



Faculty of Management and Governance

Master thesis

on the topic

The European Union – Russia relations on natural gas as
an example of the relations within network governance

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List of abbreviations:

1. EU – European Union
2. ENP- European Neighborhood Policy
3. ECT – Energy Charter Treaty

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1. INTRODUCTION

1.1 Background

Recently, there has been a growing interest in the relationship between the European Union (EU) and Russia regarding natural gas policy. This interest has emerged from the discussions among scholars and practitioners on different aspects of the relations Russia-European Union on natural gas policy, and the necessity to search for new alternative ways of looking at transnational and multi-actors relations on natural gas issues.

One of those aspects is a discussion on the expansion of “gas dependency” and the increasing role of Russia in Europe despite the European Union’s policy debate on the need to diversify the EU natural gas supply. With this regard, one of the most problematic sides, namely confrontations between Ukraine and Russia in 2006 and 2009; and between Belarus and Russia in June 2010 on gas offtake, led to the talks on the possibility of the threat to the European Union in the gas supply and disputes on the necessity of the “non-Russian” natural gas streams such as “Nabucco”, “Medgaz”, “Galsi” and alternative ways of gas production¹.

Besides, the research on this topic is needed because there are different and sometimes even opposing interpretations of the current state of affairs in EU-Russia natural gas policy by European and Russian scholars and practitioners. Frequently, among scholars there is a problem in doing impartial research on EU-Russia gas policy. To date, some researchers have attempted to politicize the relations between Russia and EU by reviewing the EU-Russia relations on gas issues one-sidedly, either from the Russian interests’ or the European interests’ perspective. Thus, as some researches (Arentsen) have pointed out, among other tendencies in the EU-Russia gas relationship there is such a tendency as politicization of the EU-Russia relations which can be explained in terms of

¹For instance, in recent (22 July 2010) article “ *Het nieuwe boren zet de hele wereld op z’n kop. De revolutie tast de machtspositie van Rusland en het Midden-Oosten aan. In Polen, Nederland en Duitsland zijn al concessies aangevraagd*” in NRC Next newspaper it was written about the new technology of horizontal drilling, which can become a revolution in natural gas production.

Russian “statism” and “resource blackmail”. At the same time another trend such as competitiveness (through diversification of gas supply) makes Russia feel the threat to its long-term contracts policy on natural gas. Such contradicting tendencies possibly could be the reasons for misunderstandings within the EU-Russia natural gas policy, which are to be discussed within the thesis.

Furthermore, the research on this topic is important because it involves different actors/stakeholders besides the European Union and its member states, namely: state-, private- and international organizations as well as the EU neighbour states engaged in the gas policy of Europe. Thus, it makes sense to orientate the research on the topic of European natural gas policy, and not only frame it as the “European boundaries” issues, but also to take into account the position of all the interested stakeholders. In fact, most of the researchers agree that the EU gas policy is not confined to the EU member states and admittedly, such country as Russia, with its increasing influence on the EU when it regards various gas issues, plays a significant role in European gas policy even though it is not the European Union member. Nevertheless the character of the EU-Russia relations on gas policy is still open for investigation.

Finally, discourse about the development of the so called “strategic partnership” between the European Union and Russia has brought a new trend and thus an additional interest in Russia-EU gas relations. Thus, the increasing interest in EU-Russia relations on gas policy has heightened the need for further research.

1.2 Literature overview

Despite the fact that the nature of the EU-Russia relations has been extensively studied in recent years (Allison, Light & White 2006; Malfliet, Verpoest & Vinokurov 2007) till now in literature the European Union-Russia interactions have been treated in terms of either European energy market or European integration and little attention has been paid to the research of their relations in terms of alternative types of relations,

namely networking. But as we can see the theory of market fails before Russia-EU relations and does not fit to the concept of their strategic partnership due to a number of reasons (lack of competitiveness, leading position of Russia in the field etc.). And as for the integration theory, some research concentrated on the integration of Russia into Europe. Thus, Roderick Lyne (2006) presented an optimistic perspective on EU-Russia relations where Russia is considered a possible future EU member. But we must notice that because of certain geographical, economical (too low living standards), political and other so called Copenhagen criteria, Russia at that moment can not integrate into Europe and that is why we can not speak about the relations only about the integration (i.e. hierarchy type). The relationship Russia-European Union on natural gas is complex and should be observed from both: private (market) and public (political integration) dimensions. That is why in our thesis we would like to observe them within network governance concept, which some scholars (Ho Park, 1996) call “hybrid” of both market and hierarchy.

Also, considerable research (Johnson, 2005) has been devoted to the examination of EU-Russia relations in terms of “strategic partnership” and interdependency (Hughes 2007; Finon, Locatelli, 2008), which actually are the main characteristics of network governance, nevertheless the relations between Russia and the European Union on natural gas policy still have not been studied from the point of view of network governance.

And as for the theory on networks and network governance, previously it has been applied mostly regarding European integration theory (Wiener et al., 2009) or regarding intergovernmental relations between the European Union states (Turner and Pappi, 2009). Though there was also some research (Murphy, Yanacopoulos, 2005) on the “issue-relations” between the European Union and other non-European countries in terms of networks, to date the theory on network governance still has not been examined on the example of Russia-European Union natural gas policy relations.

1.3 Object

In our work we would like to examine the European Union-Russia relations from a new perspective, network governance. We suppose that within the relations between the European Union and Russia on natural gas there are some features which make us consider their relations as the relations within network governance. We also believe that a clear understanding of the European Union and Russia's place in the network concerning gas policy will help to smooth out the rough edges in matters relating to gas policy.

Having examined the main characteristics of network governance concept and having observed the relations Russia-EU from the different points of view, we will try to apply the main features of network governance concept to the current state of affairs in natural gas policy between Russia and the European Union.

1.4 Research questions

We would therefore like to state as the main question of our research the following:

- Is it possible to understand the EU-Russia relationship concerning natural gas as network governance, and if yes, is this a productive perspective to explain the relations between the two blocks?

In addition to the main question of our paper we would like to explore such sub questions as:

1) How is network governance conceptualized in theory?

2) What relationship exists between the European Union and Russia on natural gas issues?

1.5 Research outline

To answer the questions stated above consistently, we organized our paper as follows: Firstly, we would like to overview the literature on networks and network governance and mark out its most important characteristics distinguishing network governance from other types of governance, namely hierarchy and market. We also will try to find the main advantages of network governance and factors which have to be taken into account in order to strengthen a network.

After this, we will make a review of the different dimensions in the European Union-Russia gas policy relations such as trade; investment and politics in order to investigate what the main views on the European Union-Russia gas relationship are. Thus, we will be able to observe more clearly the position of Russia and the position of the European Union as well as the position of the other interested actors.

Finally, we are going to apply the theory on network governance to the European Union-Russia natural gas relations. We will use the core characteristics of networks as the tool. Further, having applied those characteristics we will try to prove the premise about compatibility of network governance theory to the nature of the European Union-Russia relations on natural gas.

1.6 Methodology

As a methodology of our research we would like to employ an analysis of statistics on natural gas demand; Russian gas supply; “Gasprom” gas production; the European Union gas consumption; statistics on gas consumption by European States.

Also for the analysis we will use as data the main documents on EU-Russia gas policy such as Energy Charter Treaty (1994), European Neighbourhood Treaty; the Memorandum on an Early Warning Mechanism in the Energy Sector (2009)); Strategic partnership Treaty and the agreements between Russian, for example, Russian

government or Gasprom; and other interested stakeholders, such as Ukraine, Gasunie, etc.

Also, for interpretative analysis purposes, we will observe the reports and the texts of speeches, official and non-official opinions of the representatives of the most interested stakeholders in Russian, English and Dutch languages. Thus we can benefit not only by presenting the different points of view but also by avoiding the partiality in our research.

In our paper, as a method for gathering data, we will employ open resources, namely on-line scientific magazines and newspapers, official websites of the European Union, “Gasprom”; “Gasunie”; the project “Nabucco”, Russian Government etc.

2. NETWORK GOVERNANCE IN THEORY

This chapter we would like to devote to answering the first sub question of our thesis: How is network governance conceptualized in theory?

For this purpose we will observe the literature on networks. We would like to find out the most appropriate in terms of our thesis definition for network governance/management and also which characteristics of networks make this form of relations between policy actors different from the relations within market or hierarchy and which ones demonstrate that network governance is a hybrid of the market and hierarchy. From the number of different characteristics of network governance we would like to mark out the ones which can be used as tools to denote network governance. We also will try to observe advantages of network governance and the factors, which have to be taken into account in order to strengthen a network. Besides, we will also examine the literature on application of network governance theory to European governance and will try to see if it is applicable for network governance.

2.1 Definition and the main characteristics of network governance

“Network” is a new catch word which more and more frequently can be encountered in a number of disciplines. Microbiologists are observing cells as information networks; ecologists explain the environment as network systems; and very broadly this term has been used in computer science to describe inter-net, local networks and so on. This term also became quite popular within social science. Marin and Mayntz (1991) quote Claude Levi-Strauss (1969), who considered society as “a network of different types of orders”. Network as new concept of social organization is currently studied in the sociology and technology; in the economics of network industries and network technologies and also in different aspects of business administration.

