

International regulation of the restriction of the use of environment

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ABSTRACT

Agreements in the field of energy involve possibilities to lower consumption of natural resources and increase in production of renewable sources of energy. However, such interactions between goals and average requirements of an energy complex can be successful only when concluding similar international agreements. As the relevance of the study is energy sector of developed countries, which strives for balance of sources of electricity. Novelty of the study is determined by the fact that for the first time agreements in the field of environmental conservation are considered as a reasonable compromise between the necessity to expand the number of applicable technologies and requirement to lower overall consumption. In this regard, the authors consider as the research object the European Union as the most harmonic combination of ecological requirements to the use of energy and general desire to compensate ecological damage. In the article, the legal framework of the agreement on energy regulation in block formation has been analysed using the example of the European Union. Practical application of the study is determined by that forming of coherent energy agreement depends on not only efforts of separate states, but also on the extent to which these conditions will be combined with economic policies and the quality content of energy conservation policies.

Keywords: Energy, agreement, regulation, restriction, energy law.

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1. Introduction

The EU energy law is certainly one of the key legal means of implementation of policy of the EU energy security. As a matter of fact, the nature of this right derived from politics is determined by the general views on the international, or national, right to a contract law, enshrining the coordinated will of individual states, as well as by the dynamics of forming of the EU energy legislation, which reflects dynamics of approaches of European countries to the problems of energy security [1].

In the definition of the notion “energy law”, the concept of regulation of relations connected with energy resources is popular [2]. Energy law is determined as distribution of rights and duties, which are related to development and use of any energy sources, between individuals, between individuals and government, between governments and between states [3]. That is, in this approach, the main is to select a specific object of a legal relationship; in many East doctrines that is considered enough to select an individual branch of international law [4].

Though quite often there are arguments concerning heterogeneity of energy resources as an object of legal relations, both in their physical characteristics, origin and legal status at the different stages of economic activity in the field of energy [5]. Thus, in particular, some energy sources – oil, gas, coal – are sources of a natural origin and others – such as electricity or thermal energy – are created by humanity [6]. Besides, such natural sources as oil, gas, coal that are in the subsoil by their legal characteristic differ from already produced

oil, gas, coal [7]. In the first case, they are natural resources in an array of rocks, legal status of which are regulated by the legislation on the subsoil, in the second case, they are product, to which the legislation on the subsoil is not applicable, but civil, customs, transport and other legislation regulating transfer of ownership and product transportation is applicable [8].

To this should be added that, for example, in transportation of some kinds of energy sources, an object of legal relation is not only resources, but also corresponding transport infrastructure that is inherent in supply operations – gas transmission and electrical networks [9].

2. Literature review

Considering complexity and heterogeneity of an object of legal relations and the related complexity of legal relations regulated by energy law, the additional criterion of selection of this branch is totality of the specific principles of legal regulation as following [10]:

- The principle of permanent sovereignty over natural resources;
- The principle of doing no harm a territory of other states, which are outside the jurisdiction of a state;
- The principle of prevention and cooperation with other states regarding risks that may occur due to hazardous activities, including various emergency cases.

Despite the recognition of the principle of permanent sovereignty over natural energy resources as the basis of legal regulation within energy law, the negligent and discriminatory use of such sovereignty in relation to other countries have necessitated this branch. One of the examples is the OPEC actions that cause energy crisis in 1970-s [11]. Attempts to solve this problem may be traced even on the basis of the transformation of sovereignty definition over natural sources enshrined in international instruments [12].

Thus, one of the first definitions of sovereignty over natural sources is in Charter of economic rights and duties of states adopted by The United Nations General Assembly on December 12, 1974. Its norm of article 2 implied that ‘Every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities’ [13]. As we may see, this norm emphasises the freedom of the state to own, use and exploit its natural, including energy, resources and do not imply any restrictions of this freedom [14]. But in reflecting on its meaning, it should be understood that such norms have started developing under specific historical conditions of 1950-1960s and are reflection of the processes when developing countries were gaining independence and raised the issue on cancellation of discriminatory and long-term concession agreements for the development of their natural resources with Western countries [15].

In particular, first such resolutions have been discussed within the ECOSOC and UNGA in 1952, and they had as a goal to protect economically weak nations, which were trying to utilise and exploit their natural resources; for this purpose it was necessary to recognise their right to nationalise and freely exploit national wealth as a key factor of economic independence [16]. In 20 years, the Treaty to the Charter of Economic Rights and Duties of States dated December 17, 1994 (p1. art.18) stated that The Contracting Parties recognise state sovereignty and sovereign rights over energy resources. They confirm that these should be implemented in accordance with international law regulations [17].

3. Materials and methods

It can be argued that one of the tasks of energy law is the provision and rationing of the transformation of approaches to the implementation of sovereignty over energy resources in order to protect energy security of both suppliers and consumers of such resources [18].

Thus, for many years the UN resolutions on permanent sovereignty over natural sources has responded to changes of circumstances and view by integration the issues of development and protection of the environment, development of policy means necessary at national and international levels to implement the principle of permanent sovereignty. For example, initial interest to nationalise the sector of natural resources and the role of state enterprises has been replaced by focusing on market principle and privatisation and encouraging foreign investment. Moreover, thoughts regarding environment is integral part of debates about permanent sovereignty [19].

However, beside specific object and principles important for the forming. In addition to the specific object and principles that are important for the formation of energy law, the sufficient amount of legal material is very important too [20]. Moreover, having a dual character, the principles themselves play part in this. Because they are implemented either through international treaty or international custom and are, in fact, their

generalisation. That is, the principles are not only the source of corresponding branch of international law, but they also condition a formation of other sources, first of all, international treaties, in which these principles find their formal expression [21].

