Nuclear Insurance Pools: Does the Horizontal Cooperation leads to the Market Foreclosure?

Laura Rimšaitė[1]

Abstract

After nuclear energy became the source of electricity generation, the need to solve civil liability and financial coverage questions came at the outset. Third party nuclear liability is governed by Paris Convention and Vienna Convention. Responsibility for the safe nuclear power plant exploitation is exclusively derived to the nuclear power plant operator, however in case of an accident operator sole is not capable of providing full financial coverage for the damages. Therefore the private insurance sector has to cover nuclear risks which currently have a low probability that is difficult to estimate but its foreseen damages are of an extreme magnitude and the unprecedented nature in the event that it occurs. It is difficult to evaluate accurate estimates due to the absence of previous experience and statistical data for third party liability. Nuclear insurance pools separately existed in the EU member states. Referring to certain restrictions limiting to the obligation for operator's ability to adhere only to national nuclear insurance pools an interference with EU competition law occurs. However there is no unified EU policy for the one core insurance pool which would be capable of providing related compensation in the event of nuclear accident.

Keywords: Nuclear insurance pool, horizontal cooperation, competition law, two tier system, nuclear power plant operator.

Introduction

None of the existing insurance companies are able to provide the required capacity on an individual basis or under conventional arrangements. Nuclear insurance pools were set up to provide the necessary financial coverage to the operators of nuclear power plants as required international conventions. The idea of the nuclear insurance pools creation was based on the fact that the risk was potentially catastrophic, unknown and therefore individual private insurers would be frightened to take such insurance risk on their own. The involved risks did not allowed to provide a balanced portfolio nor affirmed the establishment of individual underwriting departments by each insurance entity wishing to operate. The nature of nuclear industry would have rendered individual insurers vulnerable to unknown accumulations had the business been placed in a conventional manner using normal reinsurance treaties. However in the event a nuclear disaster occurs, claims settlement and handling procedure require a support of whole national insurance market or even the international support. The exchange of common account reinsurance between national pools provides access to the worldwide insurance capacity to those national markets which wish to participate.

Nuclear power plant operators take out their insurance for nuclear liability directly with the nuclear insurance pool, without establishing a contractual link with each of the pool´s members. The

[1] PhD Candidate, Mykolas Romeris University, Faculty of Law Business Law Department, Ateities str. 20, LT-08303, Vilnius, Lithuania.

pools are composed of insurance and reinsurance companies and thus offer the capacity available to cover nuclear risks by the direct insurance company's members of the pools. The first pools were established in 1956 in the United States, reflecting the creation of the Nuclear Energy Property Insurance Association, the Nuclear Energy Liability Insurance Association and the Mutual Atomic Energy Reinsurance Pool, and involved more than 300 companies thus reaching a capacity of $125 million.[2] During the same year, the first European pools also were set up, currently the Swedish pool and the British pool. [3] A year later, nuclear pools were created in Belgium, Denmark, Finland, France, Italy, Norway and Switzerland, in 1958 in the Netherlands, in 1959 in Austria and in 1960 in Japan.[4] The existence of nuclear insurance pools does not presuppose that sufficient compensation system will be available as there are certain restrictions to adhere only to the national insurance pools comprising of several insurers or re-insurers. Referring to the degree of the damages caused by an accident, often only an obligation imposed to nuclear power plant operator is not adequate as the operator is not able to provide necessary insurance whereas there is no pooling system and sole insurers are not always willing to participate with such high risks. Other issue that comes to the outset is horizontal cooperation agreements and their relation with EU competition law requirements which will be analyzed in more detail in following chapters.

