

NORD STREAM PROJECT: ECOPOLITICAL, ECONOMICAL AND SECURITY FIELD CONSIDERATIONS

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ABSTRACT

Current article describes shortly about formation of the Nord Stream project and shows clearly economical, financial and other weaknesses of this project. Authors deal with supply sources of Nord Stream project and show that despite to several ecological risks and high cost of this project, several European states inspired from interests of their good energetic supply, agreed to participate in it under the factual leadership of Russian state concern Gazprom. Authors turn attention to the decision of the Estonian leadership not to participate in this project, taking into the consideration not only ecological aspects, but some security and military aspects also. Unfortunately Estonian parliament (Riigikogu) decided to discuss seriously about influences of the Nord Stream project too late, when Finland, Sweden, Denmark and other participant-countries were given from their governments "green line" for needful to Nord Stream project sea-bottom researches and other operations. Authors show, that for Russian leadership this project has strategic importance, because it increases drastically Russian influence to the states near the Baltic Sea.

UDC CODE & KEYWORDS

■ UDC: 553.9 ■ Nord Stream ■ Gas ■ Pipeline ■ Security ■ Ecology ■ Weakness

INTRODUCTION - Briefly about the formation of the Nord Stream project

The Baltic Sea states had to face questions and problems about connected with closer cooperation quite soon after the collapse of the Soviet Union. This issue was under the discussion both in the frameworks of the freshly formed Baltic Assembly and at on the bilateral meetings between the Baltic States representatives. The great interest of the Baltic States in occasion of the Baltic Sea cooperation was also noticed in the leading circles of the Russian Federation also. In the beginning of the 1990s the Russian tabloid sensational press started to write about the plan of Russian security services to bottom construct a long gas pipeline from Russia to Germany, which was be attractive for both the above-before mentioned European great power and the same time would gave be into the hand of Russia a strong argument for increasing its economic and military presence in this region. But being the assignee as a successor of the collapsed Soviet Union, the Russian Federation at first just had not had enough resources and political power for realizing such kind of grand project. Only in 1997 the leaders of Russian gas concern Gazprom together with their Finnish cooperation partners from energy firm company Neste Oy (later Fortum) established a joint-venture North Transgas Oy, whose aim was to build bottom the a gas pipeline into the Baltic Sea from Russia to North-Germany and to start it to maintain it. During the preliminaries, a from Germany side was involved local gas concern Ruhrgas (later E.ON) was involved on German side. In 1998 these great gas firms companies studied a possibility that this gas pipeline would runs through special economic zones of

Finland, Sweden, Denmark and Germany and how much of insofar as it is would be executable. Thereby under the observing besides that, were several highway route variants were under observation. Some of these variants included onshore sections so both on the territory of Finland and on the territory of Sweden. In As a result of these voluminous studies, in April in 2001 Gazprom, Ruhrgas, Wintershall and Fortum made the an agreement about engineering design of above mentioned gas pipeline. On 8 September in 2005 the representatives of Gazprom, BASF and E.ON AG signed in Berlin the tentative agreement about the realization of gas pipeline project. Russian president Vladimir Putin and German federal chancellor Gerhard Schröder participated in the signing ceremony of this tentative agreement. In 2006, as a result of the negotiations between these two leaders it was decided to involve into this project as an interested partner the Dutch energy enterprise N.V. Nederlandse Gasunie. But on 30 November 2005, the North European Gas Pipeline Company (later named Nord Stream AG) was formed in Zug, Switzerland. On 9 December 2005 Gazprom started the construction of a Russian onshore feeding pipeline. On 4 October 2006, the pipeline and operating company were officially renamed Nord Stream. (Gazprom: Nord Stream, 2007-08-03) After establishment of Nord Stream AG, all information related to the pipeline project, including results of the seabed survey of 1998, were transferred from North Transgas to the new company, and on 2 November 2006, North Transgas was officially dissolved. (RusEnergy, 2007-01-30)

According to this approved gas pipeline project, the gas pipeline will run from Vyborg compressor station at Portovaya Bay along the bottom of the Baltic Sea to Greifswald in Germany. The length of the subsea pipeline will be 1222 kilometres, of which 1.5 kilometres will be in Russian inland, 121.8 kilometres in Russian territorial waters, 1.4 kilometres in the Russian economic zone, 375.3 kilometres in the Finnish economic zone, 506.4 kilometres in the Swedish economic zone, 87.7 kilometres in the Danish territorial waters, 49.4 kilometres in the Danish economic zone, 31.2 kilometres in the German economic zone, 49.9 kilometres in German territorial waters and 0.5 kilometres in German inland. (Nord Stream Espoo Report)

The pipeline will have two parallel legs, each with the capacity of 27.5 billion cubic metres of natural gas per year. Pipes will have a diameter of 1.222 metres, the wall thickness of 38 millimetres and a working pressure of 220 bars (22Mpa). (Nord Stream AG: facts and figures, 2007-04-06)

The first leg will be built in 2010-2011 and the second one in 2011-2012. (Reuters, 2008-06-24) The first gas delivery is scheduled for December 2011. (Reuters, 2008-07-09)

Although the Nord Stream pipeline construction was subject to environmental impact assessment in accordance with the Espoo Convention, national legislation of countries involved, and HELCOM recommendations, respective requirements

and procedures of the project's first stage were fulfilled and observed by the participants casually. Now we can state that Nord Stream project has several technical, economical, financial, ecological, moral and political weaknesses and shows signs of rushing. This is the result for Nord Stream AG, because Russian public was not extensively involved in the discussions about this great international gas pipeline project, although in 2007 Gazprom issued together with the Russian Regional Ecological Centre a special booklet about involving Russian public in the Nord Stream project. Unfortunately in a great bureaucracy this booklet arrived to a small number of people and all respective events showed clearly that Russian powers try to avoid participation of public in this project (Bogdan, 2007). It can be clearly seen from the respective numbers of suggestions that came to Nord Stream project team from public of different interested countries. Let's now look to these numbers up to January 2007: from Finland - 50, from Germany and Sweden - 29 both, from Estonia - 12 and from Russia - 1 only. These numbers need no comments (BELLONA - Nord Stream 2009).

