Nord Stream: Not Just a Pipeline

An analysis of the political debates in the Baltic Sea region regarding the planned gas pipeline from Russia to Germany

Bendik Solum Whist





Nord Stream: Not Just a Pipeline

An analysis of the political debates in the Baltic Sea Region regarding the planned gas pipeline from Russia to Germany

Bendik Solum Whist bendik@cantab.net

November 2008



FRIDTJOF NANSENS INSTITUTT FRIDTJOF NANSEN INSTITUTE

Copyright © Fridtjof Nansen Institute 2008

Title: Nord Stream: Not Just a Pipeline.

An analysis of the political debates in the Baltic Sea region regarding the planned gas pipeline from Russia to Germany

Publication Type and Number	Pages
FNI Report 15/2008	79
Author	ISBN
Bendik Solum Whist	978-82-7613-546-6-print version 978-82-7613-547-3-online version
Project	ISSN
	1504-9744

Abstract

This report is an analysis of the planned gas pipeline from Russia to Germany through the Baltic Sea known as Nord Stream. Although not yet realised, the project has, since its birth, been the subject of harsh criticism and opposition by a significant number of states that consider themselves affected by the pipeline. Whereas the Baltic States and Poland have interpreted the pipeline as a politically motivated strategy that will increase Russia's leverage on them and threaten their energy security, the debate in Sweden was at first mostly concerned with the prospect of increased Russian military presence in the Swedish Exclusive Economic Zone. The potential environmental impact of the pipeline has been, and continues to be, an overarching concern shared by all the littoral states of the Baltic Sea. Proponents of Nord Stream, most notably Germany, Russia and the Nord Stream consortium, have largely dismissed the concerns as unwarranted and argue that the pipeline is a common European project that all EU-members should embrace, as it will provide much-needed gas to an increasingly energythirsty union. This report is an extensive study of the divergent attitudes and debates that have surged in the region regarding Nord Stream, and the aim is to provide plausible explanations as to why the interpretations of the project have been so different in the various states. The report is based on a variety of sources, including several first-hand interviews with researchers and government officials in the Baltic Sea region.

Key Words

Nord Stream, North European Gas Pipeline, NEGP, natural gas, energy, environment, Baltic Sea, EU, Gazprom, Russia, Germany, Sweden, Finland, Estonia, Latvia, Lithuania, Poland

Orders to:

Fridtjof Nansen Institute Postboks 326 N-1326 Lysaker, Norway.

Tel: (47) 6711 1900 Fax: (47) 6711 1910 Email: post@fni.no Internet: www.fni.no

Contents

Lists	of Fi	gures and Tables	ii
Ackn	lowle	dgements	iii
Abbr	eviat	ions	v
1	Intr	oduction	1
	1.1	The Structure of the Report	2
	1.2	Source Material and Selection	4
2	Wh	at is Nord Stream?	5
	2.1	Companies Involved	5
	2.2	Technical Features, Timeframe and Budget	6
	2.3	Legal Framework	7
	2.4	Recent Developments and Current State of Affairs	7
3	Firs	t Perspective: 'Bringing Gas to Europe'	9
	3.1	The Nord Stream Consortium's Explanation: The EU Needs Gas	9
	3.2	Alternative Explanation: Germany Needs Gas	13
	3.3	Overarching Assumption: Harmony through Interdependence	15
4	Sec	ond Perspective: 'Dividing Europe'	18
	4.1	Main Sources of Concern	18
	4.2	Russian Energy Policy: Neo-Imperialism in the Making?	22
	4.3	The Real Threat: A Coming Russian Gas Deficit	25
5	Thi	rd Perspective: 'A Military-Strategic Problem'	30
	5.1	The Swedish Debate: Paranoia or Cold War Revisited?	30
	5.2	Comparing Debates: Sweden, Finland and Estonia	33
	5.3	The Role of History and Geopolitics	35
6	Fou	rth Perspective: 'A Threat to the Baltic Sea Environment'	40
	6.1	The Baltic Sea: Not Like Other Seas	40
	6.2	The North Sea Analogy	42
	6.3	Politicisation and the Role of Domestic Politics	46
7	Con	clusions	50
Appe	endix	Energy Mix Charts	56
Refe	rence	S	63
	8.1	Interviews (by the Author)	63
	8.2	Printed Sources	64

Figures

1	Nord Stream Pipeline Route (incl. Service Platform Location)	5
2	EU 25 Gas Import Trends	10
3	EU 25 Gas Imports as Percentage of Consumption	10
4	Alternative Onshore Routes - 'Yamal 2' and 'Amber'	19
5	The Baltic Sea (incl. the narrow Danish Straits)	41
6	The Langeled Pipeline	43
7	Gulf of Finland – Sea Currents	45
	Appendix: Energy Mix Charts	
8	Energy Mix of Finland	56
9	Energy Mix of Estonia	57
10	Energy Mix of Latvia	58
11	Energy Mix of Lithuania	59
12	Energy Mix of Poland	60
13	Energy Mix of Germany	61
14	Energy Mix of Sweden	62

Tables

1	EU Natural Gas Demand (bcm/year) – IEA Projections	11
2	Projected Russian Gas Deficit	26
3	Import Dependence of the Baltic States, Finland & Poland (2003 & 2006)	28

ii

Acknowledgements

This report is based on my master's thesis in International Relations, which was submitted to the University of Cambridge in July 2008 and was subsequently awarded with 'Distinction'.