Purpose – analyze nuclear insurance pool system relation with competition law instruments;

Design/methodology/approach – paper is based on document analysis, systemic, comparative analysis method by comparing different legal acts;

Research limitations/implications – analyze nuclear insurance pool system models referring to the requirements of competition law framework;

Practical implications – this comparative analysis provides a background on further discussions concerning the nuclear operator's liability and insurance limits issues and cohesion between international regimes by providing a harmonized model throughout European Union;

Originality/Value – only a few authors have analyzed some aspects of nuclear insurance pools however there is still a lack of academic comprehension of nuclear liability regimes and insurance issues in the light of harmonization at European Union level. This work provides insights into nuclear insurance pooling system with relation to EU competition law framework and possible civil liability harmonization options in the area of nuclear energy. This work will certainly be valuable in practice when improving legislative framework and developing nuclear projects;

1. International civil liability for nuclear damage system

Vienna Convention on Civil liability for Nuclear Damage (hereinafter –Vienna Convention) was adopted at the diplomatic conference at IAEA in 1963 and is open to all States. Vienna Convention has been amended once by 1997 Protocol[5] therefore increased the minimum liability up to 300 million SDRs (about 360 million Euros) however Vienna Convention does not provide a maximum amount for the operator however it may be limited by the domestic legislation of current State having in mind that compensation ground is not less than US $ 5 million[6].

[2] McClure, R. D.(1999). A review of Nuclear Energy Insurance. Nuclear Energy. Vol. LX, p. 255-294
[3] *Ibid*.
[4] *Ibid*.
[3] Vienna Convention on Civil Liability for Nuclear Damage GOV/INF/822/Add.1-GC (41)/INF/13/Add.1 23 (September 1997).
[6] Value in gold 29 April 1963. Equal to 235 million Dollars (based on US$ gold value on 10/08/2012 of $1650/oz)

International legislation requires operator to provide insurance on the imposed liability and if such obligation is impossible, as there might not be insurers that cope with such insurance amounts, than a State covers difference between specified liabilities amounts. Another important document is Convention on Supplementary Compensation for Nuclear Damage (hereinafter – CSC) which is open to all States despite they are parties to Vienna Convention or Paris Convention or even are neither a party to any of these conventions. Good example would be USA, as this country is neither a party to Vienna or Paris Convention, however it acceded the CSC with its national legislation on civil liability for nuclear damage the so called "grandfather clause". Here worth mentioning USA two tiers compensation system whereas nuclear power plant operator must provide $375 million insurance liability coverage from a private insurer, referred as primary financial protection.[7] Second tier occurs in the event of an accident that exceeds $375 million in damages, the operators of the 103 operating nuclear reactors covered under the Price-Anderson Act must pay up to $111.9 million per reactor to cover costs in retrospective annual premiums per year.[8] It means that the potential total insurance pool financed by private interests is about $12.6 billion ($375 million primary financial protection and $111.9 million from each of the 103 reactors).

The regional international document that regulates international liability questions is Convention on Third Party Liability in the Field of Nuclear Energy (hereinafter – Paris Convention) which was adopted in 1960 and is open to OECD countries however some parties are non-European countries[9]. This Convention does not apply to nuclear incidents or damage that occurs outside territory of the contracting states except operator's national law provides conversely. After the adoption of the Paris Convention contracting parties understood that liability amount is not sufficient to cover nuclear incident damage therefore several amendments to the convention were made and later on the Brussels Supplementary Convention[10] provided three tier systems and established additional State compensation tier with public funds compensation tier[11]. Paris Convention imposes minimum liability amount of 5 million SDR[12] to nuclear operator and maximum amount is deprived up to 15 million SDR. Steering Committee for Nuclear Energy adopted non-binding recommendations to raise the liability amounts up to 150 million SDR. Most contracting parties have higher operator's liability amount, good example of such case is Germany which provides unlimited liability for nuclear operator.

Existing situation with several conventions covering same scope and countries varying on different levels of ratified amendments created rather a patchwork than provide more clearance to the compensation system. Having aware of this problem several initiatives were launched to create links between these two mechanisms however a considerable risk of legislative divergence remain. Both applied conventions may result a coexisting application instead of clarification which convention would apply in one or another situation. In this case Joint protocol should have been the answer to the absence of existing links however not all Member States acceded this protocol.[13]

[7] Act to Amend the Atomic Energy Act of 1954 (Price-Anderson), Pub. L. No. 89-645.80 Stat. 891.891 (1966).
[8] Act of August 30, 1954, Ch. 1073, 68 Stat. 919.
[9] Australia, Canada, Japan, Korea, Mexico, United States of America are not Contracting parties of nuclear liability conventions.
[10] Brussels Supplementary Convention (1963) „Convention of 31 January 1963, supplementary to the Paris Convention of July 1960". Brussels.
[11] Schwarz, J. (2010). Liability and Compensation for Third Party Damage resulting from a Nuclear Incident. International Nuclear Law: History, Evolution and Outlook. OECD, Paris.
[12] The SDR is International Monetary Fund reserve asset. 1 SDR = 1.29500 USD (Approx. rates as of 2013 March)
[13] The Joint Protocol relating the Application of the Vienna Convention and the Paris Convention (1988).