Economical and financial weaknesses of Nord Stream project

Despite of the statements of Nord Stream project representatives and Russian leaders that Nord Stream gas pipeline is economically useful to all participants and to the European Union in general, several indistinctness in project parameters make interested in people to hesitate in this. Estonian journalist Andres Kaasik from the newspaper "Eesti Päevaleht" has absolutely rightly asked why the Nord Stream gas pipeline did not extend up to the Lithuanian or Polish border that reach into the ducts of gas companies E.ON and BASF. Unfortunately Russian gas concern Gazprom never has considered to this variant. In a great hurry the Russian Gazprom started to realize an expensive and uneconomical gas pipeline project, where the gas pipeline runs through a complicated landscape. We can ask the question why the gas pipe line does not run by onshore route only? This variant is cheaper and more secure to all participants of this project. But Gazprom and Kremlin are strongly against that variant, because by their variant creates an unconventional precedent, where the movement of goods from one point in the European Union to another point in the European Union takes place under the full supervision of Gazprom, under the high approval from Brussels and by the most expensive and dangerous ways. But if we were to believe in rumours from Kremlin, then it is much cheaper for Moscow to protect Nord Stream gas pipeline with help of the Russian Baltic Fleet and the so-called "private" spetsnaz forces, than to do it on the mainland of other countries through very complicated agreements. As we know, energy commissioner of the European Commission Mr Andris Pielbalgs has repeatedly affirmed that Nord Stream gas pipeline is possible and necessary. It raises the question, in whose hands is the power in Brussels? May-be in hands of Gazprom? There is still the question, how great are the costs of the Nord Stream project? In 2005 Gazprom declared that the costs of Nord Stream gas pipeline are about 4 billion euros. Two years later Gazprom declared that Nord Stream project costs are about 6 billion euros. In the opinion of a well-known British journalist Edward Lucas, real minimal costs of this project are about 12 billion euros (Lucas, 2008:158).

According to the latest Gazprom documentation, the costs of the onshore pipelines on Russian and German territory could be around 6 billion euros (Dempsey, 2007-08-23). The offshore section of the project is expected to cost 7.4 billion

euros (Downstream Today, 2008-03-31). However, according to Gerhard Schröder, the Chairman of Nord Stream AG, the offshore pipeline will cost 8 billion euros, while BASF expects that the figure may rise to 9 billion euro (Gugau, Mosolova, Eckert, 2007-12-13). So we can see that the project costs of Nord Stream rise continuously.

As we know, the shareholders of the company are now the Russian gas company Gazprom (51% of shares), German energy companies BASF and E.ON (both 15.5%), Dutch gas company N.V. Nederlandse Gasunie (9%) and GDF Suez (9%) (Boselli, 2010-03-01). Approximately 30% of the financing will be through equity provided by shareholders in proportion to their stakes in the project, while 70% will be from external financing by banks (Leftly, 2009-03-29). Half of the loans will have export credit agency guarantees, and half of the loans will be straight, limited-resource project finance to be serviced by earnings from transportation contracts (Bowman, 2009-04-14). Nord Stream AG plans 2 tranches: first 3.5 billion euros finances will be raised through loans in 2009 and another tranche one year later. The project company issued teaser document to 30 banks in February 2009 (Euromoney Institutional Investor PLC, 2009-02-13). 2 billion euros is backed by export credits of Italian Export Credit Agency SACE SpA and French credit insures company Euler Hermes (Euromoney Institutional Investor PLC, 2009-03-20). The financial advisers for external financing are Societ? Generale, Royal Bank of Scotland (ABN Amro), Dresdner Kleinwort (Commerzbank), and Unicredit (Bowman, 2009-04-14). The European Investment Bank (EIB) has been considered as one possible major financing partner (Upstream Online. 2007-02-07). However, according to the President of the EIB Mr. Philippe Maystadt, EIB funding is unlikely because of the opposition from several member states of the European Union.

As we can see, the financing scheme of Nord Stream project is complicated and there are many participants. From one side, such an approach seems to be right, because it diffuses financial risks. From the other side, so complicated financing scheme needs quite great costs for service of credits and cannot be very transparent.

Despite several shortcomings of Nord Stream project, authors of this project underline in respective explanatory letter that the route of the gas pipe line would go so that is possible to eliminate transit fees as transit countries would be bypassed, and that offshore pipeline has a higher operating pressure, which leads to lower operating costs by eliminating the necessity for expensive midway compressor stations (Nord Stream AG, 2007-02-01). Energy experts speak of 1 billion US dollars annually, which would be lost by transit countries, but saved by countries connected to the pipeline. It is interesting to remember the statement of former Gazprom Chairman Mr. Rem Vyakhirev of 1998, when he claimed that the project was economically unfeasible (Grib, 2007-07-12). Today we must take into consideration that this estimation may not be valid any more as the price of natural gas and construction costs have changed since then. Some years later Russian leader Vladimir Putin intriguingly stated that Europe had to decide whether it needed this pipeline or not. If not, Russia will build LHG (liquefied highly-compressed gas) plants instead of the pipeline, which will be more expensive for European countries (Crawford, Catan, 2008-11-13).

By today participant states of Nord Stream project have signed bilateral agreements with Russian Federation and so these agreements can satisfy short-term economical and political needs of these countries only. But in longer perspective these bilateral agreements diminish the

economical and strategic power of the European Union. The European Union has to implement unitary energy politics from which all member-states of the European Union can cut a profit. It also foresees the respective Green Paper document issued by the European Union in 2006.