Besides, for the international law as contract law inherently, the systematically important factor of the branch of energy law is interest of international community in international energy relations as a type of international communication and international energy law as a regulator of such relations because exactly energy interests are the basis of foreign policy of many countries. This interest of states is also expressed in their actions, in particular, in creation of new norms of international energy law [22].

The mentioned components of the EU energy law also include the specifics of the EU autonomous legal order, which is that when creating the EU Member States restricted their sovereignty according to the legislation and in such way created self-sufficient legal system that links Member States, their citizens and their judicial bodies. In fact, considering the process of creation of the EU energy law, we can talk about two dimensions of this law – internal and external. The external dimension, within which external aspects of policy of energy security are implemented, is represented by international treaties of Member States with third countries, for example, the Treaty to the Energy Charter or the procedure of distribution of norms of energy legislation in third countries within the Energy Community.

In its turn, the internal dimension of the EU energy law is constituted by norms that provide the implementation of internal aspects of policy of energy security and regulate different aspects of the EU single energy market, establish standards of consumption, energy conservation and protection of the environment. This dimension is represented by acts of primary and secondary law of the EU and national normative legal acts of Member States on implementation of the EU energy law. In general, four groups of sources of the EU energy law may be selected:

- 1) Legal acts of the primary legislation of the EU;
- 2) The EU multilateral international treaties on energy issues (first of all, the Charter of economic rights and duties and the Treaty establishing Energy Community);
- 3) The secondary legislation of the EU in the field of energy – guidelines and regulations (today presented by the Third Energy Package);
- 4) "Soft law" – documents of the EU bodies containing declarative norms, codes of conduct of entities of energy market and etc.

It seems that the approach, according to which sources of law are divided into internal and external, can be applicable to the EU energy law sources. Among internal sources of law of the European Union, there are constituent documents; acts adopted by the EU institutions. Among external sources are international treaties with third countries of international organisations; acts adopted by the EU bodies within international treaties with third countries of international organisations.

4. Results and discussion

In our opinion, an important aspect is not the fact of recognition of sovereignty and sovereign rights to energy resources, but given in the norms of art. 18 of the distinction between the ECT sovereign rights to energy resources as a specific political and legal phenomenon and the implementation of the corresponding sovereignty and sovereign rights as actions related to certain foreign policy obligations. That is, recognising the sovereignty of supplier countries over their energy resources as the common principle, the ECT point out the necessity to implement states' competence to manage such resources in accordance with and subject to the rules of international law.

In particular, norms of the art.18 of the ECT establish freedom of regulation of ownership over natural sources without affecting the objectives of promoting access to energy resources, and exploration and development thereof on a commercial basis (p. 2 art. 18). Or the ECT parties' duties to facilitate access to energy resources, inter alia, by allocating in a non-discriminatory manner on the basis of published criteria authorisations, licences, concessions and contracts to prospect and explore for or to exploit or extract energy resources (p. 4 art. 18). That is, the attempt to regulate the issue of sovereignty implementation over energy source taking into account foreign-policy duties is seen:

- 1) Freedom of access to energy sources;
- 2) Non-discrimination in permits to access.

However, the solution regarding the following issues is left to the discretion of each individual state:

- 1) Area and rate of extraction;

- 2) Taxation of extraction;
- 3) Protection of environment;
- 4) Participation of a state in exploiting of energy sources (p. 3 art. 18 of the ECT).

If not to consider previous “energy” norms of Treaties of the ECSC and Euratom, which only with certain exceptions can correlate with current goals and tasks of policy of the EU energy security, then special legal regulation on energy issues has been introduced in the primary legislation of the EU by the treaty of Lisbon of 2007. Previous stages of forming of the EU energy law were based on norms establishing the general competency of the EU regarding regulation of economic policy. In particular, these are norm regulation issues of the internal market (art. 95 of the Treaty establishing the European Community), trans-European networks (art. 154-156), competition (art. 81-88), protection of the environment (art. 175).

According to the Treaty of Lisbon amending the Treaty on the Functioning of the European Union (TFEU) [23], the individual title XXI “energy” was added. The only one in this title article 194 in the part 1 established framework of standard of general energy policy basing on the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy should aim, in a spirit of solidarity between Member States, to:

- ensure the functioning of the energy market;
- ensure security of energy supply in the Union;
- promote energy efficiency and energy saving and the development of new and renewable forms of energy;
- promote the interconnection of energy network.

In this, p. 2 of art 194 of the TFEU, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives of the EU energy policy. It should be noted that established in p.1 art. 194 of the TFEU principles and objectives automatically link implementation of this article with a number of other norms of constituent documents. Thus, for example, the principles of establishment and functioning of the internal market are implemented considering provisions of art. 26 and 27 of the TFEU regarding the internal market and art. 30-32 regarding customs union.

The provision on security of energy supply refers to provisions of art. 23-41 of the Treaty on European Union defining the general provision on the joint EU foreign and security policy. The principle of preservation and improvement of the environment certainly connects energy policy and energy legislation of the EU by the art. 11 of the TFEU, according to which environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development. We shall notice that art. 194 of the TFEU establishes additional requirements on not only protection, but also on “improvement” of environment as integral component of the EU energy policy. Moreover, among the objectives of energy policy, in art. 194 of the TFEU, there are factually the main solution of the tasks of the environment protection:

- 1) energy efficiency;
- 2) energy saving;
- 3) the development of new and renewable forms of energy.