Fukushima accident hastened the need find solution to the patchwork, therefore the European Commission (hereinafter – the Commission) launched a public questionnaire referring to harmonisation which is analysed in the following parts.

2. The necessity of nuclear insurance pools

Nuclear insurance pools mostly consist of investor-owned and stock insurance companies. About 13% of the total liability capacity of the US pool American Nuclear Insurers comes from foreign sources. [14] The operation of nuclear insurance pools depends on their own individual establishment, procedures and the law of the jurisdiction in which they operate.[15] The capacity of the pool is equal to the contributions of all its members. Every pool member declares the specified amount at which it is willing or able to provide insurance coverage. If payments have to be made, than each member of the pool contributes a portion of its participation as contractually agreed within the pool. The pool members are often willing to insure a higher part of the nuclear risk than with respect to conventional industrial risks as they know the amount they are responsible for. Nuclear pools are not regarded as re-insurers and do not fall under the solvency regulations applicable on the insurance market aimed at ensuring that insurance companies maintain necessary capital to cover their obligations when money transfer might come at the outset, the nuclear engagements of the underlying re-insurers should clearly appear in their annual accounts.[16] The structure of these nuclear insurance pools varies according to the governing law of the jurisdiction in which they operate and referring to the form of cooperation.

In the United Kingdom nuclear insurance pools operates as a limited company and is governed by a Board of Directors, which, delegates much of its authority to the pool's permanent staff.[17] Nuclear Risk Insurers Ltd is a company limited by guarantee, a business structure suited to non-profit organizations as the liability of the pool members is limited to a prescribed amount and all premiums received are remitted to the members, thus the pool only has to account for its running costs. [18]The French nuclear insurance pool is also governed by a Board of Directors designated by Ordinary General Assembly annually.[19] In the 1950s, these pools were organized within national level because nuclear issues fell in the country's, national scope and only recently they have been liberalized from the state-controlled sector to the private sector.

3. The functioning principles of nuclear insurance pools

The nuclear pools cover all risks as members are not allowed to reinsure the risks individually but are committed to cover the risks of the non-reinsured part of the pool. The Members tackle not to grant reinsurance to the whole or part of the shares in the risks they have accepted on a basis in the insurance contracts.[20] According to the pools, the prohibition on the members to provide reinsurance individually decreases their uncertainty of an individual risk and enhances their commitment[21].

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[14] US NRC, Fact Sheet on Nuclear Insurance and Disaster Relief Funds, June 2011. [Online] Available: www.nrc.gov/reading-rm/doc-collections/fact-sheets/funds-fs.html.

[15] Bennet, E, Insuring Nuclear Risk [Online] Available: www.allenovery.com/AOWEB/Knowlegde/Editorial.aspx/contentTypeID=1&contentSubTypeID=7944&itemID=60957&prefLangID=410.

[15] Pelzer, N., (2007). International Pooling of Operators' Funds: An Option to Increase the Amount of Financial Security to Cover Nuclear Liability? Nuclear Law Bulletin. 37-56.

[17] Nuclear risk insurers [Online] Available: http://www.nuclear-risk.com/.

[18] *Ibid*.

[19] French nuclear insurance pool [Online] Available: http://www.assuratome.fr/en/2-welcome-to-assuratome.

[20] Syban's Statute, Article 6 [Online] Available: www.syban.be

[21] Reitsma, S. Tetley, M. (2010).Insurance of Nuclear Risk. 10th Anniversary International School of Nuclear Law.