Problems with the supply sources of the Nord Stream project

The main source of natural gas for the Nord Stream pipeline will be the Yuzhno-Russkoye field, which is located in the Krasnoselkupsky district of Yamal-Nenets Autonomous Region, Tyumen province. (Runner, 2009-01-21) Nord Stream will be fed additionally from fields in Yamal peninsula, Ob-Taz bay. Gazprom has also indicated that the majority of gas produced at the Shtokman field would be sold to Europe via the Nord Stream pipeline. For this purpose, the pipeline from the Shtokman field via Kola peninsula to Volkhov or Vyborg in the Leningrad province has to be built (Madslien, 2006-10-09). As we know, the owner of these supply sources is the Russian gas concern Gazprom. But Russian natural gas resources in the hands of Gazprom, who is in Russia in monopoly state as gas producer, are limited. Although Russian subsoil plots conceals about 47 trillion cubic metres natural gas, Gazprom has shown its inability to invest into the implementation of new fields due to the lack of competition and low domestic prices. On the other side the main gas field for Gazprom is huge Nadym-Puri-Taz gas field which today satisfies the main gas needs of the Russian Federation. But in the opinion of Russian geologists this gas field will be run down very soon (Riley, 2007-07-13). It looks that the only way for Gazprom to escape such a bad situation is to take quickly into use the Shtokman field. But it requires from Gazprom immediately a large sum of money. At the same time respective preparatory works at Shtokman field before it is given into exploitation need certain time also. Such kind of situation shows clearly that Russia has to reduce its gas supplies to traditional trade partners. In the opinion of former Russian energy affairs minister Vladimir Milov, in 2006 Russia exported about 155 billion cubic metres (bcm) gas, but in 2010 these volumes can decrease up to 100 bcm or a little bit more. As we know, today's Russian gas sector is dominated by the Gazprom concern and there is no real market. It is clear that in a free market situation Gazprom would never be interested in such kind of a project as Nord Stream project. In general this project is disadvantageous. It needs to use concrete weight coating pipes. To satisfy this need, the project foresees new coating plants to be constructed in Mukran (Germany) and Kotka (Finland) in January-March 2009 at the (Rigzone. 2008-02-18). But due to the lack of the necessary money, these works are not yet finished. At the same time Rolls-Royce plc has to supply 8 industrial aeroderivative gas turbines driving centrifugal compressors for front-end gas boosting at the Vyborg (Portovaya) gas compressor station (Downstream Today, 2008-12-30). All these circumstances make Nord Stream gas very expensive for users. But Gazprom as a concern in monopoly state has no need to take into consideration any competition situation in the gas sector. Is sufficient to look in the statistics which describe the dependence of the European Union (EU) states on Russian gas or shows how great part of gas they import today from Russia. Respective picture is the following: Netherland and Belgium - 17%, France - 23%, Italy - 32%, Germany - 40%, Slovenia - 51%, Romania - 63%, Poland - 63%, Czech Republic - 75%, Hungary - 77%, Austria - 78%, Greece - 84%, Bulgaria, Slovakia, Finland, Estonia, Latvia, Lithuania - all 100%. (Eni World Oil and Gas Review) Here it is interesting to mention that the most active EU states in Nord Stream project are

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the ones who are less dependent on Russian gas import (Netherland, France, Italy, Germany) and vice versa. As we know, Estonia, Lithuania and Poland refused to participate in Nord Stream project for different reasons.

But in today's geopolitical situation it is very important for the European Union to be sure, that its gas needs will be completely satisfied today and in future with necessary gas volumes. Today's Russian gas production possibilities make the EU states anxious. Let's look at respective statistics again. Considering the statistics from International Energy Agency (IEA), Nord Stream AG expects European Union's annual gas demand to rise from 570 bcm in 2005 to 712 bcm in 2015. At the same time EU's internal gas production is steadily declining and according to the Nord Stream company, the share of imported gas will rise from 57% in 2005 to 75% in 2015 (Nord Stream, 2008-05-10). So the Nord Stream pipeline will thus be one answer to Europe's import challenge.

But it should be noted that numbers referred to in the Nord Stream documentation do not fully correspond with IEA's World Energy Outlook 2006 statistics, according to which the annual gas demand in the EU will have risen to (only) 609 bcm by 2015. This is not only significantly lower than 712 bcm, but as pointed out by the Swedish defence analyst Robert Larsson (Larsson, 2007:28), "Nord Stream's material reveals that its analysis is based on IEA's so-called "reference scenario...which is a "business-as-usual-scenario". According to different circumstances, EU's annual gas demand may in fact be 38 bcm less in 2015 and 90bcm less in 2030 than is projected in the reference scenario. Robert Larsson therefore suggests that the Nord Stream pipeline may actually be superfluous and that increasing the capacity of existing pipelines could in fact suffice to meet the increased demand (Larsson, 2007:28).

Russian well-known energy affairs expert Vladimir Milov has different vision than R. Larsson. According to his information, Russia in 2004 had a domestic gas deficit of 69 bcm and by 2010 the deficit may be 231 bcm. According to V. Milov, Gazprom's gas production in 2010 without new Yamal fields will be about 550 bcm. Gazprom's export to Europe/CIS (without Asian exports) will be 312 bcm (includes 200 bcm to Europe and 112 bcm to CIS). V. Milov foresees that Russia's domestic demand in 2010 will be about 469 bcm. As gas deliveries from Central Asia will give in 2010 105 bcm gas, the total gap will be 126 bcm. Chairman of the Board of the Russian electricity company RAO UES Mr. Anatoly Chubais, who supports the opinions of Mr. V.Milov, therefore believes Russia should focus less on exports and more on the needs of the domestic market (Milov, 2006:305-306).

The situation with Russian gas described above is not really so great a problem for the EU as it seems to be when you look at it for the first time. One effective solution in the hands of the European Commission is pressure on the governments of the EU states for the liberalization of European gas market. If the European Commission wants to realize the common energy politics of the EU, then there must be official access to all domestic gas markets of the EU and the domestic markets should be physically connected. On such a common market gas moves to the markets of these member states who suffer from decreasing Russian gas supplies. European Union must take into account the fact that today United Kingdom is the main channel through whom gas from Norway and Qatar comes to Europe. Thanks to new supply sources, very soon United Kingdom will have gas overage that is approximately equal to half gas export volume to the European Union. It is

possible to export this gas coverage through La Manche channel into European pipeline system (Riley, 2007).

Estonia and other Baltic States must construct a gas pipeline up to Poland, which gives the necessary connection of Baltic States gas pipelines to European gas pipeline system. At the same time these states must build up gas reservoirs. Only these steps guarantee for the Baltic States gas energy independence from Gazprom possibilities and Kremlin moods. Unfortunately it looks like the energy commissioner of the European Commission Andris Pielbags has not considered these possibilities. In his interview to the Estonian newspaper "Eesti Päevaleht" on 28. January in 2008 he said the following: "Unfortunately the gas demand of the EU is today too great. Now our annual need is more than 500 bcm. The European Union itself produces about 200 bcm gas. At the same time the necessity to reduce carbon dioxide emissions in energy production process rises gas demand. In 2020 the difference between self-production and demand in the EU gas sector will be about 400 bcm." As we see, EU energy commissioner in his speech only wails and gives no reasonable solutions for this problem. From the other side it gives "free hands" to Kremlin for using energy weapon against the so-called anti-Russian EU states through Nord Stream project and with Gazprom price policy.