In such way, these issues is associated exactly with energy legislation, but earlier they were more of subject to regulation of the EU environmental legislation.

Besides, in art. 194 of the TFEU, the application of energy policy measures has been established in accordance with the ordinary legislative procedure adopted in the EU bodies (p.2 art.194), except cases when measures are primarily of a fiscal nature that require a special procedure (p.4 art. 194).

At the same time, p3. of art. 194 of the TFEU establishes exceptions on measures of the EU energy policy as follows:

- 1) Member State's right to determine the conditions for exploiting its energy resources;
- 2) Member State's choice between different energy sources;
- 3) Member State's choice of the general structure of its energy supply.

In this, measure establishment affecting the choice of Member State between different energy sources and the general structure of its energy supply is regulated by norms of p.2 of art.192 of the TFEU in the title XX “Environment”. International treaties of the EU that are sources of the EU energy law are represented by, first of all, the Energy Charter Treaty (ECT) and the Treaty establishing Energy Community (TEEC).

The ECT can be considered first specialised international legal act that embodies the EU energy policy and related energy security policy. Signed in Lisbon on December 17, 1994, the ECT came into force on April 16, 1998. Formally, its participants today are 54 countries, four of which have not yet ratified the ECT and apply it on an interim basis. 12 countries have a status of Energy Charter Conference Observers and participants of Energy Charter of 1991.

The main provisions of the ECT, containing in 50 articles and additional provisions of the Treaty, cover such aspects of energy resources supply as investment, application of WTO rules, transit and mediation. Provisions on investment within the ECT are aimed at EU subject participation in work on extraction and transit of energy resources and covers issues of creation of proper conditions and guarantees on investment.

Thus, the important element is non-discriminative regulation of investment on the national level implemented by provision of most-favoured-nation and national regime. In this, according to the p.7 of art. 10 of the ECT such regimes are applicable not only regarding Investment but also their related activities. Investment guarantees (art. 12 and 13 of the ECT) include protection from nationalisation or confiscation, compensation for losses due to expropriation, losses due to military conflict, emergency, civil conflict and etc. Finally, art.14 of the ECT obliges Parties to guarantee the freedom of transfer related to investment into and out of their territories.

In the context of liberalization of energy market, certainly, provisions of art. 29 of the ECT regarding the application of GATT rules to energy trade play the key role. In this, it is important that at the moment of the treaty signing, GATT rules has been applied to trade of energy materials between any countries of the ECT regardless of their membership in the WTO. The provisions of the ECT on freedom of transit are of the greater importance. According rules can be found is art. 7 of the ECT that regulates a number of aspects of the movement of energy resources in the territories of “transit” countries, in order to ensure continuity and security of supply.

Among such rules particular mention may be made of Parties’ duties to take the necessary measures to facilitate the Transit of Energy Materials and Products consistent with the principle of freedom of transit in the sense of art. V of GATT, “without discrimination” and “without imposing any unreasonable delays, restrictions or charges.”(p. 1 art. 7 of the ECT). This obligation is supplemented by the requirement to treat Energy Materials and Products in Transit in no less favourable a manner than its provisions treat such materials and products originating in or destined for its own Area (p. 3 art. 7 of the ECT). The most significant from the viewpoint of transit security is the provision according to which transit country in the event of a dispute over any matter arising from that Transit, should not interrupt or reduce, permit any entity subject to its control to interrupt or reduce, or require any entity subject to its jurisdiction to interrupt or reduce the existing flow of Energy Materials and Products prior to the conclusion of the dispute resolution procedures set out in paragraph (p. 6 art. 7 of the ETC). Finally, norms of the ETC on dispute resolution procedures have significant practical values. Such procedures may be divided into three types:

- 1) dispute resolution procedures on transit (p. 7 art. 7 of the ECT);
- 2) settlement of disputes between an investor and a contracting party (art. 26 of the ECT);
- 3) settlement of disputes between contracting parties (art. 27 of the ECT).

To regulate disputes on transit, the choice between mediation of the Energy Charter Secretariat and standards established by other international agreements is implied. For the disputes between countries and investors, the necessity of prior consultations is established; after this an investor can choose between the national court, the International Centre for Settlement of Investment Disputes (ICSID) or international arbitration within UNCITRAL or the Stockholm Chamber of Commerce.

In the system of energy law, a special place is occupied by the Energy Community Treaty (EComT) of November 25, 2005, which came into force on July 1, 2006 [24]. The tasks of the Energy Community are determined in art. 2 of the EComT and include as follows:

- create a stable regulatory and market framework that can attract investment in gas networks, electricity production, as well as transmission and distribution networks;
- create a single regulatory space of energy products for trade in Network Energy;
- enhance the security of supply of the single regulatory space by providing a stable investment climate;
- improve the environmental situation in relation to energy products and materials and set out the conditions for energy trade in the single regulatory space;
- develop competition in the market of energy products and materials for the transport of which networks and the like are used.

To achieve stated objectives, the activity of Energy Community is coordinated by the Commission of the European Communities (art. 4 of the EcomT) and based on the implementation of the *acquis communautaire* on energy, environment, competition and renewables to set up of a specific regulatory framework permitting the efficient operation of Network Energy markets; to create a market in Network Energy without internal frontiers (art. 3 of the EcomT).