In the literature on public policy making the emergence of the network concept can be attributed to the late 60th and early 70th. It appeared as an alternative to Thomson's (1967) idea of unitary decision maker. Further, his opponent Scharpf (1978) concluded that "it is unlikely... that public policy ... could result from the choice process of any single unified actor". Scharpf saw policy formation as a "result of interactions among a plurality of separate actors with separate interests, goals, and strategies", thus, he gave the start for the study on network governance. And if in the 60^s, some scholars (Bentley 1967) coined the idea of government as a "network of activities" with the shift in political science from "government to governance", the concept of policy making has changed from the seeing government as "network of activities" to explaining it as "actor in network" or actor in network governance.

As Dassen (2010) notices, since the 90^s the body of the literature on policy network has expanded significantly. Dassen having observed the scope of policy network literature and distinguished three cycles of policy network literature. The first cycle literature is focused on the debates whether policy networks were just tools to describe the specifics of relations between the public and private sector, or real and presented structures that affect policy processes (Thatcher, 1998; Thomson & Pforr, 2005). The second cycle literature is based on the network management idea. It is explained not only by the capacity attributed to policy networks in terms of the realization of policy outcomes, but also in the relabeling of policy networks as governance networks (Bogason, 2004; Kickert & Koppenjan; 1997; Skelcher, 2006; Sørensen & Torfing, 2007). The new public management perspective is focused on the effectiveness and efficiency of policy networks as a mode of governance (Kickert & Koppenjan, 1997; Sørensen & Torfing, 2007). According to the third cycle literature network structures are explained as a set of compositional and relational variables (Kalfagianni, 2006; Kenis & Knoke, 2002; Provan & Sebastian, 1998).

Despite extensive research of policy networks and network as a mode of governance, till now there is no generally acknowledged definition for these terms. As a matter of fact, most of the definitions describe only certain features of policy networks and network

governance and from different perspectives. Nevertheless, in our paper we are interested in the explaining of the phenomena of network governance via its general characteristics which we can extract from a number of different definitions of network governance given by scholars. For instance, Alter and Hage (1993) define network governance as “unbounded or bounded networks clusters of organizations that, by definition, are nonhierarchical collectives of legally separate units”, Dubini and Aldrich (1991) see network governance as “Patterned relationships among individuals, groups, and organizations”, Liebeskind, Oliver, Zucker and Brewer (1996) view network governance as “Collectivity of individuals among whom exchanges take place that are supported only by shared norms of trustworthy behavior”. Gerlach and Lincoln (1992) suggest treating network governance as “Strategic, long-term relationships across a broad spectrum of markets”. Kreiner’s and Schultz’s (1993) definition is “Informal interorganizational collaborations”. And for Powell (1990) network forms of organization are “Lateral or horizontal patterns of exchange, independent flows of resources, reciprocal lines of communication”. According to strategic-relational approach (Jessop 1990; Hay 1995) networks can be seen as “strategic alliances forged around common agendas of mutual advantage through collective action”.

From stated above definitions we’ve chosen the most general characteristics, describing network governance and those characteristics are:

a) Interdependency of actors, which means that actors in a network are dependent on each other in order to realize their goals and they can not reach their aims without cooperation. Interdependency is a quite tricky characteristics of the network because it can have either positive or negative effect on network governance. Such a characteristics of network as symbiosis is very similar to interdependency. It is explained by the fact that the expectation of benefits from being in the network motivates actors to stay willingly in it and achieve “cooperative surplus” (Weimer, 1995). If it does not happen as Aldrich (1979) remarks, actors “can try to avoid or influence interdependency to by acquiring crucial resources, by finding alternative resources, by acquiring authoritative powers to

coerce other actors or by changing ambitions and goals”. He adds also that “power is a central concept in the resource dependency model and is connected with the possession of resources or with the asymmetry of the dependency relations between actors”. Another important feature of interdependency according to Klijn (1999) is its non-static character. “It is something actors discover in interaction and which is changed in interaction”.

b) Relations between co-equal actors (public and private). As noted by Klijn (1996) in interorganisational studies this characteristic of networks is strongly present. “This is a logical result of the fact that this literature deals with the relations between organizations and does not have a special interest in the role of governmental organizations. In policy community and sub-system studies... more attention is devoted to the role of governmental organizations”. However, within network governance governmental organizations (as public actors) are not analyzed as the central actor, but as one of the co-equal actors in the policy process as well as private organizations and other actors. In addition, as it has been argued by Herranz (2007) many public policies and programs are not administered by a government agency but rather are jointly coordinated and implemented through a range of multiagency agreements, partnerships and networks involving both governmental (public) and nongovernmental (private) organizations. On Herranz’s view, modern multisectoral networks involve public agencies, nonprofits and commercial firms. Besides the variety of actors, Klijn (1999) marks out their co-equality, which flows out from their interdependency.

c) Horizontal character of relations, which means that there are no top-down relations between actors within the network. Also within network there is pluricentric character of governance instead of multicentric, peculiar to market, and unicentric, inherent in hierarchy. As noted by Kenis and Schneider (Marin et al., 1991), this characteristic emerged from the shift “from hierarchical control to horizontal coordination”. Some analysts observed it as a change from a “state-centrist” or “government-focused” view of policy to an image called “the centerless or polycentered society”(Mayntz 1987; Willke 1983; Schuppert 1989). Network governance according to

this trait is a decentralized concept of governance. As Kenis and Schneider (1991) state “society is no longer exclusively controlled by a central intelligence; rather, controlling devices are dispersed and intelligence is distributed among a multiplicity of actions (or “processing”) units. The coordination of these action units is no longer the result of “central steering”... but emerges through the purposeful interactions of individual actors, who themselves are enabled for parallel action by exchanging information and other relevant resources”.

d) Self-organization and informal character of the relations as another characteristic of network provides that networks can be governed without the help of a formal government (“governance without government”) through bottom-up self-government by associations, informal understandings, negotiations, regulations, trust relations and informal social control rather than coercion (Kersbergen et al., 2004). Informal character of the relations in a network includes ability to self-organizing through exchange of resources and negotiations by game-like interactions based on trust and regulated by rules agreed by network participants. Trust has often been discussed in the general network literature as significant for network performance and sustainability (Larson 1992; Powell 1990; Uzzi 1997), although until recent time (Edelenbos and Klijn., 2007), it has not been the object of public network scholars. As Kenis and Provan (2007) state, trust can be conceptualized as an aspect of a relationship that reflects “the willingness to accept vulnerability based on positive expectations about another’s intentions or behaviors” (Keith et al., 2003). Trust not only can be seen as a network-level concept but also network governance itself must be consistent with the certain level of trust density that arises across the network. Network governance is more effective when trust is pervasive throughout the network.

Besides trust, one of the key points of informal character of network governance is specific position of actors within network, which are less motivated by rules and less defined by supervision. At the same time all actors in a network are attentive to the means available to win cooperation from others, more interested in building trust-based relations, and see success as a result of their common actions. Instead of the idea of fixed

organizational limitations and roles, the network promotes “a new rationality based on the creation of a shared organizational culture” (Considine et al., 2003).

Another aspect of informal relations between actors in a network is reputation. From the network literature (Kersbergen et al., 2004) we know that the actors who take a more essential position in a network are more visible to others inside and outside the network, that is why the information about their behaviour spreads more fast, and they are therefore more careful about maintaining a positive reputation, and that hence they can better resist temptations for opportunism or abuse of power. Therefore larger and more visible actors care more about their reputation within a network.

e) Strategic character of networks can be interpreted according to March (2000) in terms of dialectical approach to networks as follows: “The actor brings strategic knowledge to the structured context and both that strategic knowledge and the structured context help shape the agent’s action”. Actually, in the theory of networks some authors (Ho Park, 1996) call concept of networks “strategic networks” because it defines the network as a purposeful and conscious arrangement among distinct, but related profit-seeking actors. Besides strategic character of the network management implies that actors are tending to long-term relations rather than short-term ones.

2.2 Advantages of network governance and factors which have to be taken into account in order to strengthen a network

Networks have been recognized by both researches and practitioners as an important form of multi-organizational governance. The advantages of a network are considerable and include improved learning; more efficient use of resources; better capacity to plan for and address complex problems; greater competitiveness (Keith et al., 2007).

Actors within network can achieve improvement in learning using information exchange. Disputation itself becomes part of the system of checks and balances within the network administration and the network economy. As the result, it works as a mechanism for mutual learning, and functions both in private and public arenas.

Therefore, as some scholars notice (Kersbergen et al., 2004), networks may be producing their own system of mutual control.

Speaking about the use of resources within a network, the actors can use partners that are specialized in performing specific tasks and thus achieve efficiency.

Also, according to Kees van Kersbergen and Frans van Waarden (2004) “Network relationships ‘reduce the risk of opportunism by two mechanisms, the longer “shadow of the future” and the higher visibility of transactions to relevant others’. So, networks as informal institutional settings help overcome collective action problems.

Other important advantages of networks are adaptability and flexibility. It is their flexibility that gives networks their advantage over hierarchies, which can be cumbersome and bureaucratic. Through networks, organizations can quickly and efficiently work with one another to achieve specific goals that require combined resources and expertise that hierarchies alone could not readily accomplish. This flexibility allows networked organizations to respond quickly to competition and other threats, as well as to opportunities. Flexibility is important for ensuring rapid network responses in ways that meet changing needs and demands.

