

25 Safe Use of Nuclear Energy Act (promulgated in OG, issue 63 dated 28.06.2002), the latest amendment made on 20.02.2015, please read article 128
26 Please, see the official announcement of the Council of Ministers dated 13.11.2013 on http://www.gov estructuralis.com
27 Please, see the official announcement of the Council of Ministers dated 15.04.2015 on http://www.gov estructuralis.com
28 On these legal grounds in article 132, paragraph 1 of the Safe Use of Nuclear Energy Act (promulgated in OG, issue 63 dated 28.06.2002), the operator’s liability for damage caused by every nuclear accident is limited to 96 mln BGN and is a bit more than the limit required by the Convention.
29 Safe Use of Nuclear Energy Act (promulgated in OG, issue 63 dated 28.06.2002), the latest amendment made on 20.02.2015, please read article 132, paragraph 1
30 Also therein, article 132, paragraph 2
31 Vienna Convention on Civil Liability for Nuclear Damage, ratified with a law of the National Assembly, passed on 27.07.1994 (promulgated in Official Gazette (OG), issue 64 dated 09.08.1994) article II, item 3(a)

**Anotācija**

Raksts veltīts kodolenerģijas izmantošanas tiesiskā režīma un civiltiesiskās atbildības jautājumiem kodolpostījumu gadījumā. Vēsturiski analizēti civiltiesiskās atbildības par kodolkaitējumu starp-tautiskie noteikumi, kā arī izskatītas Vīnes konvencijas par civilatbildību kodolkaitējuma gadījumā un Parīzes konvencijas par trešās puses atbildību saistībā ar kodolenerģiju, piemērošanas nacionālajā līmenī. Analizēts kādi atbildības veidi un atbildības režīms būtu efektīvi iedzīvotāju aizsardzībai pret kodolkaitējumu
Secināts, ka efektīva varētu būt kodolmateriālu pārvadāšanas apdrošināšana, kas jāveic specilizētiem transportēšanas uzņēmumiem, jo šādā veidā apdrošinātājs iedzīvotāju aizsardzībai par tā pārējo kaitējumu uzņēmēji. Analīze varētu palīdzēt atbildības režīms un garantijas jautājumus uzlabot.

**Аннотация**

В статье автор даёт анализ правового режима гражданской ответственности относительно ядерного ущерба при использовании ядерной энергии в Болгарии. В историческом плане рассмотрен международный режим гражданской ответственности за ядерный ущерб, а также возможные варианты по применению Венской и Парижской конвенций о гражданской ответственности на национальном уровне. Анализируется болгарский законодательный путь в сфере защиты граждан от ядерного ущерба, элементы и характеристики режима ответственности.
Предоставление страхования ядерной ответственности третьей стороне во время транспортировки ядерного материала, а именно, специализированным транспортным компаниям, повысит финансовую безопасность и страховую ответственность. Согласно болгарскому законодательству, Совет Министров определяет лицо, которое, по смыслу Венской конвенции, является оператором ядерной установки, как и вид и условия финансовой гарантии.
С этой точки зрения автор предлагает реформы в финансовом обеспечении для покрытия гражданской ответственности за ядерный ущерб установок, расположенных на одной и той же площадке, но с разными операторами. Предложение о солидарной ответственности в тех случаях, когда доля каждого оператора не может быть обоснованно ограничена, является возможностью повышения конкурентоспособности в атомной индустрии.