Members of the pool are often bound by a solidarity clause, which condemns that passive members' obligations are proportionally encountered by the other members. The detainment rule of nuclear insurance pools prevents separate pool members from providing reinsurance as it is only available on an inter-pool basis. Belgian pool participated in the loss by the Management Committee granting a common account of the Members concerned, the requisite excess of cover in co-insurance to other foreign Nuclear Insurance Pools, and possibly, to other Belgian or foreign insurance concerns.[22]

Nowadays the Czech Nuclear Insurance Pool exchanges reinsurance both in an assumed insurance and ceded insurance with more than 20 foreign pools.[23] Pools function internationally at inter-pool level: the national pools add the amount of the insured risks that they assume to other national pools, constantly exchanging their roles of insurer and re-insurer. However, at national level, even though foreign companies may be members of a national pool, national pools traditionally only directly insure the operators that are located in their country and not the operators that are located in other countries. Such situation questions the cross-border insurance pools mergers in the energy market. As the priority is given to national insurance pool rather than foreign or existing in the other member states. Such situation might be questionable according to competition law requirements whereas the possible competition between the insurance pools might be restricted. Of course such argument is often denied referring to the situation that insurance pools do not have a goal to restrict competition rather to provide sufficient compensation system.

4. The interference between European Union competition law and nuclear insurance sector

The competition requirements as they are settled in the Treaty on the Functioning of the European Union[24] (hereinafter - TFEU) apply to nuclear energy as they do not differ from the Treaty establishing European Atomic Energy Community[25] (hereinafter - Euratom Treaty). The legal relation between the former European Community Treaty (hereinafter - EC) and Euratom Treaty was governed by article 305(2) EC Treaty, which condemns that the provisions of the former EC Treaty should not derogate from the Euratom Treaty. Article 305 of EC Treaty was withdrawn in the TFEU but the principle preserved in article 305(2) EC Treaty was maintained through the similar content article 106(a) (3) in the Euratom Treaty.[26] If the nuclear insurance pools functioning falls outside the scope of article 101(1) TFEU, there is no risk of allegations to competition law otherwise, if they fall within article 101(1) TFEU but are exempted under article 101(3) TFEU, the issue comes at the outset within periodical assessment to remain eligible for the exemption under article 101(3) TFEU, or referring to either the Insurance Block Exemption (hereinafter – BER) or to the Horizontal Guidelines. However, if existence of pools falls within article 101(1) TFEU but is not eligible for an exemption under article 101(3) TFEU, the functioning of pools possibly increase the competition concerns.

In the early years of the nuclear industry, the creation of nuclear insurance pools corresponded with the TFEU and the Euratom Treaty. In 1962, Europe had already implemented competition requirements [27] as the first competition law decision was taken by the European Commission (hereinafter – the Commission), whereas the primary authority entrusted with the application of EU competition law.[28]

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[22] Syban's Statute Article 8 [Online] Available: www.syban.be

[23] Czech nuclear insurance pool [Online] Available: http://www.nuclearpool.cz/en/historie/

[24] Treaty of the Functioning of the European Union. OJ C 115/47.

[25] Consolidated Version of the Treaty establishing European Atomic Energy Community. OJ C 84/1.

[26] Hartley, T, C. (2007). The Foundations of European Community Law: an Introduction to the Constitutional and Administrative Law of the European Community. Oxford University Press. 6th edition.

[27] EEC Council Regulation No 17 – First Regulation implementing Articles 85 and 86 of the Treaty, OJ 13.21.2.1962. pp 204-211.

[28] Desicion de la Commission, du 23 Septembre 1964, relative a une procedure au titre de l'article 85 du traite, IV-A/00004-03344 "Grundig-Consten" OJ 161.

According to competition rules, some categories of agreements do not fall within the scope of article 101(1) TFEU. This exemption is granted for co-operation agreements that do not imply a coordination of the parties' competitive behaviour in the market such as a co-operation between competing companies that could not independently carry out the project or activity covered by the cooperation.[29] Pooling was necessary to allow an insurance that separate members are not capable to provide. It also enabled small insurances to operate on a market without risking on their financial capacity and to provide sufficient capacity on the commercial market by facilitating the purchase of reinsurance. Pooling system is an instrument in the insurance sector to cover high risk activities, such as environmental or nuclear risks. The Commission Staff Working Document states that some pools are outside the scope of the BER as they are necessary and do not give rise to a restriction of competition[30]. It also explains that certain catastrophic risks which include nuclear risks may be of such a degree when there is impossible for an individual insurer to cover the damage amounts solely. In this case the creation of nuclear insurance pools does not have an intention to restrict competition.