Besides, such a form of governance as network as Dassen (2010) concludes can avoid the negative spill-overs linked to hierarchical command-and-control and market steering. “Hierarchies are tightly coupled structures and by definition exclude certain groups of stakeholders from the policy process” and markets, according to Dassen (2010) “produce negative externalities in the form of market failures due to the imperfect conditions under which they operate.

Taking into account the information stated above, network governance seems to be a promising way of multi-actors and multi-levels relations. At the same time not well-organized network can face some problems. A fundamental problem with governance of any network is that the needs and activities of multiple organizations must be

accommodated and coordinated. Although dyadic arrangements can be difficult to govern, as the number of organizations participating in a network grows, the number of potential relationships increases as well. In such a case governance becomes extremely complex. As the number of organizations in the network gets larger, however, shared governance becomes highly inefficient, with participants either ignoring critical network issues or spending large amounts of time trying to coordinate lots' of organizations/actors. Consequently, as Walker and Goodyear (2001) notice, sometimes decision making process takes longer time because of the consultation within networks that is often necessary and results in more meetings.

This quality is critical for maintaining legitimacy, both inside and outside the network. Stable networks mean that participants can build up long-term relationships with at least some other members, so that each understands the other's strengths and weaknesses and respond accordingly to maximize network outcomes.

As for the number of actors within network, it should be determined and limited in order to improve possibilities for coordination and reduce possibility of opportunism.

For the same purpose within the networks it is necessary to have control mechanism. The structural solution to this problem might be centralization of network activities around leading actor[s]/organization[s]. Such a lead organization could provide administration for the network and/or facilitates the activities of member organizations in their efforts to achieve network goals, which may be closely aligned with the goals of the lead organization. "The lead organization may underwrite the cost of network administration on its own, receive resource contributions from network members, or seek and control access to external funding through grants or government funding. The role of lead organization may emerge from the members themselves, based on what seems to be most efficient and effective, or it may be mandated, often by an external funding source" (Provan et al., 2007).

Another aspect which must be taken into consideration is the character of interdependency which also influences the character of the beliefs within a network. If the action of one actor interferes with another actor's ability to take an action or achieve its goal we observe "competitive interdependency" of actors which can drive actors apart and cause a conflict. In the situation when one actor's action contributes to another actor's actions or goals we can see "symbiotic interdependency" based on the "the spirit of common policy beliefs system". This kind of interdependency helps to avoid different discourse coalitions which can block the process of making common decisions. The difference between competitive and symbiotic interdependency plays an important role in coalition formation and coordination (Klok, Fenger 2001).

2.3 Conclusions to the chapter

In this chapter of the thesis we had the task of reviewing the concept of network governance in the literature, answering the first sub question of our thesis:

How is network governance conceptualized in theory?

We have observed different approaches on networks and found out that the concept explored by the so called "second cycle literature", based on the network management idea, (Bogason, 2004; Kickert & Koppenjan; 1997; Skelcher, 2006; Sørensen & Torfing, 2007). This perspective, which is focused on the effectiveness and efficiency of policy networks as a mode of governance and distinguishing networks from the other (market, hierarchy) concepts, is the most applicable for the purposes of our thesis. Thus we propose to understand by the network governance an intermediate (hybrid) form of governance between the market and the hierarchy, characterized by interdependency of co-equal actors (through the repeated exchange of resources); horizontal, pluralistic, long-term, strategic and reciprocal relations; self organization (governance without government); informal character of relations based on trust.

From this number of different characteristics of network governance we extracted such ones as

- q interdependency of actors;
- q relations between co-equal actors (public and private);
- q horizontal and pluricentric character of relations;
- q self organization and informal character of relations within network;
- q strategic character.

We consider that the stated above characteristics denote network governance and can be used as dimensions for the analysis of the EU-Russia relations on natural gas in Chapter 4.

Having observed the advantages of network governance such as stability; flexibility; adaptability; improved learning; efficient use of resources; better capacity to plan for and address complex problems we would like to explain further why network governance can be productive perspective for the relations Russia-EU on natural gas and also which factors have to be taken into account in order to strengthen a network (necessity of controlling mechanism, avoiding of competitive interdependency etc.).

3. RUSSIA-EUROPEAN UNION RELATIONS ON NATURAL GAS

In this chapter we will try to answer such a sub question of our thesis as: “What relationship exists between the European Union and Russia on natural gas issues? And in order to observe it thoroughly, we will examine their relations from different dimensions. For these purposes we would like to divide this chapter into the parts explaining Russia-EU relations from different perspectives: trade, investment, politics and tensions.

3.1 Supplier-consumer (trade) relations between Russia and the European Union

Russia plays a key-role in gas supply in Europe. Russian corporation “Gazprom” - the monopolist in the production and export of gas, controls about 16% of world gas reserves. The share of Gazprom accounts for about 90% of the total gas production in Russia, and 20% of world gas production. Owned by Gazprom explored gas reserves are estimated at 28,8 trln.m³, which is 9 times more than the total figure for the countries of the European Union.

Approximately 2 / 3 of gas export from Russia are among the countries of Western Europe, 1 / 3 - in the Central European states. The Western European market consumes about 70% of Russian exports. In the early 2000's. Gazprom delivered to markets in the region 87.8 billion m³ of gas, the major importers are: Germany, 32.2billion m³, Italy - 19,3billion m³, Turkey -11.8billion m³, and France - 11,4 billionm³.

In 2001 Turkey became one of the largest Western European buyers, having bought 11.1 billion m³. Signed contracts will deliver gas to Turkey in the amount of 30 billion cubic meters in two directions, starting from 2010.

Since 2001, work began on the UK market, as well as on the supplies of Russian gas to the Netherlands.

Gazprom exported 41.6 billion m³ in the Central European countries, representing almost 90% of total gas purchases by these countries. The major importers are: Hungary: -9.1 billion m³, Slovakia - 7.7 billion m³, Czech Republic - 7.4 billion m³. and Poland - 7.3 billion m³. These countries receive over 75% of Russian gas to Central Europe.

For the countries of Central and Western Europe, Russia exports gas mainly under contracts for a period of 25-30 years on the basis of intergovernmental agreements. For example, Gaz de France has renewed its gas import contract until 2030. E.ON Ruhrgas (Germany) – until 2035, Wintershall (Germany) – until 2030, Gasum (Finland) – until 2025, RWE Transgas (Czech Republic) – until 2035, ENI (Italy) – until 2035. Contract extensions until 2027 and new arrangements were agreed on with Austria's EconGas, GWH and Centrex. Contracts were concluded with Romania's Conef Energy for 2010-2030, Switzerland's WIEE for 2013-2030, Germany's WIEH up to 2027, and Czech Republic's Vemex for the period till 2013. There are new importers of Russian gas, for example, the Netherlands and Denmark.

Based on the dependence on Russian supplies of gas, countries in Europe can be divided roughly into three groups.

The first group includes such Western European countries as France, Germany and Italy, which meet a significant portion of their gas needs with Gazprom, however, they have other sources of supply (for example, Algeria). They are associated with these sources of supply by existing pipelines. One of the countries, which is most dependent on Gazprom is Germany (the share of Gazprom in the structure of gas consumption is about 45%), while the degree of dependence in other countries varies from zero to about 25%. Gazprom supplies to these countries in accordance with long-term contracts. Gazprom is

eager to continue its deliveries to these countries because they represent the main source of income and cash flows.

The second group includes the CEE countries - the Czech Republic and the Republic of Poland, which buy from Gazprom the main portion of the required gas, but at prices close to market.

The third group includes some countries of the former Soviet Union, especially Ukraine and Belarus, which consumes almost only Russian gas, and were subsidized in the form of very low prices. For example, Ukraine until 2005, was paying Gazprom 50 dollars per 1 thousand cubic meters, and Belarus - 46,68 dollars. The provision of grants due to political reasons and in fact meant that Gazprom had the mandate to sell cheap gas to these countries. Given that the average selling price of Russian gas to Western Europe for the first nine months of 2005 amounted to 181 dollars for 1 thousand cubic meters, the volume of subsidies for Ukraine and Belarus in 2005 were, respectively, about 3.3 billion dollars and 2.6 billion dollars.

Some countries did not "fit in" with the selected group. Several countries such as the Republic of Bulgaria and Romania are in an intermediate position between the second and third groups. Although Gazprom profits from selling gas to these countries, selling prices are lower than in Western Europe. This is due to transport costs and the fact that historically Gazprom paid in gas for the transit costs.

Gazprom intends to increase exports, and much more rapidly: from 151 billion cubic meters in 2005 to 180 billion in 2010. Thus, the gas shortage in Russia will inevitably grow. The company is trying to solve this problem by increasing production.

3.2 Relations on investment

Besides trade relations, Russia-European Union gas relations can be observed also from the point of view of the relationship on investment in projects aimed to gas transit.

3.2.1 Russian gas pipeline projects

Speaking about the relations Russia-EU on investment, we would like to point out some Russian pipeline projects (see Picture 1) which have been invested by European companies.