It can be said that determined in art. 3 of the EcomT focus of activity of the Energy Community create three-tier structure, which may be described as concentric circles of the Treaty. According to it, the first level of the Treaty implementation is distribution and implementation of the legislation and standards of the EU, the second is creation of mechanism of managing the network energy market, the third is creation of single energy market.

The article 41 of the EcomT should be highlighted because it, unlike others, does not distribute the effect of *acquis communautaire*, but establishes independent norms on forming the single energy market. According to it, "customs duties and quantitative restrictions on the import and export of Network Energy and all measures having equivalent effect, shall be prohibited between the Parties. This prohibition shall also apply to customs duties of a fiscal nature."

Specifics of the objectives if the EComT and means of their realisation are reflected in features of legal status of the current treaty. Thus, Contracting Parties of the EComT is the EU on the whole and third countries that expressed their willingness to introduce respective provisions of *acquis communautaire*. EU Member States, according to art. 95 of the EComT, can gain the status of the participant, which for today have 19 EU Member States. This status means unconditional application of the EU energy legislation and creates an opportunity to participate in activity of all institutions of the Energy Community. Bosnia and Herzegovina, Serbia, Montenegro, Albania, Northern Macedonia, and Kosovo have the status of Contracting Parties of the EComT. Observer status has been granted to Norway, Turkey and Georgia.

It is worth noting that beside narrow sectoral objectives, energy policy of the EU is aimed at involving in this process the countries of Eastern Europe, that is, the EComT have also wider integrational functions. Thus, sometimes the significance of the EComT and created in accordance with it Energy Community is compared with the ECSC in the aspect of forming legal and institutional foundations for the further European integration. Both communities have encouraged cooperation in high technological spheres and thereby encouraged dialogue and integration between countries, which otherwise could have certain doubts regarding cooperation. Such functional framework of standards accept that positive achievements of coordination of technical issues create spread effect on other sectors of reforming.

Besides, the EComT quite often is considered through the concept of "Europeanisation", that is, the process of adopting the EU governance model by countries applying for or being potential applicants for EU membership. Introduction of standards and rules of the EU regarding countries wishing to integrate with the EU stands out as the process of regulatory equalisation. Such positions are confirmed by the experience of functioning of the Energy Community during which such Contracting Parties as Bulgaria, Romania and Croatia became EU members.

Of the particular note is art. 11 of the EComT, which factually gives normative definition of a composition of the secondary EU legislation – legislative framework on energy. The legislative framework at the moment of signing has been represented by the legal acts of the Second Energy Package. After the legal acts of the Third Energy Package came into force in 2011, by the decision of the Council of Ministers of the Energy Community of October 6, 2011. The Third Energy Package has been incorporated in the composition of determined by the norms of the EComT *acquis communautaire* [25]. So, today this group of sources of the EU energy law covers the following legal acts:

- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [26];
- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC [27];
- Regulation (EC) No. 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No. 1228/2003[28];

In addition to acts of "hard law", acts of "soft law" have played and are playing a significant role in energy policy and energy security of the EU. In particular, only for the period from 1998 to 2010, there are 18 acts of "soft law" given by the EU Commission on energy policy (Commission Communications, Green and White

Books and the like). Therefore, in such complicated fields as energy policy and especially with restricted possibilities to appeal with vertical competences, the Commission put up with the strategic hub of the European network management to facilitate treaties. To complete this task, the Commission rely on tools of “soft law” aimed at creation of the general structure of European energy policy.

Thus, for example, the number of Commission Communication has determined perspective focuses of the EU energy policy till 2020, 2030 and 2050. In particular, this is Communication from the Commission to The European Parliament “Energy 2020. A strategy for competitive, sustainable and secure energy” dated November 10, 2010 [29], Communication from the Commission “Energy Roadmap 2050” dated December 15, 2011 [30], or Communication from the Commission “Energy Efficiency and its contribution to energy security and the 2030 Framework for climate and energy policy” dated July 23, 2014 [31].

In addition to acts of “soft law” published by bodies and institutions of the EU, there is another type of acts affecting the EU energy policy. Starting from the second Directive on gas of 2003 (art. 8), the requirement has been introduced, according to which rules adopted by transmission system operators for balancing the gas transmission system shall be objective, transparent and non-discriminatory, including rules for the charging of system users of their networks for energy imbalance [32]. Provisions and conditions, including rules and tariffs, for the provision of gas transmission system operators with such services are established according to the existing methodology without discrimination and with reflected expenditures. These positions are being published. In addition, according to the EU regulation on gas authorisation conditions (art. 4) in 2005, transmission system operators should “ensure that they offer services on a non-discriminatory basis to all network users; they should provide such services using harmonised transportation contracts or a common network code approved by the competent authority” [33].

Accordingly, we can determine another act of “soft law”, which is used to implement tasks of energy policy – codes of conduct of non-state companies. Such codes of conduct or “network codes” are established by operators of gas networks and approved by respective national regulators, both of the EU Member States and countries that assume responsibility to introduce energy *acquis communautaire*. According codes establish rules and obligations of parties that use gas transmission networks. Such parties are wholesale companies – suppliers and network operators. Network code includes provisions on system access and rule of system functioning, principles of equality of parties, non-discrimination and economy efficiency.

For example, Network code introduced by Turkish operator BOTAS in 2004 is reconsidered each year in accordance with market needs and process of liberalisation. This code of conduct has two parts. The first part regulated obligations of an operator and suppliers, conditions regarding system access and disputes on access. The second part of the code named “operation provisions” regulates the following issues: technical parameters of gas transmission network functioning, ownership and liability on gas transmission, provisions on emergency, disputes regulation, billing and payment.

