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# THE OUTCOME OF THE PROPOSED AMENDMENT TO THE DIRECTIVE 2009/73/EC ON EU'S NATURAL GAS SECURITY

Master's thesis

INTERNATIONAL RELATIONS AND EUROPEAN-ASIAN STUDIES

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I hereby declare that I have compiled the paper independently and all works, important standpoints, and data by other authors has been properly referenced and the same paper has not been previously presented for grading. The document length is 11508 words from the introduction to the end of the conclusion.

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### ABSTRACT

Since the Commission has already recognized Nord Stream 2 as a threat for EU's energy security, it has proposed an amendment on the Gas Directive 2009/73/EC. The amendment broadens the applicability of the Directive to all gas pipelines from/to EU including under construction Nord Stream 2. This research focuses on the question of whether the amendment can really boost EU's natural gas security, by hindering Nord Stream 2. Thematic analysis has been employed as the methodology in order to analyze collected data from both primary and secondary sources. Thus, the outcomes of the proposed amendment have been scrutinized by making a legal and political analysis. The research findings show that although the amendment hinders Nord Stream 2, it also affects the operation of the existing interconnectors adversely while it declines investors' tendency for planned pipelines. This will end to lower energy security for EU. Moreover, empowerment of the Commission in the proposed amendment curtails member states' plans to enhance their energy security. In addition, my security analysis shows that while Russian gas has been recognized as a threat for Europe, Moscow's ability to take advantage of its 'energy weapon' is restricted due to its dependence on European technology and finance, particularly under the sanction conditions. Therefore, restraining Russian gas in the European market will not result in a higher level of energy security since reliable and affordable alternatives are not so available. Hence, all four elements of energy security, means affordability, availability, accessibility, and acceptability are jeopardized by the proposed amendment. The current study concludes although the amendment is expected to boost the energy security of the Union, it may now turn into a threat per se.

Keywords: Energy security, Gas Directive, Third Energy package, Russia, U.S. LNG

## LIST OF ABBREVIATIONS

ACER	Agency Cooperation Energy Regulators
bcf/d	billion cubic feet per day
bcm	billion cubic meters
CNPC	Chinese National Petroleum Company
EIA	Energy Information Administration
ENTSO E/G	European Network of Transmission System Operators for Electricity/Gas
ERGEG	European Regulator Group for Energy and Gas
EU	European Union
GDP	Gross domestic product
ISO	Independent system companies
ITO	Independent transmission companies
IGA	Intergovernmental agreement
LNG	Liquefied Natural Gas
NRA	National Regulatory Authorities
NCs	Network Codes
NS2	Nord Stream 2
TANAP	Trans Anatolian Pipeline
TEP	Third Energy Package
TFEU	Treaty on the Functioning of the European Union
TPA	Third-party access
TSOs	Transmission System Operators
TYNDP	Ten-Year Network Development Plan
WTO	World Trade Organization

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### INTRODUCTION

The security of energy supply has been among the European priorities since the creation of the European Coal and Steel Community (ECSC) in July 1952 (Coq and Paltseva 2009). EU's attempts of addressing energy security concerns in official documents is reflected in the White Paper on Energy Policy, published in 1996 which points out to "diversification of supply" and "competitiveness" (Belyi 2003). This ended to the First, Second and finally, Third Energy Package (TEP) legislation in EU. However, the growing rate of dependence on the external natural gas resources has reached to 74.32% in 2017, which mainly comes from Russia (Eurostat 2018). Therefore, the Commission has tried to revise its laws and regulations to decrease energy dependence to Russia.

When it comes to the natural gas, the main part of TEP is the Gas Market Directive 2009/73/EC or simply called the Gas Directive. Market liberalization, reducing monopolistic practices of energy companies and competitiveness growth and generally 'unbundling' are the main aims of the Gas Directive (Funtini 2015). However, the Gas Directive failed to hinder Nord Stream 2 (NS2), which was recognized as a threat to EU's energy security by some of the EMPs (Tomić 2018). Therefore, the Commission proposed an amendment on the Gas Directive to support EU's energy security via hindering NS2. The amendment has been ratified in the Commission after a compromise was reached between France and Germany in February 2019 and sent to the European Parliament (General-Secretariat-of-the-Council 2019).

The purpose of this study was to evaluate the outcomes of the proposed amendment of the Gas Directive from an energy security viewpoint. This is important because although the aim of the amendment was set to be boosting the energy security of the Union, it may now turn into a threat per se. Hence, evaluation of the outcomes of the amendment is essential in order to guarantee to be in line with the primary goals of the TEP.

The Gas Directive or the amendment have drawn the attention of some scholars already. Talus (Talus 2017) made a legal review on the amendment in contrary to EU law. In addition, Hancher and Marhold (Hancher and Marhold 2019) studied its compatibility with EU competences.

Romanova (Romanova 2016) discussed the encounter between Russian foreign energy policy and the TEP. Despite these works, the impact of the amendment on the energy security of the Union has not been studied before. The other novelty of my research is due to its holistic approach in energy security definition. In fact, I will consider four elements of availability, acceptability, affordability, and accessibility, instead of focusing on the security of supply, exclusively. Given what was discussed above, the research aims to political and legal consequences of the amendment implementation. The research question that this work aims to address is "how will the recently proposed amendment of the Gas Directive affect the EU's natural gas security?"

The main claim of the paper is that 'the proposed amendment of the Gas Directive will decline the energy security of EU'. In order to examine the claim, the impacts of the amendment have been discussed from both political and legal perspectives, posing two pertinent research questions. First, 'how broadening the applicability of the Gas Directive to all gas pipeline from/to the Europe restrains other external sources of natural gas for EU?' In fact, I studied how the European energy security will be threatened if other gas suppliers of Europe are going to be affected by the amendment. The second question is that 'how curtailment of the Russian gas in EU natural gas market affects the energy security of the Union in the current situation?' Here, another analysis will show how much extent it is possible to reduce dependence on Russian gas practically, and how much it is in favor of EU's energy security as the amendment follows. These two questions will end to an answer to the main research question.