The transnational **Yamal – Europe gas pipeline** (see Picture 2) runs across four countries: Russia, Belarus, Poland and Germany. The overall length of the pipeline exceeds 2,000 km. Gazprom has become the sole investor of construction work on Yamal – Europe's Belarusian part commenced in 1997. Upon commissioning of the last one in 2006, Yamal – Europe reached full capacity – 33 billion m³ per annum.

The purpose of the **Blue Stream** (see Picture 3) gas is mainly to directly supply Russian gas to Turkey and bypass transit countries. The 1,213-km-long gas pipeline consists of an overland and a submerged section. It starts in the vicinity of Izobilnoye, Stavropol Krai and ends in Ankara, Turkey. The submerged section of the pipeline is 393 km long. The pipeline was completed in December 2002. In 2008 Blue Stream transmitted some 10 billion m³ of gas. In 2010 Blue Stream is planned to reach full capacity – 16 billion m³ per annum.

South Stream is a new promising project of Gazprom and ENI (Italy). In January 2008 Gazprom and ENI set up a special purpose entity, South Stream AG, to carry out marketing research and compile a feasibility study of the South Stream project.

In 2008-2009 intergovernmental cooperation agreements were signed with Bulgaria, Hungary, Greece and Serbia in order to build pipeline sections in the European countries within the South Stream project. During the project implementation Gazprom and ENI will apply their experience gained in laying the submerged section of the Blue Stream gas pipeline across the Black Sea and utilize up-to-date technologies complying with the most stringent environmental requirements.

In 2005 Gazprom set about building the **Nord Stream** (see Picture 5) gas pipeline (initially – North European Gas Pipeline). The pipeline across the Baltic Sea towards Western Europe constitutes a fundamentally new export route for Russian gas to European customers. With no transit countries on its way, the new transnational gas main is distinguished by low country risk and transit costs, while assuring more reliable export supply. The project is crucial to diversify export routes and directly link the gas transmission pipelines of Russia with the European gas network. Nord Stream pipeline will stretch some 1,200 km across the Baltic Sea from the Portovaya Bay (Vyborg) to the German coast (Greifswald).

The first joint of the Gryazovets – Vyborg overland section was welded in December 2005. The submerged section will be built by Gazprom together with its foreign partners and contractors. Gazprom teamed up with BASF SE (Wintershall), E.ON AG (E.ON Ruhrgas) and N.V. Nederlandse Gasunie to implement the Nord Stream project. The partner stakes in Nord Stream AG – operator of the project – are split as follows:

- Gazprom – 51%; Wintershall and E.ON Ruhrgas – 20% each*; Gasunie – 9%.

* French GDF Suez in a June 2010 signed with Gazprom's agreement to join the project to build an underwater gas pipeline Nord Stream from Russia to Germany. GDF Suez has received 9 % share in the project by reducing the share of the German BASF / Wintershall and E. On Ruhrgas from 20% to 15,5% each. Gazprom still owns 51% stake in Nord Stream, the share of NV Nederlandse Gasunie is also the same - 9%. In addition, Gazprom and GDF Suez signed an agreement establishing the joint venture on a parity basis "Eco-Service" to provide consulting services to thermal power plant.

Representing critical significance for Europe, the Nord Stream project has been given by the European Union the Trans-European Gas Network status. The Russian blue fuel to be carried by the pipeline could be transported from Germany to Denmark, the Netherlands, Belgium, the UK and France.

The major gas customers of the first pipeline string will be as follows: WINGAS (9 billion m³), Gazprom Marketing & Trading (4 billion m³), E.ON Ruhrgas (4 billion m³), Gaz de France (2.5 billion m³) and DONG Energy (1 billion m³).

Stage 1 of project implementation is currently underway – the construction of one string with a throughput capacity of some 27.5 billion m³ per annum. With the construction of the second string Nord Stream's throughput capacity will double to 55 billion m³ per annum.

Only by two tubes - the Nord Stream under the Baltic Sea and the South Stream under the Black Sea from Novorossiysk to Varna, Russia is able to pave European region. Their total capacity - more than 86 billion cubic meters - should be enough to fill emerging to increase by 2020 European needs. These pipelines are provided with gas and financial assets are safe. But their construction is delayed because of delays in Europe, prompting Russia to say about the possibility of reorientation of Russian gas exports to other markets and the construction of gas liquefaction plant. Currently, the construction of Nord Stream is already under way; the pipeline will begin operation in 2011.

3.2.2 Non-Russian gas pipelines

Besides Russian pipelines, the European Union, having intention to secure its gas supply, is also interested in investment to other non-Russian projects such as:

Galsi Pipeline (see Picture 4): The 1,350-kilometer Galsi gas pipeline could bring up to 10 billion cubic meters a year of Algerian gas to Italy through Sardinia when it opens in 2012.

Medgaz Pipeline: The 210-kilometer, 8-bcm-a-year Medgaz pipeline is planned to bring Algerian gas to Spain from mid-2009. The Sonatrach-led project involves Spain's Cepsa, Iberdrola, Endesa, and GDF Suez.

Nabucco Pipeline (see Picture 6): Nabucco is an 8 billion-euro project to transport natural gas from Turkey to Austria, passing through Bulgaria, Romania, and Hungary.

The 3,300-kilometer pipeline could begin operating in 2013. It could transport up to 31 billion cubic meters of Caspian gas per year to Europe by 2020, reducing Europe's dependency on Russian gas. Austrian oil and gas group OMV heads the consortium, which includes Hungary's MOL, Turkey's Botas, Bulgaria's Bulgargaz, and Romania's Transgaz.

Hungary Gas Pipeline: Hungary's MOL plans to build a 100-kilometer expansion of its gas pipeline toward Ukraine by 2010. The pipeline would help meet Hungary's rising domestic gas needs, but is not an alternative to other planned pipelines such as Nabucco or Blue Stream, MOL has said.

Norway Gas Stream (see Picture 7). Recently Norway with its pipeline network (see picture below) became a leader in natural gas supply. Norway exported about 3.3 Tcf of natural gas in 2008, almost all of it to Europe, via pipeline. The country is the second-largest supplier of natural gas to the European Union, behind Russia. The largest recipient of Norway's natural gas pipeline exports in 2008 was Germany (932 Bcf), followed by the United Kingdom (893 Bcf), and France (562 Bcf).

Norway has numerous natural gas pipelines (see the picture below) which connect directly with Europe, particularly France, the United Kingdom, Belgium, and Germany. Some connections run from production facilities directly to receiving terminals in export markets, while others connect Norway's onshore processing facilities to these markets.

3.3 Political relations

The secret of politics? Make a good treaty with Russia

Otto von Bismarck, 1863

Besides economic aspect, the EU-Russia relations can be also treated from the political perspective. In order to understand the relation Russia-EU from this point of view, within

this chapter of our paper we will observe basic documents of the EU and Russia which are relevant to their relationship on natural gas.

3.3.1 European Neighbourhood policy and the European Union-Russia relations on natural gas

Let's start with the EU document, known as "European Neighbourhood Policy" (ENP), published in May 2004. It specifically describes how the Union sees its closer cooperation with neighboring countries. A key element of the ENP is a bilateral action plan, which the EU negotiates with each country/neighbor. It contains a set of political and economic reforms, which is to be realized in the short and medium term.

From the perspective of experts, the major weakness of the ENP as a means to control the expansion of the integration process of association can be assumed that the success of the Neighbourhood Policy, in effect, depends not only on the European Union, but on most of the partner country, of its readiness for meaningful reform. Russia has refused the invitation to participate in the ECP for reasons of prestige and diplomacy (i.e., having the right to expect a continuing relationship with the EU, having a special status). Played their part and Russian concerns about the care of national sovereignty (they can also be considered justified in view of the fact that Russia still clearly impossible for a prospect's own EU membership).

3.3.2 Energy Charter and its Protocol

Another document concerning Energy policy important for the European Union is the Energy Charter, which Russia strongly opposes to ratify. European Energy Charter was signed in The Hague on December 17, 1991. It was created as a mechanism for cooperation between Western and Eastern Europe on energy issues. The Energy Charter Treaty (ECT) and its Protocol on Energy Efficiency and Related Environmental Aspects were signed in December 1994, entered into force in April 1998. By 2003, 51 nations in Europe and Asia acceded to the treaty, 17 countries and 10 international organizations have an observer status. Russia has signed but not ratified the treaty, it is involved on a temporary basis, in respect of the provisions which do not contradict Russian legislation.

The main objectives of the Charter is to protect and promote foreign investment in the energy sector through the expansion of national treatment, free trade in energy materials, freedom of energy transit through pipelines and networks, energy efficiency and environmental protection, establishing mechanisms to resolve disputes between states or between an investor and state. The fact that, though providing for about a quarter of Europe's gas needs, Russia did not sign the Energy Charter Transit Protocol, which would allow independent suppliers of other countries (including Kazakhstan and Turkmenistan) to use the gas transportation system of Gazprom and deliver their gas directly to Europe, bypassing the intermediary in the face of Russia. These circumstances lie behind persistent attempts to get Russia to ratify the Brussels transport protocol to the Energy Charter. As it was also stated in the article of "De Telegraaf" (20/09/2006) "Moscow is wary of a curtailment of state power of Gazprom"

Protocol on Transit aims to have to explain on the basis of the existing provisions of the treaty, which means that in practice, the expression "freedom of transit" for the energy sector. Proclaimed goal is to provide clear and transparent rules for international flows of transit of energy materials and products that can promote the efficient development and use of infrastructure for transporting energy resources and reduce the risk of power failure.