Quite good example would be Commission's findings in the P&I Clubs case where it was considered that members of maritime insurance pools were not actual or potential competitors because they were unable to insure alone the risks covered by the pools.[31] The so-called "P&I Clubs" doctrine currently applies in relation to pools on markets where no coverage outside the pool is possible. In accordance with this doctrine, pools, despite their market share, may be considered not to be anti-competitive as pooling is necessary to enable members for the insurance that formers were not capable to provide on solely basis. Commission approved similar approach later on when handled a case of three European nuclear insurance and reinsurance pools from the competition perspective.

The Commission closed its investigations and granted a clearance noting that pooling agreements were necessary to provide nuclear liability insurance with a proper coverage for the risks involved[32] and in that way the pooling agreements did not restrict competition.[33] Therefore the Commission considered that these pools did not fall within the scope of the 101(1) TFEU because there was no sufficient proof that the pool was not necessary or could have been replaced by more than one pool. The existence of nuclear insurance pools does not fall within the scope of Article 101(1) TFEU while it is the only possible nuclear risk insurance option and insurers solely would not have sufficient background provide the necessary capacity. This principle should be applied in the current context, in which the nuclear insurance pools are not the sole participants of the market but likely challenge competition from nuclear operator mutual associations that also able to provide full coverage for nuclear third party liability.

5. Nuclear insurance pools possible restrictions on competition

Horizontal cooperation between nuclear insurance pools is allowed as long as it does not intent to cause harm or distort competition.

[29] Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements. OJ L 011.

[30] The Commission Staff Working Document accompanying the Report from the Commission to the European Parliament and the Council on the functioning of Commission Regulation (EC) No 358/2003 on the application of Article 81 (3) of the Treaty to certain categories of agreements, decisions and concerted practices in the insurance sector. COM 2009.138.

[31] P&I Clubs, Pooling Agreement Commission Decision 1999/329/EC. OJ 1999 L 125/12-31.

[32] Cases: COMP/37.363 Svenska Atomförsäkringspoolen; COMP/34.985 Pool Italiano Rischi Atomici, COMP/34.558 Aseguradores Riesgos Nucleares.

[33] European Union XXXI Competition Policy Report (2001).

The risk sharing mechanisms are necessary for certain types of insurance as nuclear, terrorism and environmental risks, whereas individual insurance companies are not capable to insure the entire risk alone, and such imposition is crucial in order to ensure that all risks can be covered.[34] However pooling of nuclear insurers is indispensable to raise the necessary capacity to enable coverage in case of a nuclear catastrophe therefore clauses which are necessary for the pool to exist and does not intend to distort competition, falls outside of the scope of article 101(1) TFEU. In effect, even though co-operation agreements between competitors that could not independently carry out the activity covered by the cooperation do not fall within the scope of article 101(1) TFEU because of their nature. Of course such clauses can fall within the scope of article 101(1) TFEU to the extent that the activity could have been carried out with less stringent restrictions. [35] Article 101(1) TFEU inevitably applies in the case of hard core restrictions as market-sharing or price-fixing mechanisms. Some authors express that if pooling and reinsurance arrangements are combined with further restrictions, which are not necessary by insurance, the final users will not receive a fair share of the resulting benefits and a risk of inefficiencies occur. [36] Current situation is quite questionable whereas national nuclear insurance pools would forward requests for an offer by foreign operators to the foreign pools of the operator's location, may possibly respond to a concerted practice which is not necessary for the functioning of the pools and could possibly breach the article 101(1) TFEU.

Some authors criticize the national divide of the nuclear insurance pools from the competition law perspective stating that nuclear insurance pools leads to high premiums, a low availability of insurance capacity and low financial limits on the liability of the licensee of a nuclear power plant as a result of the lobbying power of the nuclear insurance pool and the nuclear industry.[37] These authors also question a situation when pooling and reinsurance arrangements are combined with further restrictions, which are not necessitated by insurance techniques, the final users will not receive a fair share of the resulting benefits and inefficiencies might appear. [38] Competition rules do not permit restrictions that are not mandatory and all essential mechanisms should be evaluated on timely basis.