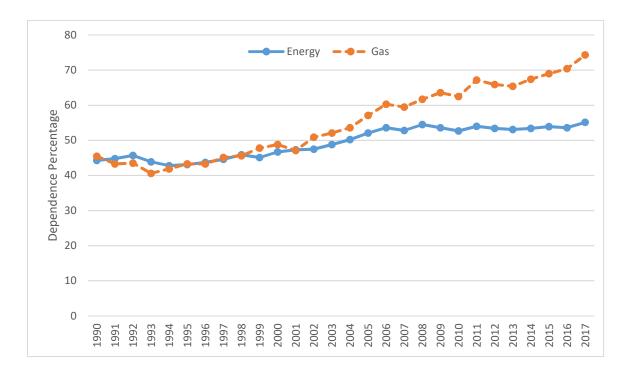
This study employed theoretical thematic analysis for both research questions since it is a flexible method appropriates for usual problems in real life (Guest, Mac Queen and Namey 2012). Reliability of the method has been boosted by using data from diverse resources and multiple researchers' works. Therefore, data preparation was done based on both primary and secondary sources in the first step. In other words, while EU's official legal energy policy documents have been studied as the primary sources, analytical and statistical reports, as well as books and research papers, have been studied as the secondary ones. Then, initial codes were generated and were analyzed considering Copenhagen Security School concept of 'securitization' as the theoretical framework of this research. In the next step, the pertinent coded data have been classified and clustered to form themes. After that, collected themes and data were reviewed to assure the existence of a meaningful connection between them. Finally, themes are put in a logical order to achieve a clear answer for both research questions and the main one, as well.

The structure of the paper is as follows. In the following, the research background and Copenhagen School is presented as the theoretical framework using for securitizing the 'energy' concept. Then, the methodology is discussed in more details. TEP and the amendment will be followed as the next part in order to portray a clear state of the art. The discussion presents both legal and political analysis on the issue of Russia – EU natural gas relation considering what the amendment tries to change. Conclusion recaps the discussion relying on all four elements of the energy security concept, aims to show how all these elements are influenced by the amendment adversely. This shows that the amendment will restrain EU's accessibility to affordable and accessible energy resource and as a result, will decline EU's energy security.

### **1. RESEARCH BACKGROUND**

### 1.1. EU energy dependence on Russia

Although EU member states have a diverse level of energy dependence, generally, the Union is still dependent on other sources for more than half of its energy needs, and this share has been increasing in recent years. The dependence is more severe in natural gas. As is shown in figure 1, EU imported 55.13% of its consumed energy and 74.3% of its natural gas in 2017.



### Figure 1. Evolution of the EU energy dependency percentage, 1990-2016 Source: Eurostat (2018)

The main natural gas resource of EU comes from Russia that provided 35% of the total EU-28 supply in 2017. According to Energy Information Administration (EIA) statistics, Russian role has inclined in the first half of 2018, which is 8% higher than in the same period of 2017. Figure 2 depicts the main EU gas providers.

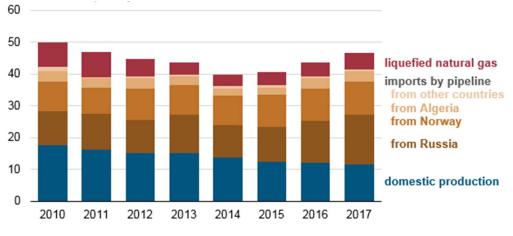


Figure 2. Europe natural gas supply composition during 2010-2017 in bcf/d Source: EIA (2018)

Although EU tended to decrease the dependence on Russian gas especially after two gas-cuts in 2006 and 2009, figure 2 implies Russian share growth in the European gas portfolio. In order to prevent potential supply disruption EU has adopted some action plans and legislation in the recent decade. These efforts are expected to boost the gas security as a part of EU's 'energy security' mainly by implementing 'Third Energy Package' (TEP).

### 1.2. Third Energy Package and the Gas Directive

After the first and second energy package legislation from 1996 to 2003, the Third Energy Package (TEP) was proposed. TEP is an attempt for achieving a more liberalized and competitive gas market in which monopolistic practices of actors such as Gazprom, the Russian state-owned gas producer, will be defied. As a result, external suppliers will have to compete for a share in the EU market, which leads them to reduce price and lower their maneuverability for taking advantage as a dominant gas provider (Siddi 2018). More precisely, the 'Gazprom clause' in the EU's Third Energy Package, limits the ownership of energy distribution assets within the EU by non-EU actors and constrains Russia's influence in the EU energy market (Goldthau and Sitter 2014).

The Directives and Regulations of the TEP are shown in table 1. Unbundling, third-party access (TPA) and liberalization of the market were already in the first two packages, however, the details of technical regulation, cross border transmission and National Regulatory Authorities (NRAs) were still uncovered. Also, the previous energy directives only required independence in relation to private entities, but the TEP extended it to public- sector entities (Talus, 2016).

Table 1. Third Energy Package content

No	Package code	Content
1	Dir. 2009/72/EC	Common rules for the internal market in electricity
		(repealing Directive 2003/54)
2	Dir. 2009/73/EC	Common rules for the internal market in natural gas
		(repealing Directive 2003/55)
3	Reg. (EC) 713/2009	Establishment of an Agency for the Cooperation of Energy
		Regulation (ACER)
4	Reg. (EC) 714/2009	Conditions for access to the network for cross-border
		exchange in electricity (repealing Regulation (EC) 1228/2003)
5	Reg. (EC) 715/2009	Condition for access to the natural gas transmission network
		(repealing Regulation (EC) 1775/2005)

Source: Funtini (2015)

TEP consists of two Directives and three Regulations. Directive 2009/73/EC, called simply the Gas Directive, concerns rules for the internal market in natural gas and repeals Directive 2003/55. The Gas Directive was adopted prior to the adoption of the new title on energy in the Treaty of Lisbon and remains the most important secondary legislation regulating the internal market for gas to date (Hancher and Marhold 2019).

The most important covered issues by TEP are (Funtini 2015):

- Unbundling & establishment of independent Transmission System Organizations (TSOs) Generally, TSOs are divided into two classes of companies: Independent System Operators (ISOs) and Independent Transmission System Operators (ITOs) who are responsible for transmitting electricity and gas through the networks. TEP asks all EU transmission companies to become 'unbundled' which means independent companies who do not have any conflict of interests with the other gas/electricity companies working in other energy sectors (like exploration, production, and refining).
- 2. Role and functioning of NRAs.

NRAs are responsible for three main duties according to TEP:

- Monitoring markets, customers' rights and quality, compliance with prescriptions,
- Cooperating with other EU's NRAs and ACER,
- Several reporting obligations (its activity, investment plans, etc.)

 The definition of power & competencies for new & re-shaped existing European bodies including European Network of Transmission System Operators for Electricity/Gas (ENTSO E/G) and ACER as below:

3-1. ENTSO E/G is a compulsory network of TSOs for electricity and gas. It should draft NCs as a set of rules to facilitate the harmonization, integration, and efficiency of the European electricity market. It is also responsible for the Ten-Year Network Development Plan (TYNDP), the regional investment plans and also providing reviews and outlooks.