We must say that the problem of transport protocol is pretty much artificially complicated. A very common myth that the ratification of the ECT Russia ostensibly open to Europeans free access to Gazprom's export pipelines (through the mechanism of mandatory access for third countries). Many believe that access will automatically receive and independent producers and suppliers of cheap Central Asian gas, which will lead to the elimination of export monopoly of Gazprom and the competition between gas suppliers on the eastern borders of the EU. However, it does not follow from the provisions of the Treaty and other documents of the Energy Charter. That is a legislative requirement for the EU internal market is not acting in the Treaty obligation to all its members (eg, mandatory third party access to transport facilities, equality of export, import, transit and domestic transportation tariffs). Moreover, the Treaty includes a

section explaining that the provisions of the ECT “do not oblige any Contracting Party to introduce mandatory third party access. Transit Protocol regulates access to "cash yield", which represents the physical capacity for transportation of four residues, including the reserve capacity for the development of future reserves, licenses that belong to the owner of the pipeline system. This means that in a pipe there cannot be free "cash power" for transit. In this case the definition of transit in the document (Article 7) that transit is only one of several ways of transportation of energy materials and products from one country to another through in between a third country (sales at the border transit and swaps transactions replacement, counter trade). Therefore, the requirement of the supplier or customer, even if supported by agreement between such supply, the availability of transit through the territory of a third country does not lead to that third country automatic obligation for it.

Moscow's objections against the transit protocol based on the fact that several of its provisions allow for expansive interpretation, not in lines with Russia's interests. That is why the State Duma in 2001, stated that it could return to the question of ratifying the Energy Charter Treaty only after the completion of negotiations on the Transit Protocol, which should find a place corresponding to clarify the provisions of the ECT. Not refusing to ratify the Energy Charter Treaty as such, Russia needs to bring a number of important rules and formulations in the form which would avoid the infringement of Russian interests. And such work is done on the expert level. As for the huge number of publications and speeches on the subject, the confusion effect of complex problems often only impedes the process of coordinating the interests and contributes to the news reports about the energy dialogue unnecessary tensions.

In addition, there are real commercial interests of Gazprom, which require access to gas pipelines without offering anything in return. In general, the EU gives not too many opportunities for an equivalent "exchange" with the Russian monopoly, able to close the road to the signing of the transit protocol. Theoretically, Gazprom is interested in European energy networks, but this issue also has serious political overtones. Many European statesmen do not like European expansion of Gazprom. Pressure from the

Europeans is, but no counter-proposals, it is not yet supported. And nobody in Russia is going to give up control of gas flows to Europe in the name of the dogma of gas market liberalization.

With regard to the threat of Brussels to postpone the main provisions of the Energy Charter Treaty, Protocol and transit application to it in the new Agreement on Partnership and Cooperation Agreement between Russia and the European Union, then make it difficult - in the form in which these documents are now being imposed on Russia. The very structure of relations between the supplier and consumer of gas, coupled with the huge costs of building and maintaining transportation infrastructure, binds the Gazprom and its European customers.

Today, the prospect of a "gas OPEC" - is nothing else then Russia's response to the idea on Energy NATO, and Russian alternative to Energy Charter. However, this does not mean that Russia by Gazprom and several other major companies will not attempt to further strengthen its influence on world energy markets, trying to unite and lead country producers of energy. In addition, long-term contracts and a single export channel - the key conditions of the gas export strategy of Russia.

3.3.3 Strategic partnership in the Russia-EU relations on gas

Besides the EU documents which Russia failed to ratify, there is still "alternative" political and legal fundament for Russia-EU relations on natural gas.

Instead the ENP, Russian relations with the European Union are developing in terms of strategic partnership covering the four spaces (economic - to build between Russia and the EU's open and integrated market, freedom, security and justice, external security, research and education, including cultural aspects).The strategic partnership Russia seeks dialogue on an equal footing, expects to be recognized in the "European family", to respect and support in difficult transformation process, whereas the prospect of

membership of Russia itself in the EU seems to be impossible. But for that moment, besides optimistic views on strategic partnership there is an opinion that in current relations between the EU and Russia it is unlikely that the EU and Russia will achieve the desired strategic partnership. Some political analysts consider their current relations as a "cooperative collaboration" ("cooperatieve samenwerking") (Koopman, 2004) rather than strategic partnership.

3.3.4 Memorandum of early warning mechanism in the energy sector

Speaking about political Russia-EU relations can not but mention such an important for both sides of the document as a Memorandum of early warning mechanism in the energy sector. The signing took place on November 16, 2009 in Moscow in the framework of EU-Russia Energy. On the Russian side signed the paper - Energy Minister Sergei Shmatko, from the European Union - European Commissioner for Energy Andris Piebalgs.

The document is intended to ensure sustainable and uninterrupted power supply, preventing and overcoming with minimal adverse effects of emergencies in the field of energy. The memorandum, inter alia, will determine the order of implementation of joint measures for the prevention and rapid response in case of any threat or emergency.

The purpose of the Memorandum of early warning mechanism in the energy sector in the EU-Russia Energy, the Russian and European sides, is to determine the order of the Coordinators of the Energy Dialogue EU-Russia (Sergei Shmatko and Andris Piebalgs) and located in their management structures of joint measures for the prevention and prompt response in the event of a threat or emergency situation. Sergei Shmatko described the document as "very important". "It's very important that we have signed this document. It gives a kind of formalized communication technology of the Russian Federation and the European Union to notify each other about possible risks, their fears and triggers coordinated action ", - said Minister of Energy.

Early warning mechanism is a set of measures relating to anticipatory evaluation of the possible problems and risks associated with the supply of and demand for energy materials and products, and a measure for the prevention and rapid response in case of any threat or emergency. This document refers to prevent the situation from the interruption of energy supplies - not only gas but also oil and electricity. The main advantage of the memorandum is that it shows the consolidated position of Russia and the EU to prevent the interruption of energy supplies.

The memorandum does not provide for any sanctions. The document also contains no sanctions against third parties, but assumes a concerted joint action to prevent the termination of supply. It includes definitions of the procedure, which can be initiated as a European commissioner and Energy of Russia.

Develop early warning mechanism was carried out in accordance with the agreements reached at the Summit of the Russian Federation and the European Union in Samara in May 2007, as well as the agreements reached by the Russian Federation and the European Union at a meeting of the Permanent Partnership Council on Energy in Paris in October 2008 .

3.4 Conclusions to the chapter

In this chapter we discovered the question: “What relationship exists between the European Union and Russia on natural gas issues? We came to the conclusion that the relations between Russia and the European Union on natural gas can not be seen just from the one perspective, because they are intensive and complex. Their relations can be characterized as intensive because they are changing and developing at the moment; and they also can be called “complex relations” because they have both private (market like) and public (hierarchy like) features and can be seen from different dimensions such as trade, investment and politics.

From the point of view of trade relations we could see that Russia plays such a significant role in European natural gas trading that the relations Russia-EU on natural gas is something different from pure market relations, based on ideas of competition and the rule “survival of the fittest”.

From the investment perspective we can conclude that in general, it should be noted that despite of the diversity of rival to Russia projects, such as gas pipelines "Nabucco", “Galsi”, “Medgaz” ans so on, and the progressive development of new technologies on gas transit, the position of Russia will stay dominant.

4. APPLICATION OF THE THEORY OF NETWORK GOVERNANCE TO THE RELATIONS RUSSIA-EUROPEAN UNION ON NATURAL GAS

If before, we were talking about the theory of network governance and character of the relations Russia-EU on natural gas, in this chapter we will try to employ theory to practice. Using the findings from previous chapters we will try to apply the theory on network governance to describe current relations Russia-European Union on natural gas. Therefore, finally we will try to answer the main question of our thesis: “Is it possible to understand the EU-Russia relationship concerning natural gas as network governance, and if yes, is this a productive perspective to explain the transnational relations between the two blocks?”

For that, we will employ the main characteristics of network governance which we stated in chapter 2, namely interdependency in the relations Russia-European Union on gas issues; horizontal and pluricentric character of the relations; self-organization; informal and strategic character of the EU-Russia relations concerning natural gas.

4.1 Interdependency in the relations Russia-European Union on gas issues

“In energy sector, Russia needs Europe as much as Europe needs Russia”

EU Energy Commissioner, Andris Piebalgs
at the International Energy Week in Moscow on 31.10.2006²

Interdependency between the actors is one of the most important features of network governance, because resource dependency and demand are required conditions,

² The European Union and Russia: Close Neighbours, Global Players, Strategic Partners. European Communities 2007. P.11

fundament for the formation of networking. And that is why it is highly important to find interdependency in the EU-Russia relations on natural gas in order to employ network governance theory for them.

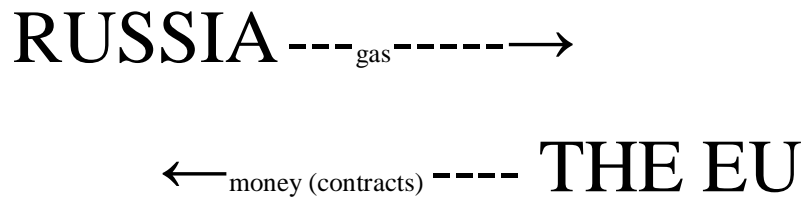
And actually all the stated before makes us to observe the relations between Russia and EU on natural gas as mutual interdependence of supply, demand and investment. Though there is an opinion (Hughes, 2007) that this interdependency is asymmetrical³, the statistics shows that Russia needs Europe as much as Europe needs Russia.