Environmental aspects of the Nord Stream project

Environmental concerns raised are that the construction of the pipeline would disturb the sea bed, dislodging World War II-era naval mines and toxic materials including mines, chemical waste, chemical munitions and other items dumped in the Baltic Sea in the past decades, and thereby toxic substances could surface from the seabed, damaging the particularly sensitive ecosystem of the Baltic Sea. Taking into account these circumstances, on 20. September in 2007 the Estonian government refused to give Nord Stream AG permission for making route research works necessary for the gas pipeline in Estonian territorial waters. On 26. September in 2007 Estonian Ministry of Foreign Affairs issued respective comment, where it was underlined that this decision is based on the International Maritime Law Convention of the United Nations Organization from 1982, the articles of the Estonian Economic Zone law and other respective documents (Comment of the Ministry of Foreign Affairs 26.09.2007). The decision of the Estonian government was accepted by Russian, German and Finnish leading circles as "surprisingly negative message". Lithuanian government and Polish government supported Estonia's decision. It was also mentioned by the well-known British journalist Edward Lucas in his book "The New Cold War - How the Kremlin Menaces both Russia and the West" (Lucas, 2008).

But with this decision Estonia automatically gave up the possibility to intervene directly into the project processes and forfeited possibilities to demand various compromises and compensations from Gazprom in the future. Estonia also lost the possibility to protect its section of the Nord Stream pipeline with domestic defence forces and to avoid the possibility that Russian navy and "private" spetsnaz forces make legal espionage against Estonia under the argument that they protect the Estonian section of the Nord Stream pipeline, because Estonia as republic was not interested in participation in the Nord Stream project. At that time it was clear for every Estonian politician that the Nord Stream project is not an economical project, contrary to the statements of current prime minister Vladimir Putin, or that project is environmentally orientated energy project, as underlined by some Western politicians like Paavo Lipponen and Gerhard Schröder. Desperately late, on 27 October in

2009, the Estonian Parliament (Riigikogu) deliberated as a matter of significant national importance the environmental risks related to the gas pipeline planned in the Baltic Sea. During this discussion MP Mart Jüssi as the chairman of environmental commission of Riigikogu presented a report. Co-reporter was Professor Tarmo Soomere. Ivar Puura and Georg Martin also sent their written expert opinions (Verbatim Record of the Riigikogu sitting 27.10.2009). In his co-report "Nord Stream: Challenges to oceanography of the Baltic Sea" Professor Tarmo Soomere underlined that Nord Stream is serious challenge because the Baltic Sea is a particularly sensitive maritime environment. Unfortunately the first version of impact assessment completely ignored the fact that the pipeline can influence water exchange between the Baltic Sea and the Nordic Sea (Soomere, 2009a). He also stressed that as we do not know where exactly the chemical shells and other kind of munitions are located, ecological disaster may be unavoidable. He also admitted that most of the scientists studying the Baltic Sea are distanced from the Nord Stream project. At the same time the methodology of study used by Nord Stream AG unfortunately does not take into account the peculiarities of the Baltic Sea. But the Nord Stream project has one positive side also: now scientists of the Baltic Sea start to see themselves in the mirror (Soomere, 2009b).

The Baltic Sea is bordered by nine countries. Each of these countries supports a fishing industry that operates in, and in most cases is dependent on the Baltic Sea. Fishing is a culturally important activity for many of the Baltic Sea states and it is not only an important source of food and income, but also a part of community identity.

The legislative framework that governs the Baltic enables states to fish in the Exclusive Economic Zone (EEZ) outside the Territorial Waters of individual Baltic states. Access into the Territorial Waters, a 12-nautical mile (21.224 km) coastal band, is regulated by national jurisdiction.

The Baltic Sea is managed in line with the EU's Common Fisheries Policy (CFP)(2). Each year, total allowable catch (TAC) quota for different fish species are determined mutually by the countries permitted to fish in the Baltic Sea. Total catches by weight in individual states - Estonia, Latvia, Lithuania, Finland, Sweden, Poland and Denmark - show that in 2005 the majority of fishing vessels fished close to their national borders, although vessels from all nations frequent the area around Bornholm. This underlines the transboundary nature of fishing in the Baltic Sea.

The results of the comprehensive analyses of the risks to people and the environment during the construction and operation of the Nord Stream pipeline show that no risks are considered

unacceptable when compared to the risk tolerability criteria agreed for the Project (Espoo Report, 290-293). There is always a degree of uncertainty in risk assessments. However, the assessments discussed show that the estimated levels of risk are significantly below the risk tolerability criteria agreed for the Project (ibid, 291).

Unplanned events, such as a fuel/oil spill, the disturbance of conventional munitions and pipeline failure, have the potential to result in transboundary impacts. However, the total risk impact (which for pipeline operation is the sum total of all the national impacts), including the impact on the fishing industry and commercial shipping, has been shown to be low (Espoo Report, 291), as it is shown by several agencies all over the world (www.egig.nl, 2008); https://www.cia.gov/library/publications/the-worldfactbook/, 2008; www.apia.net.au, 2008).

A key factor in developing the route alternatives has been safety considerations. This includes factors such as avoidance of areas which have a high shipping traffic activity, areas with munitions-related risks and areas where trawling or dredging may occur. Any areas that are deemed to represent a significant safety risk to the Nord Stream Project (during either installation or operation) have been avoided in the pipeline routing (Espoo Report, 311).

Survey Corridor in Estonian Waters was submitted to the Estonian authorities as part of the survey application. This application was rejected by the Estonian Ministry of Foreign Affairs in September 2007. Further development of a route alternative in Estonia was therefore abandoned and this is no longer considered as a reasonable option for the project. Following abandonment of the Estonian option two options for part of the Nord Stream Route in Finnish waters, a northern and a southern route, have been examined at Kalb?dagrund. Both routes run within the Finnish EEZ but outside Finland's territorial waters (Espoo Report, 331).