3-2. ACER was established in 2010 and has its seat in Ljubljana, Slovenia. Before the foundation of ACER, European Regulator Group for Energy and Gas (ERGEG) was founded as an advisory organization by the NRAs in a voluntary procedure. ERGEG was set up by the European Commission to assist the Commission in consolidating a single EU market for electricity and gas. However, as it did not have a legal mandate nor clear power and therefore, it was merged into the ACER in the following. Nowadays ACER mandates:

- Drafting framework guideline and issue opinion on NCs.
- Issue opinions on other ENTSOE/G document or plans;
- Issue opinions and recommendations whenever asked (or if needed) to European Parliament and the Commission;
- Decoding on cross-border issues if national regulators cannot agree or ask ACER to intervene.
- Monitor the functioning of internal electricity and gas market, including network access for electricity produced from renewable energy sources, retail prices and respect of consumer rights, issue every year a report;
- 4. The definition of non-discriminatory rules and procedures to foster market integration, based on framework guidelines and Network Codes (NCs). It is done by putting a technical rule that regulates several aspects of electricity and gas supply chain ("Who may use infrastructures and how", "under which conditions")
- 5. Market monitoring

Shortly after TEP legislation, the question of the Gas Market Directive applicability on NS2 was raised. Technically speaking, the pipeline is not an interconnector, nor an upstream pipeline according to the Directive. It neither connects the national gas transmission systems of two EU Member States nor a part of the transmission systems of any EU Member State. As a result, and considering the definition of 'interconnector' mentioned in Article 2, the Directive is not applicable to NS2 (Talus 2017). This Commission also admitted it afterward (Gurzu 2016).

Therefore, the Commission asked for a mandate to negotiate an intergovernmental agreement (IGA) between EU and Russia on the operational aspects of the pipeline, as the Commission claimed the existence of a 'legal void' or a 'conflict of laws' in the case (A. B. Wilson 2018). However, the Legal Service of the Council of the EU rejected most of the commission's claims later, which explicitly declared the absence of a legal rationale for the mandate. Therefore, the Commission launched the amendment of the Directive in order to expand the applicability of it to external pipelines in order to create a legal rationale for a mandate (Yafimava 2017). The latest proposed amendment following to France – Germany compromise was concluded on 12 February 2019 (General-Secretariat-of-the-Council 2019).

### **1.3.** Critical literature review

Since the Commission has ratified the proposed amendment but the EU Parliament needs to get into that, much has not been discussed in the academic papers separately, however, TEP has been surveyed from different perspectives before. Kim Talus (Talus, 2019) has surveyed the latest amendment on TEP critically. The amendment is supposed to defy the construction of NS2 in order to preserve the certain level of dependence on Russian gas, he claims. Talus approaches the issue from a legal perspective. He tries to shed light on the controversial changes have been done in the Gas Directive as well as probable conflicts with the non-discrimination principle under the World Trade Organization (WTO) and the EU law. Accordingly, he shows that the proposed amendment still includes a number of confusing elements and it is inconsistent with WTO and EU laws. Moreover, it provokes unfair and inequitable treatment with Nord Stream 2 pipeline under the Energy Charter Treaty. As his research is legal-oriented it focuses on the legal contradiction and does not talk about the outcomes of the proposed amendment, on the energy security for instance.

Hancher and Marhold (Hancher and Marhold 2019) studied the proposed amendment compatibility with EU authorities and competencies in order to find whether it can set the stage for a uniform legal structure for all the pipelines from/to the EU territory. They also discuss the allocation of competencies between the EU and its Member States on the energy. In this research, the most attention has been pointed to the impacts of the amendment on the existing and future gas pipelines which inject gas to the EU territory.

In a brief part of their study, the security of supply has been talked according to the EU's Regulation 2017/1983, which entered into force on 1 November 2017. In fact, the authors look at the obligations which Regulation 2017/1983 imposes on the EU member states to ensure the gas supply for the final clients in particular in the emergency situations firstly. Then, the confrontation between the Regulation means and the amendment is discussed. In this section, energy security concept has been curtailed to the 'continuity' (or more generally, 'acceptability') element as the aim of Regulation 2017/1983. Therefore, other aspects of energy security are left and the analysis of energy security is not holistic, taking into account surveying energy security is not even among the primary aims of that paper. In the end, the survey shows the proposed amendment will not result in the application of a uniform set of rules over the entire route of pipelines. In addition to that, member states can probably advocate their energy security priorities relying on the Treaty on the Functioning of the European Union (TFEU).

When it comes to the impact of TEP on the security of supply, analysis and research are more available. European Commission has published a report on State of implementation of the Third Energy Package in the gas sector (Anca, Efthymios and Andras 2018) shows an integrated EU energy market and the adoption of the NCs increases transparency, fair access to cross-border trade and flexibility for the supply. According to the report, these changes are leading to a more attractive environment for the markets participants which is one of the consequences of TEP. The report wants to talk about the status of the package and therefore it does not have a security approach. However, it can be a stepping stone for the current research as it talks about some elements of energy security.

In the book was published by Ole Gunnar Austvik (Austvik 2009) the functional linkage between EU natural gas market liberalization and long-term energy security has been studied. It talks about energy security not just from a geopolitical but also environmental and economic perspective, while the later one covers investment in energy infrastructures as well as the price of energy in the Union. The book also tries to differ short-term from the long-term perspective of EU's energy security and as a result, the 'availability' element is also discussed. Therefore, the study covers all important elements of the energy security concept in general. According to the study, increasing competition may act as a double-edged sword: "policies that aim at improving competitiveness, supply security, or the environment however often contradict each other [...] Another aspect is that competition in and increased privatization of Russian gas activities could improve the EU supply situation in the short run but deteriorate it in the long run; prices could be pushed down,

resources exhausted faster and a greater dependence on Russian gas would result" (Austvik 2009, 109, 112).

The study ends to the point that analyzing the impact of liberalization on energy security should be performed considering the obstacles of market change and the interaction of different policy areas. However, when it comes to the practical market analysis and the future of European gas market, the study lacks a statistical-numerical analysis of the suppliers' current abilities and future potentials in order to portray a clear image of potential alternatives for EU to meet its natural gas demand. Moreover, as the political condition of gas suppliers has been changed severely from 2009, updating such a hypothetical analysis is demanded. In addition to that, as the book has been published shortly after TEP legislation, it just points out the second and third energy packages superficially. In other words, it mainly focuses on the general concept of 'liberalization' rather than those specific legal packages in details. As a result, the practical impacts of adopted EU's energy laws are not discussed.