From the prospective of supplier-consumer (trade) relations Europe is dependent on Russia. Though Russia provides only ¼ of the EU natural gas demand, certain European countries consume 100% of Russian gas.

From the other side, Russian trade development at the moment is highly dependent on the natural gas transits to Europe, which helps in maintaining the growth of GDP of Russia. Acknowledging this, Gazprom leads its policy in order to fulfill European requirements on different sides in gas trade, like gradual elimination of dual-pricing system, long term transparent contracts with European energy companies directly etc. All of this demonstrates the importance of gas exports to European Union for Russia as well as the interdependency (see scheme 1) of Russia and European Union by means of natural gas trade. This interdependency implies that the breaking of contracting rules is not in the interests of Russia's State government.

³ Nicola Casarini, Costanza Musu [Eds.] European Foreign policy in an evolving international system. The Road Towards Convergence. Palgrave Macmillan

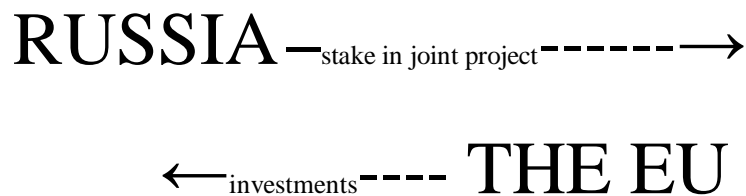
Scheme1. Russia-EU interdependency in the supply-consumer relations:



From the point of view of the European Union-Russia relations on investment, we can also observe their mutual interdependency (see scheme 2).

Russia for its domestic pipeline infrastructure renovation and expansion needs additional investment which can be (and actually is) provided by European countries such as the Netherlands (with its GASUNIE), France (with its SUEZ). In return, the EU gets an alternative (from Ukrainian and Belarusian) ways of gas supply and therefore strengthens its on gas supply security.

Scheme2. Russia-EU interdependency in the relations on investment:



If analyze the relations Russia-EU we can also see that in fact there is no threat to the EU natural gas supply initiated by Russia. But there is jeopardy for their relations as the relations within network and it is a threat of competitive interdependency (which is more

typical for the market, with its principle “survival of the fittest”. This threat emerged from the EU new tendency to buy natural gas on stock sales of natural gas (with cheaper than Russian prices) by certain European countries such as Norway. It does not go in lines with Russian long-time contracts policy and, if speak in terms of network governance theory, weaken the stability of the network and make the beliefs and interests within network divergent.

From the point of view of the political aspect of the relations Russia-EU, we can add that Russia failed ENP and ECT because of the fact that both of those act are aimed at putting Russia in a quite dependant position before the EU, which is inappropriate because they do have the relations based on mutual interdependency/ not just dependency.

Thus we can see that the relations Russia-EU can be characterized in terms of interdependency, but with the remark that in order to fit network governance concept, its interdependency should be more symbiotic but not competitive. Otherwise, we can get as the result not only absence of stable network governance but increasing of the tensions between the EU and Russia on natural gas which is undesirable for both parties.

4.2 Relations between co-equal actors (public and private)

In Chapter 3, while observing the aspects of the relations Russia-EU on natural gas, we could see there are different actors, involved in the relations Russia-EU on natural gas.

Thus, speaking about trade relations we mentioned such gas national corporations as Russian Gazprom; Dutch Gazunie; French SUEZ, Gaz de France; Germany’s E.ON Ruhrgas, Wintershal, WIEH; Gasum (Finland); ENI (Italy). Austria’s EconGas, GWH and Centrex; Romania’s Conef Energy, Switzerland’s WIEE, and Czech Republic’s Vemex and RWE Transgas.

In terms of investment relations we were talking about International companies with the stakes of different countries, namely Nabucco, Nord stream etc.

As an actors in political relations we stated Russia (and its state officials) and European Union (and its European Commission) as a whole (as an independent global actor).

Therefore, we could observe that there are different actors (public and private), engaged in the Russia-EU relations on natural gas.

Despite the fact that all of the actors have formally different status (not equal powers, resources etc.), within the network governance all of them are actually equal (because all of them are interdependent) and sometimes, because of the complexity of the relations, their status gain both, private and public features (for instance we can observe it on the example of Gazprom, which is on a half private and on a half public and because of that can be equally treated as a public or/and private actor) .

4.3 Horizontal and pluricentric character of the relations

The relations Russia-European Union on natural gas can be seen as horizontal relations because of several reasons:

First, the parties admit that their relations have the form of a “Dialogue”, which implies bilateral relations of equal partners. Here we must mark out that considering such a global actor as the European Union and one certain country as Russia is possible within network governance concept because of their equally strong interdependency.

Second, from the dimension of political relations there could exist mono-centric hierarchical relations on Russia-EU natural gas if Russia would join the European Union as a member. But as noted by Light (2006) if in 1990^s Russian politicians, officials and scholars sometimes suggested the possibility of Russia joining the EU; few have seen this as an option nowadays, at least in the foreseeable perspective. The political integration is

possible, while maintaining the formal sovereignty (as in the case of integration between the EU and the U.S., for example).

Russian analysts (Murphy et al., 2005) notice the “serious divergences in the political sphere” which separate Europe and Russia concerning natural gas policy course. The European Union is offering Russia to sign European Neighbourhood Treaty which goal is to gather pan-European countries around the European Union; and as for the natural gas issues to unitize Russian policy with European one and thus to make the European Union the only center of natural gas policy. Russia does not want to be followed by the EU and is not going to ratify European Neighbourhood Treaty and because of the same reasons Energy Charter as well. The European Union as an international organization on its behalf is not ready to admit Russian (as one certain non-European country) dominance. Therefore from the political point of view Russia and the European Union can be seen as two separate centers (or blocks) within natural gas policy.

From the trade and investment perspectives in Russia-EU natural gas relations there are also more than one center. As it was stated before, the extent of dependency of European countries divide them into different groups: more dependent countries make the group around Russia, less dependant can be close to another centers/ another gas producing countries. Besides, the number of diverse projects on natural gas supply such as Nabucco, Galsi, Medgaz pipelines makes European natural gas policy decentralized (see Picture 8). At the same time we can see on the picture it also make the relations within network and between sub-groups centered around Nabucco and South Stream there is an interlink (Bulgaria, which has a stake in both projects), which makes the relations between centered patterned (thus, inseparable) which is an argument for the network existing between them.

4.4 Self-organization and informal character of the EU-Russia relations concerning natural gas

Network as a special form of governance is characterized by the special way of governing. It does not need government. It can be governed through informal meetings, negotiations between actors. And this tool can be admittedly employed for the relations Russia-EU on natural gas. At the 6th Russia-EU summit in 2000, an Energy Dialogue was established. It was designed to “provide an opportunity to raise all the questions of common interest relating to the sector, including the introduction of cooperation on energy savings, rationalization of production and transport infrastructures, European investment possibilities, and relations between producer and consumer”. There are regular meetings under the dialogue with producing of reports as the result.

Though as we stated before, network relations do not need the government, it makes network more organized and stable to employ not government but leading organization which could coordinate the activity of the network. And in case of Russia-European Union relations such an organization could be so called “energy OPEC” proposed by Russia.

One of the most important aspects of informal character of the relations between the actors in network is a trust. One of the key issues in this regard is doubts of the European Union officials on reliability of Russia as an economic partner. Some researches consider that currently between Russia and Europe there is a tendency on politicization of gas policy which implies strengthening the state’s role in the national gas industry. This trend is leading to so called “resource nationalism” (Stern 2006). And as an example of the statism in natural gas supply they name Russia under Putin. There is an opinion which goes in lines with resource nationalistic approach that Russia with its Gasprom as a monopolist, using its natural gas resources as an instrument for political blackmail, can make a threat to the supply of gas in Europe. That is why the European Union expects the

gas flow to be diversified and voluminous enough to provide a real consumer choice can gas-to-gas competition develop (Arentsen). The next “myth” is that Russia was inclined to play “the energy card” (Goldthau, 2008) to achieve their political goals. Possession of resource potential associated to any country with high risks. As the experience of the twentieth century, countries that possess such capabilities, often subject to political pressure and force. The world has changed, and in this context the main interest of Russia and economic cooperation of all involved in oil and gas business partners, co-operation, based on which will be based on mutual trust and a desire to promote a stable and predictable political environment for development.

This question emerged from the situation of suspensions in gas supply by Russia because of the crisis with Ukraine in 2006 and 2009. The importance of trust in the relations Russia-EU on natural gas was proved by the signing by both parties Memorandum on an Early Warning Mechanism in the Energy Sector (2009). The idea of this document is to secure the European Union from the “threat to its gas supply” and for Russia – to prove its reputation as reliable partner of the European Union. And actually to date, we could see the results of this document. In June 2010 in accordance with the provisions of the Memorandum Russia informed the European Union about the situation with the suspensions of natural gas supply through the territory of Belarus.