The impact assessment methodology serves to provide a means of characterising impacts identified and their overall residual significance. Impacts on the physical and biological environment are assessed in each of the five Environmental Sub-Regions while impacts on the social/socioeconomic environment are assessed at the Baltic Sea level with a focus on specific countries where relevant (Espoo Report, 434). Even with a final project design and a constant environment, impacts are difficult to predict with certainty. Predictions can be made using varying means ranging from qualitative assessment and expert judgement through to quantitative techniques. Use of these latter techniques allows a reasonable degree of accuracy in predicting changes to the existing environmental conditions and making comparisons with relevant environmental quality standards (Espoo Report, 446). The key objective of an Environmental Impact Assessment in a transboundary context is the rigorous assessment and succinct communication of anticipated transboundary impacts. The Espoo Convention defines a transboundary impact as: "...any impact, not exclusively of a global nature, within an area under the jurisdiction of a Party caused by a proposed activity the physical origin of which is situated wholly or in part within the area under the jurisdiction of another Party."

The assessment of transboundary impacts relies on the prior identification of all potential impacts associated with the Project along the full length of the pipelines and for these to have been assessed rigorously and consistently in accordance with the methodology set out (Espoo Report, 450).

Recently the Russian News Agency RIA News (RIA News, 23.04. 2010) commented the Nord Stream AG co-operation agreements with two German environmental groups (BUND and WWF Germany) to protect the Baltic Sea environment. Of course, they estimated this kind of agreement as great change of public attitude.

Foreign and security policy dimension of Nord Stream

Energy acquired significant foreign and security policy importance already during World War I, when internal combustion engines had been taken widely into use in military technology and advancing towards oil fields became one of the motives of the war. Let us recall here, for example, the competition for Baku oil fields between Russia, Germany and Great Britain. Since then the importance of energy as a foreign and security policy factor has steadily increased. The direction of the advance of German forces in the first half of World War II cannot be explained with anything else

but the wish to get the oil fields under their control. The fight for energy during the Cold War should not be underestimated either. Although the Soviet Union tried to expand the "socialist world system" in all directions and at any price, the exclusion of the Middle Eastern states from British and US sphere of influence and the creation and dissolving of CENTO were clearly connected with the wish to control energy flow.

Energy is a convenient means for the states that have sufficient energy resources under their surface but are in other ways economically weak to increase their influence at international level by exerting pressure through it and influencing the political decisions of the states that depend on energy. Already in the 1950s the states that were rich in energy resources but economically less developed used as international sanction the combination of energy + armed forces. Instead of developing economy, armed forces were developed to achieve the position of a regional leader, but this income was also used to compensate the budget deficits caused by modest development of economy, which enabled to preserve the living standard necessary for the government to remain in power. OPEC, which was founded in 1960, has coordinated such policy.

The Arab states used their energy policy forcefully in international politics after the 1973 Arab-Israeli War, increasing the price of oil many times and triggering by it a global economic crisis.

Energy as a political sanction in international relations was not of central importance to the Soviet Union. There were many reasons for that. First, the Western states had energy resources that were sufficient for their existence under their control, therefore it was not possible for the Soviet Union to use the "energy weapon" extensively. But more important, the economy of the Soviet Union, at least until the end of the 1970s enabled to achieve desired aims also by military means. The situation changed cardinally when the economy of the Soviet Union collapsed and the state fell apart.

The Russian Federation that became independent in 1991 was in the situation where the country had:

1. immense energy resources;
2. armed forces it was not able to manage;
3. collapsed economy.

The decision to use energy to improve its international position was from Russia's point of view logical as the most easily available and fastest way, but also the way that most hindered the development of Russia.

Here it would be important to note Russia's security policy development scenarios that were prepared already in the first half of the 1990s and foresaw the restoration of Russia's control over the territory of the former Soviet Union by using any means available (see Karaganov 1992, 42-45). Karaganov's, or more correctly, Yeltsin's doctrine provided the following means for restoring Russia's sphere of influence:

1. Military union plus international mandate for carrying out so-called peace keeping functions in former Soviet republics.
2. Diplomatic union. Russia would have been guaranteed the votes of the protectorates at international level, but also the right to represent their "interests".
3. Economic union. Common economic space and "transparent" borders.
4. Exterritoriality through multiple citizenship (Nutt, 1994/2008, 379).

In this context it is important to note that in spite of the collapse of the Soviet Union, Russia had not given up the wish to rule over the territory of the former Soviet Union. As Russia had given up (or, more correctly, lost) the sovereignty over the remaining 11 Soviet republics with the Belavezha Accords of 8 December 1991, other means had to be found for it: legal, political and military (see *Ibid.*). In this context energy was a readily available tool for influencing the politics of the states that depend on Russia for energy.

Returning to the specific case of Nord Stream, it must certainly be admitted that security policy aspects here are hypothetical and proving the existence of them is complicated. Russia stresses purely economical aspects and distances itself from the activities of Nord Stream AG as an independent international corporation, placing itself formally on a neutral position, in line with all other Baltic Sea states. Naturally in reality nobody doubts that Russia has great national interests in connection with Nord Stream, certainly bigger than any other Baltic Sea state, including Germany. And as the Gazprom Concern owned by the Russian state has control over Nord Stream, it is clear that Nord Stream cannot be treated as a private company not depending on Russia. The point of the issue is whether these interests are in reality, too, limited to purely economic aspirations or will they be intertwined with political ambitions.

The issue of security risks connected with Nord Stream is actually avoided by all states concerned and at least in public debates all Baltic Sea states try to confine themselves to environmental and security issues. The criticism of Nord Stream has in international relations also remained at the level of environmental and economical arguments. It is in no way different in Estonia. The official Tallinn does not speak about security risks but environmental risks. In the Riigikogu debate the security issue was also avoided by keeping a careful distance. At the deliberation of the matter of significant national importance "Environmental risks related to the gas pipeline planned in the Baltic Sea" in the Riigikogu on 27 October 2007 the main speaker, Chairman of the Riigikogu Environment Committee Mart Jüssi also referred only to risks connected with environmental security¹.