Eikeland (Eikeland 2011) has done another research on energy as a shared competence in the EU and the effects of TEP on it. He picked a historical approach to focus on the trend and historical developments have happened during 2003-2007, which ended to the TEP legislation. As a conclusion, it is derived that EU supranational governance will become stronger in the energy matters in the future as TEP gives the Commission higher authority in the energy field. In the research, it was not surveyed whether a higher EU authority in energy will end to a higher level of energy security.

Last but not least, In Tatiana Romanova's research, TEP has been taken as the exterior appearance of EU's market-based energy policy (Romanova 2016). In fact, she believes that while Russia has a geopolitical approach in its foreign energy policy, EU's energy policy is market-based in her research. Therefore, Russia uses legal and technocratic instruments to counteract EU's third liberalization package (or TEP). Romanova believes in spite of this confrontation there was a potential opening for a degree of policy convergence between the EU and Russia, however, it has been influenced by the Ukraine tension in post-2014. Therefore, legal and technocratic instruments were compromised as a result of the 2014 worsening in EU-Russian relations (Romanova 2016). Although the research has combined geopolitical and market-based approach for its analysis, the security is left.

In spite of the above-mentioned papers, the impact of TEP and the proposed amendment on energy security has not been studied yet. In fact, the main aim of the legal package has been declared the energy security improvement, and the proposed amendment is expected to set a common energy framework for EU (Hancher and Marhold 2019), as well as restricting NS2 as a threat for the Union energy security (Talus, 2019). Therefore, an evaluation of the package reform, as the current research is following, will show its efficiency as well as the flaws. In the other word, an inspection of the proposed amendment and its outcomes on the energy security of the Union is vital since the basic goal of the package and the revision are connected to the energy security.

In addition to the necessity of the research, the current research has three novelties comparing to previous researches. First, it focuses on the energy security changes as a dependent variable in relation to the TEP amendment, the independent variable. This has not been done before, taking into account that a holistic definition of the 'energy security' has been picked based on a combination of other different delineations, according to table 1. And finally, the research sheds light on the outcomes of the amendment, not just from a legal perspective, but it also considers security, technical and political facts of EU-Russia energy relations which help to form a more comprehensive and more realistic analysis.

According to above-mentioned features, the current research question is that "how will the recently proposed amendment of the Gas Directive affect the EU's natural gas security?" In fact, it is discussed how targeting NS2 and efforts to counteract the Russian gas penetration in EU by this amendment can influence the energy security of the Union. For this purpose, the recently proposed amendment facets will be discussed analyzing its legal outcomes on the EU's energy security. Then, the political analysis will be done taking into account the security effects of dependence on gas comes from Russia. Finally, the conclusion will come up with the idea that curtailment of the Russian gas by means of the amendment will lower the EU's gas security in the short term.

# **1.4. Theoretical Framework: Energy Security and Copenhagen Security School**

Traditionally, threats pointed to the sovereignty, particularly in realism school. Therefore, military power has been the most important measure to make a sovereign state secure. Also, "security policy consists of the use of armed forces -the military and the police- to free the state and its citizens from threats" (Huysmans 1998). However, the advent of new threats particularly at the

end of the cold war era showed incapability of the traditional approaches to cover all kinds of threats. In the late 1980s, Copenhagen school emerged and tried to expand the idea of security in order to cover new threats including not just military issues, but a wide range of political to social, economic and environmental problems. It also attempted to accept non-state actors as the agents of security in the analysis (Buzan, et al. 1998).

Copenhagen School believes that security is an especial part of politics which is applicable in different aspects. However, it does not mean that any political topic can be simply recognized as a security one, but instead any public issue can be located on the spectrum as below:

- Nonpoliticized: Issues that state does not deal with, nor need public debate and decision;
- Politicized: Issue which is a part of public policy, demanding government decision and resource allocations or maybe some other form of communal governance;
- Securitized: Issues that are presented as an existential threat, requiring emergency measures and justifying actions outside the normal bounds of political procedure.

Accordingly, a hypothetical actor takes an issue out of what under those conditions is 'normal politics' and makes it 'securitized' in a process called 'securitization'. Moreover, security is an intersubjective issue rather than objective or subjective in the Copenhagen School. This means that one cannot securitize an issue individually alone but it needs to be constructed socially. As a result, the actor legitimizes the securitization process via speech act for instance.

Although the Copenhagen School does not consider energy security as an independent security dimension, its importance is penetrated in different facets including political, military, economic and environmental ones (Belyi 2003). Moreover, the oil price rise in late 1973 set the stage for the securitization of the energy concept in which states followed measures to guarantee meeting their energy demand. Considering the above-mentioned process of securitization, energy has been securitized by the Western world particularly due to the considerable impacts of two oil shocks in the 1970s and then two gas Russia - Ukraine conflicts in 2006 and 2009 on the society (Özcan 2013).

Despite the fact that energy has been already securitized as a concept, there is not a unanimously accepted definition to the 'energy security' concept and more than 45 ones have been recognized by Sovacool (Sovacool 2011, 3). However, most of the available ones are close enough that finding common components is achievable. Therefore, energy security can be determined based on four

elements of availability, accessibility, affordability, and acceptability as they are explained in table 2 (Maleki 2017) and will be used for the current research.

Element	Explanation	
Availability	How durable the resource is, in order to make it available in the future	
Accessibility	Having access to energy resources should be possible easily.	
Affordability	Equitable price based on the transparent pricing method and minimum volatility	
Acceptability	Finding a model which guarantees sustainability and continuity of long term	
	energy development	

Table 2. Energy security elements

Source: Maleki (2017, 27)

In the section 2.2.1 of this research, I show how an energy carrier, the natural gas, has been 'securitized' in EU-Russia relationship during the las decades considering securitization process in Copenhagen School. The 'securitized Russian gas' has motivated EU to react Russian energy diplomacy by designing TEP to preserve its energy security. Therefore, the amendment to the Gas Directive should be evaluated considering EU's aim on energy security enhancement, as the research aim. Here, the abovementioned definition of the energy security makes us able to turn the subjective 'energy security' concept to an objective one, which is possible to be evaluated by analyzing each four elements separately.