Besides, the EU extends the practice of code of conduct to other spheres related to energy policy with provisions of energy security. Thus, starting from November of 2008, the European Commission has introduced Code of Conduct on Data Centres Energy Efficiency (EU CoC) [34], the task of which is to inform and to stimulate operators of data centres to reduce energy consumption. This stimulation is implemented by informing about the best energy efficient practice. In particular, the technical guide (EU COC Best Practice Technical Guide) is attached to this code of conduct. The guide has technical advises on energy efficient solutions, specifics, technologies and data centres management.

The legal basis of current events on energy security of the EU is adopted on July 13, 2009 acts of the Third Energy Package, the implementation process of which in the EU ended in March 2011. The main objective of the Third Energy Package is to complete the process of building the EU single energy market till 2014, this process delayed for more than several decades. Now we can state that in general this objective is fulfilled. Geographical area of the Third Energy Package covers 28 EU Member States, countries of the European Economic Area, and provides for expanding to eight countries of the Energy Community. The main objectives solving within the Third Energy Package has been formulated by the European Council in 2007, which appealed to the EU Commission with a request to submit its proposals on such measures:

- Efficient division of work regarding supplies and producing from network managing;
- Further harmonisation of powers and increased independence of national energy regulators;
- Introduction of an independent mechanism of cooperation between natural regulators;
- Creation of a mechanism for the operators of transportation system to improve coordination of network functioning and security, cross-border trade;

–Greater transparency in functioning of the energy market.

That is, the core role of the Third Energy Package is further progress to ensure competition in the gas and electricity market, which because of specific of delivery of these energy carriers is impossible without respective rule that regulated functioning and access to electricity and gas networks. By forming such competitive market the EU tries to solve the complex of tasks, such as wellbeing of citizens, industrial competitiveness, investment attractiveness and, finally, security of energy supply in general.

According to the opinion of the Commission of the EU, exactly the efficiently functioning and competitive internal energy market can provide the biggest advantages of security of supplies and high standards of public services. And the tool of creation of such advantages is effective separation of networks from competitive parts of electricity and gas business that actually encourages companies to invest in new infrastructure, capacities regarding mutual connection and new generating capacities thereby avoiding down times and surplus price increases. In such way, the single market promotes diversification.

In this aspect the Third Energy Package removes shortcomings and gaps of the Second Energy Package, which manifested itself during the Second Package introduction. In particular, researches of the results on introduction of electricity and gas directives by the commission in 2006-2007 revealed that despite the progress, objective about the single market had not been achieved and despite a liberalisation of the internal energy market, barriers to free competition remain. In particular, the following negative effects were highlighted: significant increase in wholesale prices for gas and electricity that cannot be explained by high prices of energy carriers and environmental obligations and persistent complaints about access barriers and limited possibilities of choice for consumers.

The reasons of such negative phenomena are insufficiency of measures on competition introduction (excessive concentration of markets, vertical integration of energy companies and insufficient transparency) and insufficient integration of markets (in particular, an absence of regulation regarding cross-border issues). That is why the necessity of solution of such issues has determined the structure and content of rule introduces by the Third Energy Package. In particular, urgent measures and priorities have been concentrated among four areas:

- 1) Efficient division between network activity and supply;
- 2) Removal of regulatory gaps (basically, on cross-border issues);
- 3) Focusing against concentration of markets and access barriers;
- 4) Increasing transparency in market relations.

So, according to the Third Energy Package, the main mechanisms of regulation of relations in the energy field are rules of division of vertically integrated energy campaigns by one of the Package's norms, empowerment of the EU Member States on regulation of energy market, granting EU Member States, as well as EU authorities, additional powers to regulate the energy market, creation of the independent institution for cooperation of national energy regulators, EU Member States. In particular, in aspect of extending powers to regulate the energy market, the Third Energy Package states that the authorities of each European country can deny the right of a company to entry to internal market in two cases: if a company does not meet requirements of division of extraction and transport or if it may threaten energy security of the EU.

The Third Energy Package consists of two Directives – the Third on gas and the Third on electricity – and two regulations on electricity networks and gas networks. All these act replaced respective acts of the Second Energy Package are aimed at strengthening and further development of measures for the development of competition and the formation of the single energy market. Besides, the separate Regulation for the Agency for the cooperation of Energy regulators in energy sphere is the novel of the Third Energy Package. So, in the sphere of the single energy market, the Third Energy package includes:

- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [26];
- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in gas and repealing Directive 2003/55/EC [27];
- Regulation 714/2009/ EC of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation 1228/2003/EC [28];
- Regulation 715/2009/EC of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation 1775/2005/EC [35].

And, finally, on creation of the institutional basis of cooperation of national regulators:

– Regulation 713/2009/EC of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators (ACER) [36].

The system of measures enshrined by norms of the Third Energy Package is based on tested mechanisms of regulation of relations in the EU energy sphere, at the same time, implying changes of strengthening of certain directions. Thus, the main differences between the Third Package and previous act of the EU secondary energy legislation is that the norms of the Package:

- regulate the protection of consumers in more details and focus on such aspects as energy from renewable sources, energy efficiency and protection from energy poverty;
- introduce new criteria to grant permits to building of new capacities aimed at environment protection;
- fix obligations of Member States and regulative bodies to cooperate on regional level;
- establish new rules regarding disconnection standard of operators of systems of transportation and distribution of gas and electricity;
- clarify rules of providing access to energy infrastructure to third parties;
- expand the role of regulatory authorities.