Only a few politicians and journalists have brought out the security policy aspect and even then they represented their own personal opinion, not the official position of the state or a political party or the attitude of a periodical. Member of the Riigikogu Marko Mihkelson (Pro Patria and Res Publica Union, government coalition) noted in his blog that "it increases Germany's dependence on the supply of raw materials from Russia, and this dependence may in some way interfere with Berlin's freedom of action in foreign policy" (Marko Mihkelson, 19. 01. 2009). Andres Tarand (Social Democratic Party, opposition), former Prime Minister and Member of the European Parliament, stressed that "Estonia's main concern is political. The pipeline will pass along the same route as the iron curtain in its time. Putin's explicit statement that the pipeline has to be protected by using the navy, if necessary, is a threat to us as the country with the longest coastline near the pipeline" (Tarand, 30. 10. 2009). Member of the Riigikogu Igor Gräzin (Reform Party, government coalition) stated that "the appearance of the pipeline near our waters is a foreign policy and security loss to the Estonian state. But let us admit: nobody asked anything from us. Gazprom was not even ready to start negotiations with us." (Gräzin 20. 02. 2010). Jaanus Piirsalu,

¹ verbatim record of the Riigikogu sitting of 27 October 2009 <http://parlament.ee?op=steno&stcommand=stenoqram&date=1256627100>

Moscow correspondent of Eesti Päevaleht, remarked when writing about Gazprom in the middle of the first decade of the 21st century that "the plan of the most ardent defender of Gazprom's interests, the then-president of Russia Vladimir Putin envisaged that Europe would be dependent on Russian gas for a long time, and through the price of gas Russia could dictate its conditions to Europe." (Piirsalu, 17. 03. 2010).

The Wall Street Journal called Nord Stream the Molotov-Ribbentrop pipeline². The journalist of Agence France Presse (AFP) Anneli Rõigas notes that "the gas pipeline is a project that significantly impairs the security of Estonia" (Rõigas, 20. 02. 2010). The columnist of Financial Sense J. R. Nyquist in his publication of 1 January 2010 quoted Russian economist and President Putin's former adviser in economic issues Andrei Illarionov's speech of 11 November 2009 in a meeting of the "discussion club" of the OGF (United Citizens Front) in Moscow, bringing out the following: "The Russians are trying to push the United States out of Europe. Why should Europe need a security alliance with America? Why not ally with Russia? It is the stated policy of Russia to remake Europe by eliminating NATO, by creating a "new security infrastructure" that effectively isolates the Americans. For the last ten years, noted Illarionov, the leadership of Germany realized that unification transformed Germany into the strongest political force in Europe -- except for Russia. The Germans began to resent America's role as Europe's protector. This suited the Russians perfectly. "The policy of Germany in Europe is the policy of the leader of Europe for the past ten years," noted Illarionov. The Germans want to lead Europe. "No other country, except Russia of course, can pursue a policy of leadership like Germany." So the Russians flatter the Germans, and let them imagine a bright future. "Let the Americans go home, and leave Europe," they say. "Russia will gladly work with Germany. After all, we [Russians] respect our German 'partners'" (Nyquist, 2010).

In his report A. Illarionov does not deal with the issues connected with Nord Stream in particular but discusses the ambitions of Russia on a wider scale. But should A. Illarionov be right, the issues connected with Nord Stream fit into this context.

The reluctance to mention security issues is in a way understandable because focusing on security risks would be rather direct accusing of Russia of endangering the security space of Europe and upsetting the balance of powers. It is tried to avoid this at any cost. But at the same time Russia quite openly accuses NATO of endangering the security of Russia. Behind the scenes the security issue is strongly represented actually in all states. Differences arise from the fact that some states (e.g. Germany) do not perceive it as a security risk that concerns them, but do not deny that it could be a security risk to some other country.

Colonel Erik Erroll of Finnish National Defence University presented an analysis on the security effects of Russian energy policy to the OSCE PA delegation of Finnish Eduskunta before the Fall Meeting in Athens (Erroll 2009). Colonel Erroll remarks that Russia is a cooperation partner whose behaviour is hard to predict because it does not perceive the world and priorities the same way as the EU and the rest of the world. The versatility of security makes cooperation harder. Yielding to Russia's claims for special treatment however adds risks to fall under Russia's political pressure. The USA will never agree with Russia's special

² <http://www.postimees.ee/?id=187367&print=1>, 12. 11. 2009

rights on the territory of the former Soviet Union. But Russia may use energy as a means of increasing political pressure:

1. subjecting the states of East Europe to political pressure by weakening the energy security of these states, reducing energy transit through these states (Nord Stream);
2. developing special relations between Germany and Russia in order to interfere with or slow down the strengthening of the EU;
3. offering activities connected with energy and increasing economical prosperity to new member states of the EU and NATO (South Stream);
4. strengthen its influence in Central Asia and Caucasus (war in Georgia).

Erroll admits that Nord Stream bends Eastern Europe under Russia's political pressure and breaks up the EU. South Stream has similar influence. In any case the pipelines increase Europe's dependence on Russia. At the same time no significant additional risks emerge on the Baltic Sea in connection with the energy infrastructure defense by Russia. This in itself is natural and there is no need to see any ghosts in it.

Finland is certainly in a delicate situation in connection with Nord Stream, already because of historical background, traditionally good relations with Russia and also because of the political ambition to be a regional mediator. But the security policy situation of Finland is somewhat different from that of the Baltic states. First, Nord Stream will never surround Finland and therefore the potential armed forces controlled by the Kremlin will never be situated between Finland and Sweden. But even more important is the fact that unlike the Baltic states, Russia's rhetoric about spheres of influence does not include Finland. Russia does not treat Finland as near-abroad and has no pretensions of political control over that country. It is another matter if such rhetoric has any practical importance in this context but public opinion is shaped in this direction and in situations where a state is in economic or political difficulties, it is necessary to start paying tribute to public opinion.

For Russia, already the fact that Nord Stream enables to avoid or reduce transporting gas through Poland, Ukraine and Belarus and thus reduce dependence on the wishes and positions of these states is an argument, and this argument can be defended also in the situation where it is clear that financially Nord Stream costs more than developing additional gas transit possibilities on the mainland. Russia's somewhat strange fear to become dependent on other states is strange but not surprising because it has always been characteristic to Russia. But in the situation where Russia hints at the political instability of transit countries, gas thefts and political attempts to control Russia's gas export, this fear seems to be acceptable to Germany and also to some other Western states. Apparently the campaign conducted by Russia has had effect in influencing the decisions of both Nord Stream and South Stream. At the same time the security aspects connected with Nord Stream are not sensitive for Germany or France, especially in comparison to the states of Central and Eastern Europe that would be situated in the zone remaining between the pipeline and Russia when the pipeline is completed.