Still questionable whether national partitioning of the nuclear insurance pool markets derive from a concerted practice or an agreement as competition law does not require a formal agreement to be made in order to evaluate the existing agreement opposing the TFEU. Also it is necessary to question whether the national partitioning of the nuclear insurance markets by the nuclear insurance pools is indispensable and does not influence the requirements competition law. The danger of not indispensable restraints from a competition law perspective is that if pools would start acting like monopolistic insurers, premiums might be relatively high and unattractive for specific industrial operators and this is an important factor to insure risks is a competitive insurance market.[39] When pooling results a very high concentration on insurance markets, which seems to be the case with the insurance of the nuclear risk, the end result would not be efficient.

6. European Union nuclear insurance pool system – a way forward?

[34] Explanatory Communication from the Commission on the application of the Article 101(3) of the Treaty to certain categories of agreements, decisions and concerted practices in the insurance sector. 2010/C82/02.
[35] Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements OJ L 011.
[36] Faure, M. G.(2002). Insurance and Competition Law: Balancing the Conflicts. Global Issues in Insurance Regulation. Maastricht.
[37] Faure, M. G. Borre, V. T.(2008) Compensating Nuclear Damage: A Comparative Economic Analysis of the US and International Liability Schemes. 33(1) William & Mary Environmental Law and Policy Review 250.
[38] *Ibid*.
[39] Bruggeman, V. (2010).Compensating Catastrophe Victims: a Comparative Law and Economics Approach. Energy and Environmental Law & Policy Series,

Nuclear liability regime is regulated by national law, which widely reflects the provisions of the Paris Convention or the Vienna Convention.

Despite international conventions prescribes minimum required compensation amount several countries regulate civil liability questions applying legal channelling principle in compliance with unlimited liability. Five Member States currently: Austria, Cyprus, Ireland, Luxembourg, Malta are not bound by any Convention, therefore national legislation provides common tort law rules which are imposed to nuclear liability also some countries provide legislation whereas operators, transporters and suppliers are held unlimitedly liable. [40] Competition rules in different Member States might be distorted, as there is a wide variety of liability limits imposed to nuclear power plant operators.[41]

The Commission has launched public consultations to analyze what harmonization level might be achieved. Questionnaire covers several harmonization options as an implication for Euratom to accede to a particular convention also binding or soft-law regulation. However it should be taken into account that new legislations might lead to a bigger patchwork instead of clarification. Possible option for harmonization might be implication for all Member States to accede to one Convention namely the Amended Paris Convention thus some obstacles occur. Firstly, OECD membership would be a precondition for such accession and not all countries are members: Lithuania, Latvia, Malta, Cyprus, Bulgaria, and Romania. Non-member countries might adhere to OECD but only with unanimous agreement of the existing contracting parties. Other option could be Euratom's as the international organisation accession to one of the Conventions preferably the Amended Paris Convention. This option is quite ambiguous as Euratom's jurisdiction in external matters goes in line with internal jurisdiction and article 101 of Euratom Treaty that can't precondition the Community to accede the Amended Paris Convention.[42] Paris Convention does not provide an option for supranational organisation to accede it and therefore essential amendments are to be made in order to implement such option.[43]

The questionnaire provides a part related to nuclear insurance pools, whether to achieve sufficient means of compensation operator's pool or insurance pools should be taken into account. However the effective compensation mechanism is possible when sufficient pooling system is launched as the operator solely is not capable to provide huge compensation amounts or sole insurance company is unable to provide insurance to the required amount of money. In this regard we could discuss the creation of European Union insurance pool however such option possibly rise several obstacles from countries having more operating units, whereas they would have to pay bigger amount in case of nuclear accident. Other issue would be national regulatory institutions as comparing to USA two tier system whereas all nuclear power plant operators in case of nuclear accident are obliged to pay so called "retrospective premium" referring to the licence that they received from the national regulator. Therefore one have to discuss an option to establish supranational nuclear regulator throughout EU or discuss options to delegate some powers to supranational regulator as to oblige all nuclear power plant operators to pay similar retrospective premium in case of an accident.