Significant changes in the security of supplies under the Third Energy Package concern the regulation of the gas market, which turned out to be the most vulnerable to threats of energy security. It is noteworthy that exactly acts of this package actively declare the connection of energy security with other types of security; before it was determined by acts of “soft law” such as the Commission Communications. Thus, gas Directive 2009/73/EC admit the security of energy supply a significant component of public security. In this, functioning of open gas markets, networks and other related to gas supplies is significant for public security, competitive economy and well-being of citizens of the Union.

Besides, Directive 2009/73/EC (p.22) does not only consolidate the attempt to form solidary policy in the field of energy security, but also takes into account specific of policy of energy security of each member country of the EU that in the previous energy packages has always been a gap. In particular, in this aspect, there is a number of criteria, according to which security of supplies in each specific case should be evaluated:

- independence of network exploitation;
- level of dependence of the Community and each Member State on energy supplies from third countries;
- relation of a third country to national and external trade and investment in the energy sector;
- rights and duties flow from international law, in particular, international treaties between the Community and respective third country.

In this, the Directive directly connects application of the system of tools of gas market regulation connects with norms on supplies security. Thus, supplies security in integral element of obligations on public service and consumer protection on gas sector established by the directive 2009/73/EC, its guarantee includes the following measures:

- to obligate gas industries, for the sake of general economic interest, obligations regarding public services that may concern security, including supplies security, frequency, quality and price of delivery and environment protection, including energy efficiency, energy from renewable sources and climate protection (p.2 art. 3);
- introduction by Member States long-range planning concerning supply security (p.2 art.3);
- to ensure that consumers receive their gas from a supplier provided that a supplier applies appropriate commercial and compensation mechanisms complying requirements of delivery security (p.3 art 3);

Another important tool is monitoring of security of supply (art. 5) that should be provided by Member States, typically, using national regulative bodies of gas market, and results of which should be published and given to the commission annually. The range of issues covered by the monitoring of security of supply, in particular, includes:

- the balance of supply and demand on the national market;
- the level of expected future demand and available supplies;
- envisaged additional capacity being planned or under construction;
- the quality and level of maintenance of the networks;
- measures to cover peak demand and to deal with shortfalls of one or more suppliers.

One of the cornerstones of supplies security is regional solidarity (art. 6) and regional cooperation (art.7). Thus, guarantee of supplies security in the internal market of natural gas is implemented by Member States cooperation in order to promote regional and bilateral solidarity. Such cooperation, first of all, is aimed at

counteracting situations, which have led or may lead after a short period of time to halting supplies in a certain Member State. Respective cooperation should include (p. 2 art. 6):

- coordination of national emergency measures referred to in Article 8 of Council Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply;
- identification and, where necessary, development or upgrading of electricity and natural gas interconnections;
- conditions and practical modalities for mutual assistance.

Since regional cooperation to counteract a halt of gas supplies is impossible without respective cross-border gas transportation infrastructure that allows applying alternative routes and sources of gas supplies, then p.3 of art. 7 of Directive 2009/73/EC obliges Member States to guarantee that transmission system operators have one or more integrated system(s) at regional level covering two or more Member States for capacity allocation and for checking the security of the network. The last provision is consolidated by requirements of p.2 of art. 13 of the Directive, according to which each transmission system operator shall build sufficient cross-border capacity to integrate European transmission infrastructure accommodating all economically reasonable and technically feasible demands for capacity and taking into account security of gas supply [27].

Since, according to p. 32 of art.2 of Directive 2009/73/EC, security covers not only supplies security, but also technical security, then guarantee of the latter, according to art. 8 of the same Directive, is implemented by the establishment of technical regulations by authorizing bodies of Member States. In particular, technical criteria of security and technical regulations are determined and published. They set minimum technical designing and functional requirements in the field of connection LNG to systems, saving storages, other transport or division networks and direct gas pipelines. Besides, ACER right is provided to publish recommendations to achieve compatibility of such rules.

At last, the important tool of complying with security requirements of supplies by participants of the gas market is certification of operators and owners of gas transmission system (art. 10, 11 of Directive 2009/73/EC). When certifying national owners and operators, there is only a vetting for compliance with the requirements of art. 9 Directive 2009/73 / EC on the distribution of vertically integrated companies. But when certificating owners or operators of transmission system, which is controlled by an individual of individuals of third country, a vetting also includes guarantees of supplies security.

Thus, according to p. 3 of art. 11 of Directive 2009/73/EC, refuse of certification of an owner or operator is implied if it has not been demonstrated the entity concerned complies with the requirements of Article 9 or to the regulatory authority or to another competent authority designated by the Member State that granting certification will not put at risk the security of energy supply of the Member State and the Community. In this, when considering the possibility of a threat to the security of the energy supply, should be taken into account:

- the rights and obligations of the Community with respect to that third country arising under international law, including any agreement concluded with one or more third countries to which the Community is a party and which addresses the issues of security of energy supply;
- the rights and obligations of the Member State with respect to that third country arising under agreements concluded with it, insofar as they are in compliance with Community law;
- other specific facts and circumstances of the case and the third country concerned.

Besides, prior to the completion of the certification process, it is necessary to obtain the final decision of the EU Commission on the compliance of the entity subject to certification to the requirements of paragraph 9 of Directive and the requirements for security of supply (p. 5 art. 13).