As it was already said, according to Russia Nord Stream has purely economic reasons and will cause no additional security risks to any country. The representatives of Gazprom have also assured that their energy policy is purely

business and independent of the Russian Government. At the OSCE PA Fall Meeting in Athens (9-12 October 2009), one of the main speakers Sergei Komlev, Head of the Contract Structuring and Price Formation Directorate of the Gazprom Export Company stressed that the statements according to which Gazprom is the executor of the political goals of Russian government and aims to distort competition at the EU gas market

In the second part of his presentation Mr. Komlev focused on the "obstacles that impede a broader use of natural gas in Europe" and related them to three main fears, or "phobias", that exist around Gazprom.

In response to the first phobia about Gazprom as an executor of the Russian government's political goals, he stated that Gazprom is a pure business organization with clear business goals, noting that the Russian government would not be willing to jeopardize the entity, the tax receipts of which provide 20 per cent of the Russian budget. Rebutting the second phobia about distorting competition in the European gas market, Mr. Komlev stated that Russia provides only 25 per cent of the EU gas supply, and thus Gazprom's presence on the European market only benefits the European consumer by strengthening the competition. In turn, he criticized Western governments for imposing political pressure on business activities, especially after the August 2008 conflict in Georgia.

In response to the third phobia about Russia as an unreliable supplier, Mr. Komlev criticized Ukraine's behaviour during the 2006 and 2009 gas crises, based on the country's unwillingness to transfer to market-based gas prices.

In conclusion, Mr. Komlev stated that the "phobias" against Gazprom in particular and natural gas in general "lead to inadequate energy policy decisions which end up in drafting the most costly and inefficient action plans." He called for a closer interlink between Europe and Russia "as a means of strengthening the economy of each and standards of living for all." , are phobias and do not correspond to reality (Komlev 2009).

But when we analyse Russia's foreign and security policy more widely, follow Russia's rhetoric on that issue and observe the harnessing of Russia's energy policy to achieving foreign policy goals more generally, then we have reason to feel uncertain about the purely economic purpose of Nord Stream. The policy of near-abroad and spheres of influence that prevailed in the beginning of the 1990s is not discarded but has been pursued consistently. Since V. Putin became the president in spring 2000, Russia's policy of extending its positions in the near-abroad (but actually even more extensively at the international level) has strengthened (Nutt, 2004/2009, 415-417).

Geographically Nord Stream and South Stream would divide Europe approximately along the same line as the iron curtain did during the Cold War. Such symbolic signs are more emotional than rational and could be just a coincidence. But historical symbols have a very strong influence on the making of decisions and parallels connected with this issue have been repeatedly stressed (Socor 2009). Russia, who stresses the purely economic aspect of Nord Stream, has itself caused feeling of danger in connection with its rhetoric that is perceived as aggressive and revanchist in its neighbouring states. Both Moscow's rhetoric and Russia's activities highlight the following aspects that cannot be rejected when the context is dealt with:

1. Restoring the spheres of influence, according to which the territory of the former Soviet Union (near-abroad)

has to consider Russia's interests and must not accede to the EU or NATO is one of the most important political ambitions of Moscow;

2. Confrontation with NATO in security issues. Russia pronouncedly considers NATO its main enemy, whereas NATO stresses cooperation and speaks of Russia as its most important partner; Nord Stream gas pipeline directly concerns the interests of several NATO member states, like Estonia, Latvia, Lithuania, Poland, Germany and Denmark;
3. Rearmament and the possibility of being the first to use the nuclear weapon (preventively);
4. Artificial complicating of relations with the states that formerly belonged to the Soviet Union, like Ukraine, Moldova and the Baltic states;
5. The issues of re-evaluation of history, in which Russia denies the violent accession of the Baltic states to the Soviet Union and considers itself the liberator of Europe in World War II;
6. War in Georgia.

In the light of these developments it seems more logical that Russia wants to use Nord Stream in the interests of achieving its political aims than that it does not do it.

Besides rhetoric, one has to consider what are Russia's real possibilities for using energy in its political interests or, in other words, what would Russia be able to do? Presuming that Nord Stream is in use, Russia can:

1. Increase military presence in the Baltic Sea under the pretext of guaranteeing the security of the pipeline and to claim bases (ports) for servicing it in the states bordering on the Baltic Sea. In this way Russia may mobilise armed forces between the Baltic states and the Scandinavian countries which is problematic from the standpoint of their security;
2. Exert psychological pressure by threatening that if Russia's demands are not satisfied, Russia cannot guarantee the security of the pipeline, which may end in disaster;
3. Russia as an important partner in fight against terrorism will also guarantee the protection of the pipeline against potential terrorist attacks. But certain freedom to act is necessary for that;
4. Turning off the tap to exert political pressure;
5. Playing the member states of the EU against each other (Socor 2009).

The obvious interest of the EU states is to avoid dependence on the monopoly supply of energy from some other state, including Russia. Security analyst Merle Maigre stresses: "Increasing energy dependence on a non-EU and non-NATO supplier that speaks of energy trade as an important instrument of its foreign policy should be regarded with caution. The energy security awareness of public and opinion leaders should be improved" (Maigre 2010). In her article Maigre focuses on Estonia but this observation can as well be extended to all EU and NATO member states.

But EU member states do not have much choice because gas resources in other regions are also connected with problems (Middle East). In any case, the unity and solidarity of the EU will be put to test in connection with Nord Stream.