Several concerns were raised on the compensation amount limitations. There is a variation as some countries provide legislation for unlimited operator's liability others introduce the minimum amount to the operator as it is deprived by international conventions, there are countries that provide higher than convention's prescribed minimum amounts.

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[40] Schwartz, J. (2006). International Nuclear Third Party Liability Law: the Response to Chernobyl. International Nuclear Law in the Post-Chernobyl Period, OECD/NEA.

[41] Faure, M. (2008) The Civil Liability of European Nuclear Operators: Which coverage for the new 2004 Protocols? International Environment Agreements: Politics, Law and Economics. 3(8) p. 227-248.

[42] Handrlica, J. (2012). European Nuclear Liability Law at crossroad. ELRF Collection. Cambridge. Vol.3. p.145-180

[43] Pelzer, N. (2009) Nuclear New Build –New Nuclear Law? Nuclear Law Bulletin.

A variation referring to the convention caps includes state aid question when a State decides to impose to the operator higher amount that is prescribed in the conventions also there is a possibility for State to cover certain amount up to required by national legislation.

However when State decides to implement a certain financial coverage for the operator that is higher than international conventions required minimum therefore additional coverage by the State than is might precondition an alleged State aid according to article 107 TFEU. Article says that aid granted through State resources in any form favouring certain undertakings, affecting trade between Member States is incompatible with internal market. In this case State provides a guarantee to compensate the rest of amount defined in national legislation that is necessary to cover damage costs. According to TFEU such measure should be notified to Commission and clearance provided before the implementation of support scheme. However the principle of channelling liability is implemented in the international conventions and the option when state covers the damage which exceeds operators provided financial coverage also the limitation of the liability amount when state decides to provide a guarantee in case of an accident that it covers the damages might precondition the state aid according to TFEU. The problem is even deeper as we have the collusion between international nuclear law namely international conventions on civil liability for nuclear damage and EU primary legislation. Referring to situation when the state guarantee to provide financial coverage is imposed by international convention thus precondition a "silent exemption" that such measure might not be treated as an aid.

Referring to the questionnaire the operator's unlimited liability is questionable to the extent if harmonised liability regime is concentrated to efficient compensation or just strong theoretical background without orderly financial coverage as the insurance is provided to current amount by the insurers[44]. However the imposed unlimited liability system would not lead to a sufficient compensation system as such condition implies bankruptcy of the operator without efficient orderly compensation for victims. If there is a need to provide adequate and timely compensation but not just theoretically strong background constructing the obligation to provide unlimited compensation which is impossible to implement.

Conclusions

1. Referring to the extent of possible nuclear damage and the probability of such accidents, the insurance amounts are huge. Therefore the nuclear insurance pools might serve as a viable option to provide coverage of high insurance costs as nuclear power plant operators are required to provide financial coverage by international conventions and national domestic laws.
2. Civil liability for nuclear damage system at European Union is divided into Vienna Convention and Paris Convention countries and there remains a need to provide links between existing gaps. Commissions launched a public questionnaire on nuclear liability which should give clarification on a way forward from the existing patchwork.
3. The problem occurring with competition law requirements comes at the outset when nuclear insurance pools by an agreement or collusive practice cooperates by providing an adequate insurance to nuclear power plant operators. However horizontal cooperation possibly restricts competition in the market and therefore is evaluated by the Commission. Despite hypothetical negative effects such cooperation opens path to the development and competition in market as individual insurers are not capable to provide insurance alone thus they do not have intentions to restrict competition.
4. Establishment of insurance pools throughout European Union would serve as an instrument of harmonization and thus would adopt a two tier system similar to the existing in the USA.

[44] Tetley, M. (2006). Revised Paris and Vienna Nuclear Liability Conventions – Challenges for Nuclear Insurers. Nuclear Law Bulletin.. P. 27-39.

However the obstacles should be solved before, as application of such model at EU level preconditions to solve the so called "central regulator issue". In this case possible subordination with a "central regulatory body" would be needed and the level of competence should be defined or even the amendments to EU primary legislation have to be made.

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