4.5 Strategic character of the relations

Strategic character of the relations between Russia and Europe is also can be seen through different dimensions.

From the point of view of the trade relations between Russia and Europe we can point out that strategic character of their relations can be observed through long-term contracts between Russia and the countries of Central and Western Europe (Gaz de France has renewed its gas import contract until 2030. E.ON Ruhrgas (Germany) – until 2035, Wintershall (Germany) – until 2030, Gasum (Finland) – until 2025, RWE Transgas (Czech Republic) – until 2035, ENI (Italy) – until 2035. Contract extensions until 2027 and new arrangements were agreed on with Austria’s EconGas, GWH and Centrex.

Contracts were concluded with Romania's Conef Energy for 2010-2030, Switzerland's WIEE for 2013-2030, Germany's WIEH up to 2027, and Czech Republic's Vemex for the period till 2013). Russia seeks to enhance the role of long-term contracts and is pleased that in recent years, this commitment meets with the understanding at the level of European Union institutions, which agree with the fact that the processes of transformation of the EU gas market should not lead to a threat to the stability of these contracts. But at the same time we could see that European countries are searching for another, rather than via Russian pipelines resources of gas supply and nonrecurrent rather than long-term contracts, thus strategic character of Russia-EU relations on gas seems to be doubtful.

From the dimension of investment relations we can observe that such European countries as the Netherlands and France etc. invest their money in future joint pipeline projects such as "Nord Stream", "South Stream" etc. with Russia. But taking into account the variety of different alternative pipelines (Nabucco, Galsi, Medgaz etc.) not all the countries of Europe are interested in investment in future Russian projects, thus the strategic relations sometimes are limited by the number of few countries.

From the perspective of political relations between Russia in the EU we should mark out the new policy on strategic partnership between Russia and the EU, which was created in order to maintain the strategic relations ("strategic networks") between the actors as an alternative to ENP and ECT. Another point of the political relations between Russia and the EU on natural gas, which says for the presence of the strategy in their relationship is Memorandum of early warning mechanism in the energy sector which aimed at secure Europe from any kinds of "misunderstandings" with Russia, and thus this document is aimed at the *strategy* of energy security.

4.6 Conclusions to the chapter

In this chapter we were trying to answer the main question of our thesis: "Is it possible to understand the EU-Russia relationship concerning natural gas as network governance,

and if yes, is this a productive perspective to explain the transnational relations between the two blocks?” We found out that Russia-EU relations could be suitable for network governance, but not unquestionably.

As for such a characteristics as interdependency, we can point out that it really takes place in the relations Russia-EU on gas policy and can be seen thorough different dimensions of Russia-EU relations.

We can also admit that the actors within network Russia –EU on natural gas are co-equal and their status combines private and public features.

As horizontal and pluricentric, the relations Russia-EU can be seen but only from the certain points (for example within “Energy Dialogue” political relations, in terms of different centers of gas supply etc.).

From the prospective of self-organization and informal character we can assume that it fits to the Russia-EU gas relations but with the remarks that still there is no common organization of the natural gas policy between Russia and the EU and still lack of trust.

Strategic character of the relations Russia-EU can be observed in terms of policy on Strategic partnership between the EU and Russia and long term contracts between Gazprom and other European parties. But to date the policy on strategic partnership is seen as a plan rather than actual state of affairs in Russia-EU natural gas relations.

5. CONCLUSIONS AND FUTURE RESEARCH DIRECTION

5.1 Conclusions

This study explored the opportunities to review the literature on Russia – European Union relations on natural gas and network governance theory in terms of the application of the theory to their actual relations. Having as a goal of our research answering the main question:

“Is it possible to understand the EU-Russia relationship concerning natural gas as network governance, and if yes, is this a productive perspective to explain the transnational relations between the two blocks?”

We have observed the literature on network governance, Russia-EU relations and finally came to the following conclusions:

1) Having examined different approaches on networks we came to the conclusion that the most appropriate (for the purposes of our thesis) is a concept explored by the so called “second cycle literature”, based on the network management idea. This perspective is based on the effectiveness and efficiency of policy networks as a mode of governance and distinguishing networks from other concepts (market, hierarchy), and is the most applicable for the purposes of our thesis. Thus, by the network governance we suggested to understand “an intermediate (hybrid) form of governance between the market and the hierarchy, characterized by interdependency of actors (through the repeated exchange of resources); horizontal, pluralistic, long-term, strategic and reciprocal relations; self organization (governance without government); informal character of relations based on trust”.

From a number of different characteristics of network governance we extracted the following:

- q interdependency of actors;
- q relations between co-equal actors (public and private);
- q horizontal and pluricentric character of relations;

- q self organization and informal character of relations within network;
- q strategic character.

The characteristics stated above denote network governance and thus could be used as dimensions for the analysis of the EU-Russia relations on natural gas.

Having observed the advantages of network governance such as stability; flexibility; adaptability; improved learning; efficient use of resources; better capacity to plan for and address complex problems we concluded that network governance could be a productive perspective for the relations Russia-EU on natural gas.

2) We also tried to examine the relationship through different aspects: namely trade, investment and politics. We came to the conclusion that the relations between Russia and the European Union on natural gas can not be seen just from one perspective, because they are intensive and complex. Their relations can be characterized as intensive because they are changing and developing at the moment; and they also can be called “complex relations” because they have both a private (market like) and a public (hierarchy like) aspect.

3) Trying to answer the main question of our thesis: “Is it possible to understand the EU-Russia relationship concerning natural gas as network governance, and if yes, is this a productive perspective to explain the transnational relations between the two blocks”, we found out that Russia-EU relations could be suitable for network governance, but not unquestionably.

As for such a characteristic of network governance as interdependency we would conclude that it really takes place in the relations Russia-EU on natural gas policy and can be seen through different dimensions of Russia-EU relations.

We can also observe that the actors within Russia –EU on natural gas are co-equal (as in classical network governance) and their status either combines private and public features (in the case of half-state/half-private Gazprom), either in the interactions of the actors it does not really matter if they are public or private.

As horizontal and pluricentric, the relations Russia-EU can be seen but only partly (for example within “Energy Dialogue” political relations, in terms of different centers of gas supply etc.).

And from the perspective of self-organization and informal character we can assume that it fits the Russia-EU gas relations but with the restriction that still there is no common organization of the natural gas policy between Russia and the EU and still a lack of trust.

Strategic character of the relations Russia-EU can be observed in terms of policy on Strategic partnership between the EU and Russia and long term contracts between Gazprom and other European parties. But to date the policy on strategic partnership is seen as a plan rather than an actual state of affairs in Russia-EU natural gas relations.

5.2 Future research direction

If in our present thesis we treated Russia-European Union relations on natural gas as an example of the relations within network governance using the characteristics of the model as tools to answer if the theory is applicable to practice. Having enough argumentation that Russia-EU relations fit to them, for our future research we would like to examine network Russia-EU on natural gas employing social network analysis by examining reciprocity of issue network Russia-EU, frequency and intensity of contacts between the actors; structure of the network as a whole and the structure of sub-groups (cliques) within network. Thus we could answer the question about the organization of governance of Russia-EU network and evaluate actual “size” of network and actual number of actors which we could miss within current research and try to find the solutions on how to improve Russia-EU network on natural gas.

In order to improve our methodological base we would like to hold some interviewing of the main stakeholders, for instance representatives of “Gasprom” as Russian gas monopoly and world leader in natural gas supply, “Gasunie” as a company of the EU Member State and the representatives of the European Union who are responsible for

Energy policy in order to specify their position on the nature of the relations Russia-EU on natural gas.