Developments on the world market of gas, including the influence of shale gas on the world market price since the second half of 2009, have raised the question if Russia has

any reason at all to rely on the effectiveness of the so-called gas weapon. Referring to the interview of East European Gas Analysis President Mikhail Kortchemkin to Eesti Päevaleht, Piirsalu writes: "This thesis is outdated because Russia's energy doctrine was wrong from the beginning. This doctrine had wrong presumption that the price of gas will increase constantly, every year. By now it is clear that Gazprom cannot dictate prices any longer" (Piirsalu 17.03.2010). In the situation where the pipeline is constructed but no gas will be transported through it, a paradoxical question arises for the whole Europe: why should the pipeline be guarded then? And why should the expenses connected with constructing it be paid? In spite of all economic prognoses today we are in the situation where the gas pipeline is being built and it will be guarded, and the security risks connected with it have to be faced. The doubts regarding the security aspects of Nord Stream both in Estonia and the neighbouring states have actually not disappeared anywhere, which can also be seen from the following positions of experts.

Estonian writer and reserve lieutenant-colonel Leo Kunnas writes in the Estonian newspaper "Eesti Päevaleht" (07.12.2009) that "now after getting agreement from Danish, Swedish and Finnish governments, the Nord Stream gas pipeline has obtained green way. There are no external barriers for realising it. Now it is clear that this pipeline will be constructed in spite of opposition from Poland, Lithuania and Estonia. If there are interests of great powers, then opinions of middle size and small countries never come into account". Reserve officer and military expert Leo Kunnas continues: "Now there is no need to implement a sea blockade against the Baltic States in the nearest future because Nord Stream gas pipeline and its supervision in any case create on the Baltic Sea de facto a permanent division. In the future Baltic region will remain in a so-called sack, which reaches from St. Petersburg up to Kaliningrad" (Kunnas, 2009).

Swedish military experts, including former defence minister Mikael Odenberg, have stated that the pipeline can cause a security policy problem for Sweden and warnings have been raised about Russian espionage and military friction (Bakst, 2006-11-15). Mr. Odenberg said "We get a pipeline that motivates Russian navy presence in our economic zone and Russians can use this for military intelligence should they want to. Of course, that is a problem". Odenberg also stated that the Swedish government has very limited opportunity to influence the project, except for the environmental aspects (Dagens Nyheter. 2006-11-14). More political concerns were raised when Russian president Vladimir Putin (now Russian prime minister) stated that the ecological safety of the Nord Stream pipeline project will be ensured by using the Baltic Fleet of the Russian Navy and by Gazprom "private" spetsnaz forces (Interfax, 20061025).

Finnish military scholar Alpo Juntunen has said that even though the political discussion over Nord Stream project in Finland concentrates on the various ecological aspects, there are clearly military implications to the pipeline that are not discussed openly in Finland. (Juntunen, 2009-01-10).

Similarly to Finland, the discussions on different levels over the Nord Stream project in Estonia also mainly focused on environmental aspects although the opposition to this pipeline project started from security aspects.

Returning to Estonia, it has to be noted that Estonia's position regarding the issue of the pipeline has been the most reserved of all Baltic Sea states and Estonia's opposition to the pipeline the clearest. But Estonia, too, has

stressed security risks as the reason for opposing the project, and not security risks. At the same time there is no reason to doubt that security risks have strongly influenced the formation of Estonia's position. Why have security risks become a bigger influencing factor in Estonia than in some other state, although, like everywhere, not publicly? Here, too, both objective and emotional aspects have to be stressed, accepting the reservation that in this context most probably it will never be possible to prove whether they are true. We would bring out four factors:

1. Geographical position (Estonia is the bridgehead on the route of the pipeline and the longest section of the pipeline on the eastern coast of the Baltic sea will pass along Estonia's coastline);
2. Historical background. Estonia has been isolated by a fleet once and after that occupied;
3. Testing how much Estonia's position is taken into account internationally, and how much it will be taken into account in Russia;
4. Expectation that it is possible to reach an agreement with Russia in other issues.

Did the fact that Estonia did not give permission to study its seabed in connection with Nord Stream route diminish Estonia's security risks or did it increase them instead? It may be presumed that if the research had been carried out by Nord Stream as an interested undertaking, the results might not have been objective and the state of Estonia would not have obtained the information that was of interest to it to the full extent because of the business secrets of the company. On the other hand, the research could have given Estonia information about the risks and the mineral resources of the seabed, which would have enabled to use it to increase Estonia's security. Journalist Jeroen Bult is critical of Estonia's decisions and writes, "Now all decisions will be made behind Estonia's back; Sweden, Finland and Denmark are in the situation where they can conduct relevant negotiations with Nord Stream, keep an eye on the construction of the pipeline and detect possible environmental risks in time. In Stockholm, Helsinki and Copenhagen, Realpolitik prevailed, but Tallinn lost the Nord Stream battle. New "test" will soon show whether Tallinn will follow their footsteps: on 15 March Nord Stream - that two weeks earlier had gotten a fifth shareholder, GAZ de France Suez - submitted a request to carry out an environmental survey programme in the territorial waters of Estonia to the Ministry of Foreign Affairs of Estonia. But whatever Estonia's answer will be, it is clear that the clock of the pipeline cannot be turned back" (Bult 2010). In any case security risks are generally hypothetical. Evidence about a security risk usually emerges afterwards. But this does not mean there are no security risks. They have to be taken into account and one has to be ready for them,

The security risks connected with Nord Stream are not connected with Russia's factor only. The latter will largely depend on Russia's political development and its readiness to contribute to the strengthening of collective security mechanisms. But security risks connected with terrorism should never be underestimated. Nord Stream is a huge project that attracts attention in the whole world. Therefore the security risk connected with terrorism has to be treated with all seriousness. And here all Baltic Sea states, including Estonia and Russia, have common interests. Here another foreign policy dimension emerges, according to which it is regrettable that the issue of security risks has been so modestly represented in the Nord Stream debate. All problems simply cannot be treated by focusing on Russia,

wider international background and issues have to be taken into account. It may also be said directly that reluctance in security issues is connected with Russia and not security problems in broader sense. Evidently it was a mistake but it is not yet late to correct it. Strengthening foreign policy coordination between the Baltic Sea states in Nord Stream issues would enable to deal with this problem without any tension and help the parties find an acceptable solution. Of course if the interested parties have enough readiness and good will.

Security risks would be grounded by an agreement between the Baltic Sea states on guarding the pipeline in the future, and it would be advisable that no states of the region are excluded from this agreement. One possibility is the common guaranteeing of the security of the pipeline by using the armed forces of all states of the region or combining their activities with private security companies. But it is important to remark that security debate in Nord Stream issues should not be finished, it should be at the beginning.

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