### 1.5. Methodology

This study employed a theoretical thematic analysis for both research questions. Similar to many other qualitative research methods, the first step is data preparation (Gibbs 2008, 2). The main data source for my research has been various official documents, books, and published papers and think tank reports. While the first one is classified as the primary resource, the rest is known as the secondary ones. Thus, the official EU documents regarding energy policy have been selected, including the Gas Directive and the proposed amendment as the main part. These legal documents are required to survey the first research question and for performing the legal analysis. Official statistics on alternative energy resources for the Union as well as primary or secondary documents, which imply the level of mutual dependency between Europe and Russia, have been gathered as well. Analytical reports of think tanks, which projected the future of EU natural gas market, have been chosen as the other part of the research.

In the second step, initial codes are generated. In this phase, I have organized the found data systematically and in a meaningful way. In fact, coding helps to reduce lots of data into small chunks of meaning. Coding can be done in two different ways; inductive and theoretical. Inductive thematic analysis is used in cases where there are no previous studies dealing with the phenomenon, and therefore the coded categories are derived directly from the text data while in the 'theoretical' thematic method, analyzing the data is done with addressing specific research questions in mind (Vaismoradi, Turunen and Bondas 2013). Since the current research was driven both by theoretical interest and a couple of clear research questions, the approach is theoretical. Searching for themes comes in the following of the code generation. After all, data have been coded, they were gathered into more and more abstract codes until a common theme or a pattern is represented by a cluster of them (Bergström 2010). In other words, a theme is a pattern that captures something significant or interesting about the data and/or research question (Maguire and Delahunt 2017). Hence, pertinent codes are put under one theme in the legal documents in order to connect the impacts of the amendment on the interconnectors from third states to EU territory. The same has been performed in search of the answer for the second research question through the rest of the abovementioned documents. This sets the stage of themes generation on the alternative energy resources for Europe as well as bilateral dependency between Russia and the European Union in the energy field. Data and themes are reviewed to prove the existence of a sensible and meaningful bilateral connection. All the data should support their theme and themes should be assessed whether they work in the context of the entire data set as well.

Finally, themes are put in an order which clarifies the answer for the research question (Gibbs 2008). In the current research, the themes are connected to each other using a theoretical framework to show how four main elements of the energy security will be finally affected by the amendment, considering the legal and political themes.

Thematic analysis has its own pros and cons. The main weakness of the thematic analysis is low reliability due to a wide variety of interpretations from multiple researchers (Guest, Mac Queen and Namey 2012). In this research, I made a counter-argument in the core themes. This has been achieved by surveying a variety of primary and secondary resources from diverse resources and multiple researchers' works, simultaneously. For instance, the dependency between Russia and Europe in the energy has been surveyed according to statistics and analysis from both Russian and Western resources.

The advantages of the thematic analysis method justifies it applicability in this research. For instance:

- It is very flexible since it is not tied to a particular epistemological or theoretical perspective, unlike many qualitative methodologies. This makes it suitable for researches in the energy field, which usually qualitative and quantitative data are used and are interpreted.
- Energy is known as a political, economic, technical and social concept (Shove and Walker 2013) and it necessitates picking of a systematic method. This is also crucial in this research to have a systematic approach for making political and legal analysis is crucial as most of the other issues in the energy field (Sorrell 2007). Thematic analysis also has a systematic approach and therefore, it is a reasonable choice.
- Thematic analysis method works on the documents as the raw data. In the current research we need extract required data from legal documents of EU, to form the legal analysis. As a result, the method is an appropriate instrument.
- The method is known as a proper tool for interpretation of usual problems in real life like the energy security issues (Guest, Mac Queen and Namey 2012).

### **2. RESULT AND DISCUSSION**

The main baselines of the TEP proposed amendment can be classified into four main components:

- 1. Expansion of the "interconnectors" definition to the territorial waters of the member states and covering the pipelines from third states to an EU member state (Article 2);
- 2. Empowerment of the Commission in the decision making especially for negotiation with third states, derogation or expansion of pipelines from Directive (Article 36, 49, and 49aa);
- 3. Accentuation of the role of the states who may be affected by interconnectors that span EU member states border and third states (Article 34, 36 and 49)
- 4. Clarifying the condition of derogation and exemption (Article 36, 49, 49a and 49aa)

The outcomes of the Gas Directive can be discussed considering these four elements and unbundling as the backbone of TEP from the legal perspective. Also, the implementation of the Directive amendment will result in some political impacts that will be discussed separately.

### 2.1. Legal analysis

According to the Gas Directive article 2 (17), 'interconnector' means "a transmission line which crosses or spans a border between the Member States for the sole purpose of connecting the national transmission systems of those Member States". However, it is expanded to a new definition in Article 1 (1) amendment which says:

"transmission line which crosses or spans a border between Member States for the purpose of connecting the national transmission system of those countries or a transmission line between a Member State [] and a third country [] up to the territory [] of the Member States or the territorial sea of the Member State [];"

Therefore, in addition to NS2, some of the other existed and under construction pipelines will be affected. In the other words, despite Articles 36, 49, 49a and 49aa of the amendment try to make some 'derogation' for existing pipelines and 'exemption' for new ones the side-effects of this approach will still be detrimental, as will be explained below.

According to the amendment, derogation should not be for more than 20 years. It can be made in order to enable recovery of investment or due to reasons of security of supply while not detrimental for competition. Therefore, existing pipelines between EU and North Africa or the UK in post-Brexit will be affected. Particularly, two main older African routes, Maghreb and Transmed, have been constructed 1996 and 1983 respectively and even Greenstream or Medgaz became operational 2004 and 2010 would not probably be subjected to a 20-year derogation relying on the need for 'recovery of the investment made' (Talus, 2019). Connectors between the UK and EU will have the same legal status in post-Brexit. African – Europe pipelines features have been shown in figure 3.

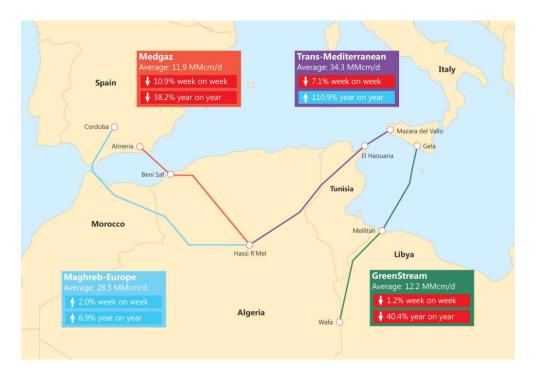


Figure 3. African – Europe pipelines features Source: Ratcliffe (2018)

Also, article 49a of the proposed amendment says

"Where the gas transmission line [] in question is located in the territory of more than one Member State, the Member State in the [] territory of which the first [] connection point with the Member States' network is located shall decide on a derogation for the [] gas transmission line [] after consultation with all concerned Member States".