According to p. 7 of art. 10 of Directive, when assessing whether the control by a person or persons from a third country or third countries will put at risk the security of energy supply to the Community, the Commission shall take into account:

- the specific facts of the case and the third country or third countries concerned;
- the rights and obligations of the Community with respect to that third country or third countries arising under international law, including an agreement concluded with one or more third countries to which the Community is a party and which addresses the issues of security of supply.

At last, a number of norms of Directive 2009/73/EC is aimed at ensuring the ability of gas transmission network operators to maintain appropriate level of security of supply in the future. In particular, it is provided by requirements:

- Operators have investment planning ensuring the long-term ability of the system to meet reasonable demand and guaranteeing security of supply (s.f p.2 art.17);

– Every year, transmission system operators should submit to the regulatory authority a ten-year network development plan that should contain efficient measures in order to guarantee the adequacy of the system and the security of supply (p. 1 art. 22).

Mentioned regulative tools along with market mechanisms of competition should create conditions guaranteeing security of natural gas supply to all consumers in the EU, regardless of the country of location of a consumer and the country of location of a supplier. Moreover, thanks to mechanism of extending the EU energy legislation to transit countries and foreign entities of the gas market, a favourable regulative environment is created also outside the EU.

In general, the similar set of tools of supplies security guarantees is implied also by electricity Directive 2009/72/EC. In particular, it concerns:

- Public service obligations on supplies security and customer protection in the electricity sector (art. 3);
- Monitoring of security of supply (art. 4);
- Including safety requirements into technical standards (art. 5);
- Certification of a transmission system owner or a transmission system operator, which is controlled by a person or persons from a third country or third countries taking into account requirements on supplies security (Certification in relation to third countries) (art.11).

Along with this, there is a number of differences between gas and electricity Directives of the Third Energy Package regarding requirements in the field of supplies security. Thus, electricity Directive 2009/72/EC taking into account the specifics of electricity market does not have provisions on regional solidarity on supplies security limiting itself to the requirement to Member States to ensure that transmission system operators have one or more integrated systems at regional level covering two or more Member States for capacity allocation and for checking the security of the network (p.3 art. 6).

Besides, Directive 2009/72/EC has norms regulating matters of security of capacities (art. 7, 8). In particular, p. 2 art. 7 of Directive requires that procedure of granting authorisations for the construction of generating capacity by Member States implies the criterion of the safety and security of the electricity system, installations and associated equipment.

In addition to the procedure of granting authorisations, p. 1 art. 8 of Directive implies a possibility, in the interests of security of supply, of providing for new capacity or energy efficiency/demand-side management measures through a tendering procedure. Those procedures may, however, be launched only where, on the basis of the authorisation procedure, the generating capacity to be built or the energy efficiency/demand-side management measures to be taken are insufficient to ensure security of supply.

The specific requirements on security of electricity supplies established by Directive 2009/72/EC should be noted:

- Establishment of each transmission system operator's obligation to contribute to security of supply through adequate transmission capacity and system reliability (s. c art.12);
- The right of Member State, for reasons of security of supply, directs that priority be given to the dispatch of generating installations using indigenous primary energy fuel sources, to an extent not exceeding, in any calendar year, 15% of the overall primary energy necessary to produce the electricity consumed in the Member State concerned (p.4 art. 15).

If gas Directive 2009/73/EC and electricity Directive 2009/72/EC create the common regulative environment in internal energy market of the EU, then gas Regulation 715/2009 and electricity Regulation 714/2009 addresses technical and procedure issues of third party authorisation to gas transmission and electric networks established by the aforementioned Directives. However, within solution of such technical and procedure issues, the certain security questions are separated.

Especially, it concerns gas Regulation 715/2009, one of the objectives (art. 1) if which is facilitating the emergence of a well-functioning and transparent wholesale market with a high level of security of supply in gas and providing mechanisms to harmonise the network access rules for cross-border exchanges in gas. The means of solution of this issues are:

- Setting harmonised principles for tariffs, or the methodologies underlying their calculation, for access to the network, but not to storage facilities;
- The establishment of third-party access services;
- Harmonised principles for capacity-allocation and congestion-management;
- The determination of transparency requirements, balancing rules and imbalance charges;
- The facilitation of capacity trading.

One of the tools of regulation an introduction of this means, besides acts of the EU energy law, is network codes elaborated by the ENTSO. They should cover both network security and reliability rules (art. 8). Besides, one of the principles of capacity-allocation mechanisms and congestion-management procedures concerning transmission system operators is obligation of transmission system operators “to assess market demand and take into account security of supply” (art. 16). Electricity Regulation No. 714/2009 the purpose of its application calls (art. 1), in particular, “facilitating the emergence of a well-functioning and transparent wholesale market with a high level of security of supply in electricity”. The achievement of this purpose is provided by the following means:

- mechanisms to harmonise the rules for cross-border exchanges in electricity;
- the establishment of a compensation mechanism for cross-border flows of electricity;
- setting of harmonised principles of the tariffs for cross-border exchanges in electricity;
- the allocation of available capacities of interconnections between national transmission systems.

It is worth noting that electricity Regulation No. 714/2009 to a greater degree focuses not on the security of supply, but on the security of networks, which is the main key to a reliable supply of electricity.

Regulation of issues of supply security includes a number of tools, in particular, network codes elaborated by the ENTSO for Electricity. Wherein such networks should cover “network security and reliability rules including rules for technical transmission stocks capacity for operational network security” (art. 8 of Regulation 714/2009).

Besides, the important element of supply security is the mechanism of calculation of cross-border flows of electricity and tariffs for authorisation to networks, one of the principles of which is provision of investment in development of supply and network security in general [37-48].