APPENDICES

Picture 1. European gas pipelines



Picture 2 Yamal-Europe gas pipeline



Picture 3. Blue stream



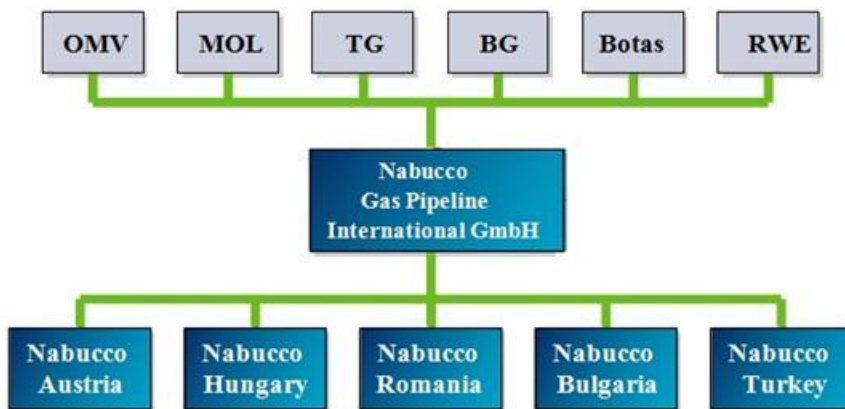
Picture 4 Galsi pipeline



Picture 5 Nord stream

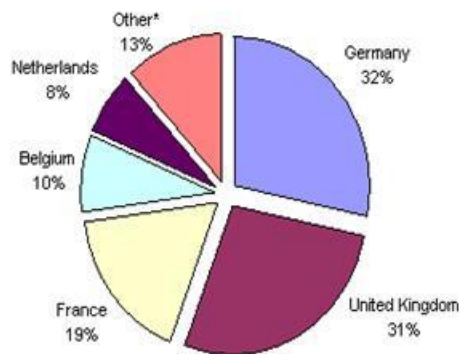


Picture 6 Nabucco



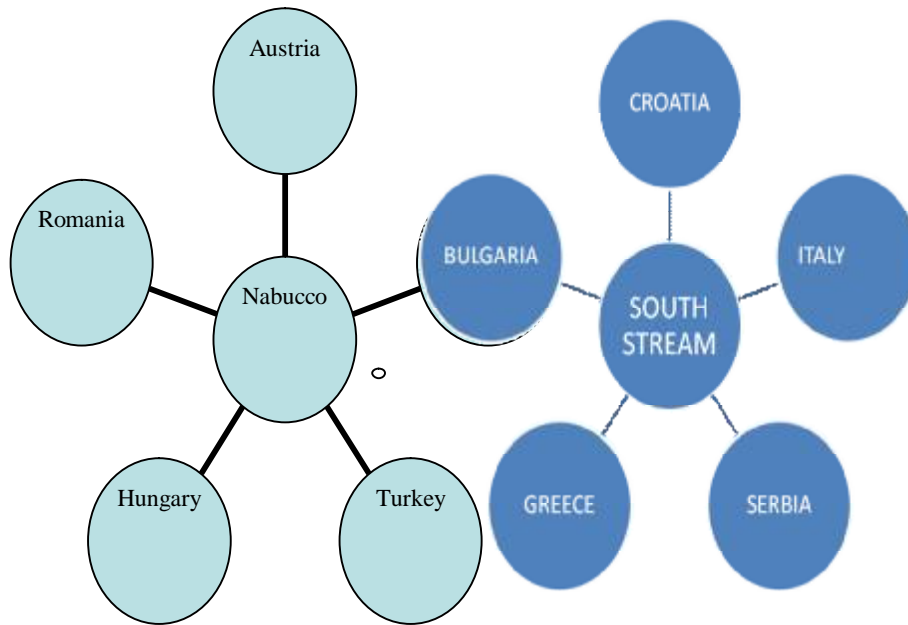
Picture 7 Norway gas stream

Norway Natural Gas Pipeline Exports, 2008





Picture 8. Example of the decentralization and the pattern within Russia-EU relations on natural gas



REFERENCES:

1. Allison Roy, Light Margot and White Stephen (2006). *Putin's Russia and the enlarged Europe*. Chatham House Papers
2. Arentsen, Maarten J, *Trends in Gas* in Rolf Künneke and Matthias Finger (eds.) Handbook on Infrastructure Industries, forthcoming.
3. Bilgin Mert, *Geopolitics of European natural gas demand: Supplies from Russia, Caspian and the Middle East*. Energy Policy, 2009. 37
4. Casarini Nicola, Musu Costanza [Eds.] *European Foreign policy in an evolving international system. The Road Towards Convergence*. Palgrave Macmillan
5. Considine Mark, Lewis Jenny M.(2003). *Bureaucracy, Network, or Enterprise? Comparing Models of Governance in Australia, Britain, the Netherlands, and New Zealand*. Public Administration Review. March/April, Vol. 63, No. 2
6. Correlje Aad, Coby van der Linde (2006), *Energy supply security and geopolitics: A European perspective*. Energy Policy, 34
7. Dassen Adrie (2010). *Networks: Structure and Action. Steering in and Steering by Policy Networks*. CHEPS/UT.
8. Dudek Daniel J., Alexander A. Golub, Elena B. Strukova (2006), *Should Russia increase domestic prices for natural gas?* Energy Policy, 34
9. Erik-Hans Klijn (1999). *Policy Networks: an overview*. Rotterdam.
10. Europa hekelt machtsvertoon Moskou. *De Telegraaf*. 20/09/2006
11. Fenger Menno, Klok Pieter-Jan (2001). *Interdependency, beliefs and coalition behavior: A contribution to the advocacy coalition framework*. Policy sciences, 34. Kluwer academic publishers
12. Fernandez Rafael (2009), *Russian gas exports have potential to grow through 2020*. Energy Policy, 37
13. Finon Dominique, Catherine Locatelli (2008), *Russian and European gas interdependence: Could contractual trade channel geopolitics?* Energy Policy, 36
14. Goldthau Andreas. *Rhetoric versus reality: Russian threats to European energy supply*. Energy policy. Volume 36, issue 2, February 2008, pp. 686-692

15. Gow David (2009). *Russia-Ukraine gas crisis intensifies as all European supplies are cut off*. Guardian; <http://www.guardian.co.uk/business/2009/jan/07/gas-ukraine>.
16. Hay Colin, Richards David (2000). *The tangled webs of Westminster and Whitehall: the discourse, strategy and practice of networking within the British core executive*. Public Administration. V.78 N1
17. Het nieuwe boren zet de hele wereld op z'n kop. De revolutie tast de machtspositie van Rusland en het Midden-Oosten aan. In Polen, Nederland en Duitsland zijn al concessies aangevraagd. NRC Next. 22 juli 2010. P. 4-5
18. Ho Park Seung (1996). *Managing an Interorganizational Network: A Framework of the Institutional Mechanism for Network Control*. Organization studies, 17/5, EGOS
19. Joaquin Herranz, Jr (2007). *The Multisectoral Trilemma of Network Management*. Journal of Public Administration Research and Theory Advance Access. March,3.
20. Jones Candace, Hesterly William S., Borgatti Stephen P. (1997). *A General Theory of Network Governance: Exchange Conditions and Social Mechanisms*. The Academy of Management Review, Vol. 22, No. 4 (Oct., 1997), <http://www.jstor.org/stable/259249> Accessed: 29/01/2009 09:09
21. Journal of energy security
http://www.ensec.org/index.php?option=com_content&view=article&id=176:algeria-a-strategic-gas-partner-for-europe&catid=92:issuecontent&Itemid=341 Accessed 20/07/2010
22. Kersbergen Kees van, Waarden Frans van (2004). *'Governance' as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy*. European Journal of Political Research 43
23. Koopman Bert (2004). Oekraïne verstoort Rusland-top. Het Financieel Dagblad. 25/11/2004
24. Lund Sagen Eirik, Tsygankova Marina (2008), Russian natural gas exports – *Will Russian gas price reforms improve the European security of supply?* Energy Policy, 36
25. Mandell Myrna P. [Ed.] (2001) Getting results through collaboration. Networks and Network Structures for Public Policy and Management. Quorum Books.
26. Marin Bernd, Mayntz Renate (1991). *Policy Networks*. Campus Verlag.

27. Marsh David, Smith Martin (2000). *Understanding Policy Networks: towards a Dialectical Approach*. Political studies. Vol. 48
28. Nord Stream AG, *The new gas supply route for Europe*. 2010, http://www.nord-stream.com/en.html?no_cache=1
29. OAO “Gazprom”, *Gazprom on Foreign Markets. International projects*. 2010, <http://eng.gazpromquestions.ru/?id=4#c326>
30. OAO “Gazprom”, *Gazprom on Russian Market*. 2010, <http://eng.gazpromquestions.ru/?id=5#c315>
31. OAO “Gazprom”, *South Stream Project*. <http://old.gazprom.ru/eng/articles/article27150.shtml>
32. Provan Keith G., Kenis Patrick (2007). Modes of network governance: structure, management and effectiveness. *Journal of Public Administration Research and Theory* Advance Access published August 2
33. Rosamond Ben [Ed.]. *Theories of European Integration*. Palgrave Macmillan
34. Russian Ministry of Energy official web-page: www.minenergo.gov.ru Accessed 15/06/2010
35. Russische staat ‘voert oorlog tegen de markt’. *Het Financieel Dagblad*. 23/10/2006
36. Shiryayevskaya Anna (2010). *Gazprom Net Rises as Russian, Europe Demand Recovers*. Bloomberg, http://www.bloomberg.com/apps/news?pid=20601072&sid=aUACY6S1_fw0
37. Smith Keith C. (2008). *Russia and European Energy Security: Divide and Dominate*. Center for Strategic & International Studies CSIS.
38. South Stream Pipeline, Europe, 2010, <http://www.hydrocarbons-technology.com/projects/southstream/>
39. Spanjer Aldo (2007), *Russian gas price reform and the EU–Russia gas relationship: Incentives, consequences and European security of supply*. *Energy Policy*, 35
40. Stern Jonathan (2006). *The Russian-Ukrainian gas crisis of January 2006*. Oxford Institute for Energy Studies.

41. *The European Union and Russia: Close Neighbours, Global Players, Strategic Partners*. European Communities, 2007
42. The European Union of the Natural Gas Industry, Eurogas. *Natural gas consumption in EU27, Turkey and Switzerland in 2009*. Brussels, 2010.
43. Thurner Paul W. and Franz Urban Pappi (2009). *European Union Intergovernmental Conferences. Domestic preference formation, transgovernmental networks and the dynamics of compromise*. London
44. Wiener Antje, Diez Thomas[Eds.] (2009). *European Integration Theory*. Oxford University Press
45. Wood Steve, Quaisser Wolfgang [Ed.] (2008). *The New European Union. Confronting the Challenges of Integration*. Boulder London