Since an exclusive clear criterion, which defines 'who the concerned Member States can be', has not been introduced, this stipulation makes it more complex to derogate a pipeline. Similar complexity can be seen about the under-construction pipelines as well. According to Article 36 (5) (a) of the amendment, "the national regulatory authorities of the Member States the markets of which are likely to be affected by the new infrastructure" shall be consulted for building new pipelines. In addition, according to Article 36 (9) of the Gas Directive, EU Commission is the final authoritative body who determines whether the pipeline can be exempted. This is important, as some of the projected pipelines from third states to EU territory are vital to guarantee the EU's security of supply.

Implementation of the amendment for those pipelines, which enter EU territorial waters from a third country, is a bit deceptive. According to the amendment, the jurisdiction of the Directive will expand to the 'territorial sea of the Member State'. Thus, interconnectors from third states to the territorial water of member states will be subject to the amendment because it is physically impossible to differentiate between their European part and the rest (Zbytniewska 2019). Since the perspective of Turkey's accession to the European Union is still blur, Turkish Stream or any plans for exporting gas from the Eastern Mediterranean will be affected as well. This intricacy in the exemption of the new pipelines is against EU's energy security from two angles: it puts new pipelines under doubt and it gives a negative signal to the investors for other planned projects.

This complicated procedure leads to the separation between derogation and exemption having two other side effects. Initially, it will make the future of investment ambiguous and uncertain for the investors as the amendment has a retroactive approach and all of the current deals have to be revised accordingly. Furthermore, it considers all types of under construction projects as the same, regardless of their progress level and how much money has been spent there. In the other words, the amendment behaves similarly towards new pipelines in the range from 'planned' to 'ready to operate' projects, while the second one should be protected more due to the money that has been spent for it. This uncertainty pointed to the investment atmosphere is a threat to future projects and by essence for energy security (Talus, 2019).

Last but not least, the proposed Commission empowerment in the amendment seems controversial from a legal perspective. The amendment practically gives the exclusive external competence to the Commission on the IGAs for the interconnectors from third states; including its right to have the final say on both derogation and exemption (Hancher and Marhold 2019). This appears to be in contradiction with article 194(2) of the TFEU where it is said the Union's policy on energy shall not affect a Member State's choice between different energy sources and the general structure of

its energy (Talus, 2019). Also, it appears to violate TFEU article 194 which lists energy security as a shared competence of the EU and its Member States (A. b. Wilson 2017).

### 2.2. Political analysis

#### 2.2.1. Russian gas from a security perspective

Despite the Western ideal dream for making a 'depoliticized' international energy trade, the goal seems still unachievable since energy is not yet a 'purely economic' phenomenon (Högselius 2013). Taking into account the Copenhagen School framework, nowadays energy has been 'securitized' particularly due to the considerable impacts of two oil shocks in the 1970s (Henderson 2015). The same goes for Russian gas which has been 'securitized' after two gas Russia - Ukraine conflicts in 2006 and 2009 and as a result, dependence upon Russian gas has been recognized as a threat for EU more seriously (Özcan 2013).

According to Copenhagen Security School, an issue is securitized when the audience of the security speech act accepts it as 'an existential threat to a shared value' (Buzan, et al. 1998, 21-31). This is discernible when it comes to Russian gas in EU's market, because 'dependency on Russian gas' has been reflected as a 'common threat' for EU's security as a 'shared value' in EU's documents, like European White Paper for Energy Policy (EC 1996). Moreover, TEP has been legislated by EU in order to counteract the abovementioned Russian gas threat, and to restrict the dominance of Gazprom by putting an end to its adaptation strategy through downstream integration in EU (Boussena and Locatelli 2013).

From the other perspective, securitization "is a kind of 'discursive act' as a 'speech act', by which a security issue is labeled as 'important' and 'urgent', that 'legitimizes the use of special measures outside of the usual political process to deal with it'" as Weaver argues (Özcan 2013). Along with the current version of the Gas Directive, the 'urgency' of the commission to adopt the amendment can largely be attributed to NS2 (A. B. Wilson 2018). In fact, the Directive amendment wants to shut down NS2 as it is believed that the pipeline is against EU's energy security because it will diminish Ukraine as the traditional route for Russian gas towards Europe. This 'urgency' is also another testimony shows securitization of Russian natural gas in EU's market, according to Copenhagen Security School.

Despite the fact that some scholars consider "Russia's usage of its energy power for influencing the foreign and security policies of its neighbors" as an undeniable fact (Smith 2009) I do believe this should be interpreted cautiously. In fact, Moscow's ability for taking advantage of its natural gas penetration in the European market is defied due to some facts, including Moscow's tendency, the efficiency of 'energy weapon' and the interdependency between Russia and EU.

Although EU is not ready yet to face an interruption in Russian gas import (Ruban 2013), such an event is not even so likely. Moscow does not like to be known as a capricious player in the eyes of EU when it comes to natural gas. Gazprom claims despite all the geopolitical changes that have taken place over these 50 years, it has stayed "a reliable supplier of the vital resource for the partners in Europe" (Gazprom 2015). This will be more highlighted considering the fact that Russia did not extend the Ukrainian route problem to the other gas routes, not in 2006 nor 2009 gas conflicts. A sudden cut in the gas flow reduces Russian reliability and as a result, Russian contract volumes and prices may decline significantly in the future by the clients, which is not desirable for Gazprom (Morbee and Proost 2010). Therefore, Moscow is cautious about the political usage of its gas exportation.

Applying energy as a political advantage by Russia is not curtailed just due to the lack of Kremlin's tendency. In other words, Russia even cannot use the energy easily as leverage against EU in the current situation due to different facts. First, possessing energy resources is not enough for this goal. For instance, more often than not, Russia failed to achieve political concessions by using its energy resources as a 'weapon' before. This is because the ability of an energy owner to use this 'weapon' is highly dependent on other issues like the dominance on the energy infrastructure of the target state or the level of state resources monopolization. Even a historical survey shows that Russia has not been always successful in using its energy resources as a political measure in relation to the West (Stegen 2011).

From another perspective, Russia – EU energy relation is one small piece of a bigger puzzle of bilateral economic relations: the 'inter-dependency'. In fact, if EU relies on Russian gas, Moscow is also dependent technologically and financially on Europe. Moscow dependency on the Western equipment in the upstream sector was between 60-100 percent shortly after the first round of EU sanctions in 2014 (Nikulina and Kruk 2016).