Also, the mechanism of compensation between transmission system operators for costs incurred as a result of hosting cross-border flows of electricity on their networks (art. 13 of Regulation No. 714/2009). In particular it is implied that such costs should be established with taking into account losses, investment in new infrastructure, and an appropriate proportion of the cost of existing infrastructure, in so far as such infrastructure is used for the transmission of cross-border flows, in particular taking into account the need to guarantee security of supply.

Charges applied by network operators for access to networks, according to requirements of art. 14 of Regulation No. 714/2009, should be transparent, take into account the need for network security and reflect actual costs incurred insofar as they correspond to those of an efficient and structurally comparable network operator and are applied in a non-discriminatory manner.

So, gas and electricity regulations supplement the general rules on security of supplies established under the Third Energy Package. It should be noted that there are separate acts of the secondary EU energy legislation on security of energy supplies, which is not included in the Third Energy Package, but it has direct pointing on these acts or acts adopted in the process of implementing the tasks and objectives established by this package.

In particular, this is Council Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply, to which Directive 2009/73/EC directly refers on regulation of regional solidarity (art. 6) by coordination of national emergency measures. In 2010, in accordance with new powers in the energy field given to the EU by the Treaty on European Union, Directive 2004/67/EU has been replaced by Regulation (EC) No. 994/2010 of European Parliament and Council on gas supplies security cancelling Council Directive 2004/67/EC.

The purpose of Regulation (EC) No. 994/2010 (art. 1) is safeguarding the security of gas supply by following measures:

- ensuring the proper and continuous functioning of the internal market in natural gas;
- by allowing for exceptional measures to be implemented when the market can no longer deliver the required gas supplies;
- by providing for a clear definition and attribution of responsibilities among natural gas undertakings, the Member States and the Union regarding both preventive action and the reaction to concrete disruptions of supply.

In particular, according to art. of Regulation (EC) 994/2010, security of gas supply is a shared (distributed) responsibility of natural gas undertakings, Member States (notably through their Competent Authorities) and the Commission, within their respective areas of activities and competence.

The main mechanism of guarantees of supply security is establishment of a preventive action plan and an emergency plan (act. 4). Such plans are created using transparent mechanisms of planning and in the spirit of

solidarity and coordination on three levels: country, regional and EU. According to Regulation (EC) No. 994/2010 organisational means to provide gas supply security:

- infrastructure that implies introduction by operators of gas transportation systems of constant reverse capacities at all cross-border connections between Member States (art.6,7);
- supply standards implying the Competent Authority to take measures to ensure gas supply to the protected customers of the Member State in the following cases:
 - 1) extreme temperatures during a 7-day peak period occurring with a statistical probability of once in 20 years;
 - 2) any period of at least 30 days of exceptionally high gas demand, occurring with a statistical probability of once in 20 years;
 - 3) for a period of at least 30 days in case of the disruption of the single largest gas infrastructure under average winter conditions (art. 8).

Moreover, Regulation (EC) No. 994/2010 contains an inexhaustible list of non-market gas supply security measures, which should be considered by Member States in development of preventive and emergency plans. Such gas supply security measures are divided into two groups: measures of supply security and consuming security. This, measures of supply security:

- Using strategic gas stocks;
- Forced use of alternative fuels (for example, in accordance with Council Directive 2009/119/EC of September 14, 2009, that obliges member states to keep minimum stocks of crude oil and petroleum products);
- Forced use of electricity generated from other sources;
- Forced increase of gas production;
- Forced exemption of stocks.

Measures of gas supply security applied by consumers include different measures to reduce demand as follows:

- Forced replacement of fuel;
- Enforcing interrupted contracts that are not fully implemented as part of market-based measures;
- Forced load shedding.

So, Regulation (EC) No. 994/2010 has become the act of energy right. This creates systematic regulation of issues of the EU and Member States actions in the case of in cases of threats to the security of natural gas supplies and today is the most effective regulatory act on significant threats to energy security.

Besides, in Regulation (EC) No. 994/2010, there is provision, which links the system of the EU modern measures in the field of energy security with one of the first in this field, which have been introduced in the end of 1960s by Council Directive 68/414/EEC, – requirements regarding stocks of crude oil and petroleum products.

Now these questions are regulated by Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products. According to this Directive, requirements on amounts of emergency stocks have been increased to a constant total level of oil stocks equivalent to, at the very least, to 90 days of average daily net imports or 61 days of average daily inland consumption (art. 3). Also, it is recommended to Member States to create special stocks composed of determined by the Directive product categories (art. 9).

5. Conclusions

So, the legal basis for maintaining an adequate level of security of the EU's supply in general and of individual member states in relation to imported energy resources – gas and oil – have been created, and the foundations of regional solidarity and cooperation in countering the disruption of energy supply have been developed.

Certainly, the other sources of *acquis communautaire* play the significant role in forming the EU energy law. In particular, it concerns the decisions of the EU Court. Many decisions of the Court determined the main principles of community law. Especially it was significant to legal relations in the energy field including nuclear energy. Since regulation of energy industry primarily concerns the activities of natural monopolies, non-discrimination access of consumers to networks (electricity), then certain cases in court and interpretation of norms of directives concerns precisely the issue of non-discriminatory access.

Today the EU energy law is young industry, which is developing rapidly. It is characterized by a large number of entities of rulemaking, which are represented by the EU institutions, international organisations, specialized agencies, non-state entities and etc. The dynamics of energy law is predetermined by influence of economic and political factors, which determine the state of the EU state security.

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