The same trend is discernible in the financial perspective. Statistics show that 46% of the Russian federal budget revenue came from oil and natural gas activities in 2018 (Minfin 2019). Considering

the fact that EU is the main destination for up to 75% of Russian natural gas export and 68% of Russian exporting revenue (EIA 2017), the European gas market is irreplaceable for Russia. Even China cannot be considered as an alternative since the under construction 'Altai pipeline' from Russia to China is going to be fed from Western Siberian gas field, not the current fields which are used to feed European states (Lifan and Chengzhi 2015). Figure 4 shows how oil and gas have a dominant role in Russian export revenues.

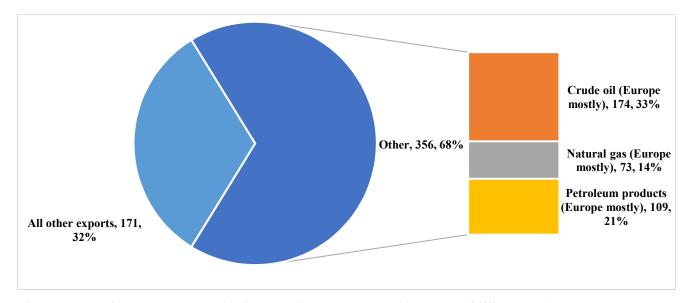


Figure 4. Russia gross export sales in 2013 in percentage and amount (billion USD). Source: EIA

In addition to Russian dependency on EU, sanctions by the West and the oil price fall have weakened the Russian energy 'weapon' as well. Selling the equipment applicable for deep-water drilling, shale oil extraction and extraction of oil from the Arctic zone is forbidden now according to the sanctions (EIA 2017). Shortly after putting sanctions against Russia, the consultancy IHS CERA estimated that the sanctions, if maintained, could cause a 25 percent drop in Russian oil output by 2025 (Farchy 2014). More optimistic resources believe that despite that the result of the sanctions is not catastrophic, it will result in production decline in the next decade (Mitrova 2018). According to a survey, sanctions have directly affected sanctioned state-controlled banks, oil, gas and arms companies in Russia. Obstacles for the Russian company, Novatek, to access US capital caused a US\$27 billion raised in needs for its Yamal LNG (Liquefied Natural Gas) project, and as a result, the Chinese National Petroleum Company (CNPC) took a 20% share of the Yamal LNG (Russell 2016). Moreover, sanctions have hampered Russian oil industry's modernization and its capacity to generate income for Russia's overall modernization as well (Aalto 2016).

Sanctions did not just influence the oil and gas industry in Russia, but the whole economy. The overall negative effect on gross capital inflow over 2014–2017 is estimated at approximately \$280bn. The sanctions' estimated effect on GDP is also significant (–2.4 p.p. by 2017, compared with a hypothetical scenario with no sanctions). The influence of oil price fall has been even worse for the Russian economy; up to 3.3 times more than the sanctions (Gurvich and Prilepskiy 2015). This prevents Russia from continuing its aggression via energy resources.

Last but not least, contrary to the expectations of neoliberalism and neofunctionalism theories, this 'interdependency' has not been expanded to a higher level of 'complex interdependence' and therefore, tensions decline. In fact, neofunctionalism believes that cooperation between two states in one field always 'spills over' to other fields. Neoliberalism also believes 'spillover' paves the way for peace and tension decline (Jakson and Sørensen 2013). However, the EU-Russia energy relation has stayed in a rudimentary dependency level. In fact, interdependency has not worked since each side has been worried that the future interdependence will become asymmetrical. However, none of the sides "can reduce their own dependence without also threatening to increase the dependence of the other side and as a result, the relationship looks like a classic security dilemma – where neither side can improve its own security without threatening the security of the other side" (Krickovic 2015).

### 2.2.2. Alternatives for Russian gas

In the previous sector, it was shown that Russian gas is not such a threat that a severe restraining action plan would be demanded. From a different angle, we can pose the question that if EU repeals Russian gas then what alternatives will be available. However, there is another fact beyond this question: European conventional gas production from Norway, Netherlands, and the UK is expected to fall by 110 bcm/year (or by 40 percent) in the period 2013–2030 (Dickel, et al. 2014). Therefore, EU's gas need for import is going to grow and new sources are not just required for 'diversification' but even for 'compensation'. According to the International Energy Agency projection, the gap between EU's natural gas demand and supply will be between 350 – 400 billion cubic meters annually in the approaching decade. Generally, while Iran and the US Liquefied Natural Gas (LNG) are counted as external potential resources, European unconventional (shale gas, tight gas, and coal bed methane) resources and biogas are considered potential domestic resources.

Although Iran is the first gas owner in the world, it is not among the top ten gas exporters (BP 2018). Therefore, the required exportation infrastructures including LNG terminals and pipelines are not in place yet. Interval disruptions in Iranian gas exporting to Turkey in 2002, 2004, 2005, 2006, 2007 and 2008 due to different technical issues and sabotage (Kinnander 2010) has made Iran suspicious as a reliable exporter and political obstacles between Tehran and the Western world hinders any effort to execute the idea of gas transfer.

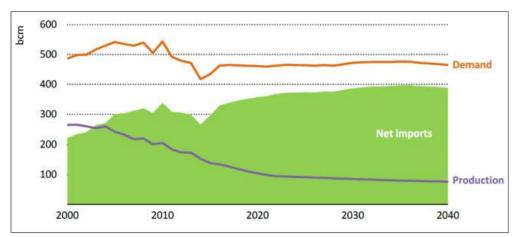
Moreover, different proposed routes to transport Iranian gas to Europe are problematic. The pricing conflict between Iran and Turkey makes Iranian participation in the Trans Anatolian Pipeline (TANAP) unlikely. A hypothetic extra pipeline through Turkey needs in excess of \$5 billion (Rezayeva 2014), raised a lot of questions regarding the financing of the pipeline considering the US sanctions and the low gas price makes the project under doubt economically. The same goes for the northern route through Caucasus region and Black Seabed. The other already proposed Friendship pipeline via Iraq and Syria does not seem promising considering the Syrian civil war. After the US withdrawal from the Iranian nuclear deal, the political aggression and sanctions have intensified against Iran. Thus, it is more difficult to make a cooperation with Iran on LNG facilities and therefore, this option is not achievable either.

Although the US has become a natural gas net exporter thanks to the shale gas boom and it is estimated that it will be ranked among top three LNG exporters, until 2030 (BP 2019), the U.S. LNG is not promising to penetrate into whole EU market at least in the short term perspective. This is due to lack of interconnectors between existing LNG terminals and final customers, lack of reverse flow through EU natural gas network and the fact that the U.S. LNG is more expensive than Russian gas (Bros 2017). Going forward, LNG imports in Europe will have to compete on a cost basis with existing and new pipeline supplies of natural gas, particularly from Russia. As a result, it is not so likely to see that all of Europe can or is inclined to take advantage of the U.S. gas, but maybe just the Eastern and the particularly Baltic region (Dickel, et al. 2014). It is also contemplative that current U.S. efforts for halting NS2 is more political and can be associated with the interests of the US to find a market for its own LNG as it was already stated by Austrian Chancellor Christian Kern and German Foreign Minister Sigmar Gabriel, as well (Sputnik 2017).

From the other perspective, statistics of gas export from Norway – the major European gas producer – shows Germany (29.7), the UK (28.7), and Netherland (18.6) are the main importers out of total (109.8 billion cubic meters, bcm) Norwegian gas export volume (BP 2018). Taking into account that Netherlands and UK will face a sharp decline in their domestic production, and

the fact that Norway will face almost 30 bcm decline in gas production until 2030 (Hall 2018), the U.S. LNG will suit mainly this region. Therefore, even natural gas production dynamics of Europe shows the U.S. LNG will not be enough to make a huge impact in the European market. Finally, as the Eastern Asian LNG market has been always more enticing for producers, a part of the U.S. LNG will be expected to go to the Asian destination, which makes it out of reach for EU.

When it comes to the renewable domestic resources, statistics show that the outlook for (renewable) biogas is more optimistic with a possible increase from 14 bcm in 2012 to 28 bcm in 2020, and perhaps to 50 bcm in 2030, although problems of subsidy make the larger figures uncertain. Therefore, it seems likely that Europe will only be able to replace at most around half of the decline in conventional gas with unconventional/renewable production (Dickel, et al. 2014). The gap between European natural gas production and consumption is depicted in figure 5.





Note: New Policies Scenario broadens the scope to include policies and targets announced by governments

Recapping the main points of the alternatives for Russian gas, considering the declining European domestic gas production and political restrictions for the alternatives (mainly Iran) or economic considerations of the U.S. LNG, Russian gas will be still needed as much until 2030. Moreover, the new alternative resources including renewables cannot compensate for this decline. In this situation, severe efforts to curtail Russian gas – including amendment in Gas Directive for NS2 hindrance – will not enhance EU's energy security.

### CONCLUSION

Considering the framework of Copenhagen security school, Russia – EU gas relation is no longer considered as a purely economic deal, but instead, it has been 'securitized'. Thus, Russian gas has been recognized as a threat by the Commission taking into account NS2, in particular. Therefore, the Commission has followed tackling the securitized NS2 pipeline via recently proposed amendment to the Gas Directive.

In this research, the outcomes of the proposed amendment to the Gas Directive on the EU's energy security has been surveyed. It is critical to assess this impact because the main goal of the amendment is the curtailment of Nord Stream 2 in order to preserve the union's energy security, however, since the amendment affects other suppliers adversely, it will threaten the energy security. Assessing the whole elements of energy security makes the current research holistic and distinguished from the other researches. However, even the idea of amendment outcomes for energy security is novel.

This research has been done by analyzing the effects of the amendment on energy security elements from the legal and political perspective. Basically, the idea of recognizing 'EU dependency on Russian gas as a threat' is scrutinized. According to the survey, Russia is not '*always*' able to threaten EU by its 'energy weapon'. This is because possessing energy resources does not result in the ability for taking advantage of the relationship by the exporter side, generally. In fact, Russian ability for using its energy resource as a weapon against EU is restrained by different factors, including:

- $\checkmark$  Russia's tendency to preserve its face as a reliable supplier in the EU's market;
- ✓ The essence of Russia EU relation is an interdependency rather than a unilateral, restricting Moscow's ability for using the 'energy weapon' against the West. Russian maneuverability has been restrained especially due to the Western sanctions.

It is worthy to be mentioned that this interdependency is more along with a security dilemma in which each side cannot improve its own security without threatening the security of the other side. Therefore, it will not result in tension decline.

In addition to the above-mentioned security analysis, the impacts of the amendment have been surveyed in this research considering all the energy security components separately. The study shows that:

- 1) The proposed amendment by the Commission will grow the uncertainty for the energy investors considering its retroactive approach, which affects the under construction pipelines. It also has a side effect on the existing interconnectors with the third states. The planned derogation/exemption procedure is not efficient as it is too complicated and may even raise the tension between the member states when the interconnector passes through different states. In this case, the amendment is ambiguous on determining clear criteria for distinguishing of the 'concerned states' in derogation applications. Uncertainty for the investors results in the decline in their tendency for the new projects including those that are needed to provide durable energy flow and threatens 'availability'.
- The amendment is detrimental for existing interconnectors from third African states. As a result, the sustainability of energy supply to EU is being jeopardized, which means that 'acceptability' is threatened.
- 3) EU is going to face a domestic gas production fall in the approaching decade and there are not available sources in order to fill the gap. Middle Eastern resources and mainly Iran are not viable enough due to the political difficulties while the U.S. LNG may be reliable just to compensate a part of this decline. As a result, extreme restrictions against Russian gas under the pretext of diversification will result in the opposite situation, because of the more expensive LNG. This is against 'affordability' of energy supply.
- 4) Despite TFEU recognizes energy security as a shared competence, the amendment gives an external exclusive competence to the Commission on the IGAs for the interconnectors from third states. It also gives the authority to the Commission to have the final say on both derogation and exemption cases. This would appear to be in contradiction with article 194 of the TFEU in particular, where it declares member states should be free to define their general energy structure. In addition to this legal contradiction, it would be against having easy access to the energy resources for the member states and therefore it defies 'accessibility' as one of the other components of the energy security.

As a result, if we define energy security as providing available, accessible, affordable and acceptable energy, EU's decision for the Gas Directive amendment is harmful to the Union's energy security. In fact, the amendment was backed by the political efforts for hindering NS2 to

save EU's energy security. However, it cannot stop construction of the pipeline as Germany can benefit the application of the exemption since the Directive should be supportive of the made investments. Furthermore, the abovementioned flaws will turn the new Gas Directive to a threat for EU's energy security, according to this study.

Last but not least. Nord Stream 2 is still a controversial issue and the amendment has not been ratified in European Parliament yet. Therefore, it may be revised again in Parliament. In addition, the Danish government decision on issuance of permission for the pipeline may impact the whole story, as well. Finally, upcoming decisions by German, Russia and the United States on Nord Stream 2 should be considered in the analysis. Therefore, since the impacts of influencing actors are still unclear, the study can be followed and fulfilled in the future.

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