First of all I want to thank the Fridtjof Nansen Institute for providing me with a highly appreciated scholarship and the possibility to be a part of the vibrant research environment at Polhøgda. I still miss the lunches with fruit, quiz, and the occasional swimming in the Oslo Fjord. At FNI I would like to thank Lars Rowe, Arild Moe, Geir Hønneland, Tor Håkon Inderberg, Svein Rottem, Pål Skedsmo and Kristine Offerdal for reading and commenting on my research. I owe a special thanks to Lars Rowe for being particularly supportive along the way, and for pushing me to extend my research trip in the Baltic Sea region. This trip was a great experience both personally and academically, and it has undoubtedly enriched this report. In this regard, I would also like to extend my gratitude to all my interviewees, whose arguments have been an important supplement to the written material on which my analysis is based. Without these interviews it would have been significantly harder to analyse the different interpretations of the Nord Stream pipeline.

Finally, I wish to thank several old and new friends who have taken the time to read and critically comment on my drafts. In no particular order: Eva-Kristin Urestad Pedersen, Anne Staver, Lars Raaum, Tor Håkon Tordhol, Mike Palmer, Silje Nålsund, Silje Kjellevold, Helene Imislund, Yngve Olsen Hvoslef, and Benjamin de Carvalho. I am sincerely grateful for all your support. You really make a difference!

Berlin, November 2008

Bendik Solum Whist

Abbreviations

bcm	billion cubic metres
CIS	Commonwealth of Independent States (former Soviet Republics: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan)
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment (according to the Espoo/EIA Convention) NB. EIA is also an abbreviation for 'Energy Information Agency' (statistical agency of the U.S. Department of Energy). When 'EIA' is followed by a date, e.g. EIA (2006), it refers to a printed source from the agency that can be found in the reference list. Otherwise, the abbreviation refers to 'Environmental Impact Assessment'
Espoo	Name of the Finnish city where the EIA Convention was signed.
FOI	Swedish Defence Research Agency [Totalförsvarets forskningsinstitut]
HELCOM	Helsinki Commission (governing body of the 'Convention on the Protection of the Marine Environment of the Baltic Sea Area', commonly known as the Helsinki Convention)
IEA	International Energy Agency
LNG	Liquefied Natural Gas
mcm	million cubic metres
MFA	Ministry of Foreign Affairs
NEGP	North European Gas Pipeline (previous name of 'Nord Stream')
pigs	(intelligent) pipeline inspection gauges (used for pipeline maintenance)
tcm	trillion cubic metre
TEN-E	Trans-European Network Energy (EU guidelines)
UNCLOS	UN Convention on the Law of the Seas

1 Introduction

The past decade has seen an increased focus on energy-related issues. Instability in petroleum-abundant regions, skyrocketing commodity prices, and concerns about CO_2 emission levels are all factors that have contributed to the trend. The focus on energy security has even led some to speak of a 'new cold war' over increasingly scarce commodities (Follath and Jung 2006; Lucas 2008; SvD 2007a). The crucial point, however, is that the energy agenda is not only defined by the need for safe supplies but involves a vast spectrum of related issues, such as preservation of the environment, historically established power relations between the states in question, and naturally, current political realities.

This report analyses the planned sub-sea pipeline from Russia to Germany known as Nord Stream, a project to which the reactions have varied substantially in the different littoral states of the Baltic Sea. The report is an extensive study of the divergent attitudes and debates that have surged in the region regarding Nord Stream, and the aim is to provide plausible explanations as to why the interpretations of the project have been so different in the various states.

Previous analyses of Nord Stream have often been country-specific, i.e. written by a national research institute for the government of the country in question, and have mostly focused on issues relevant for that particular country. This report, by contrast, has a wider scope in that it will review and contrast the different debates about Nord Stream, and the focus is not merely on energy-related aspects of the project but also on military-strategic and environmental ones. Furthermore, since Nord Stream is a 'moving target' in that the pipeline has not yet been constructed, the report is also a contribution to the general research about the project in that it presents new material from several first-hand interviews.

The question of what a pipeline is seems quite straightforward. Arguably, a pipeline could be seen as merely a means to transport a substance from origin to destination – a pipeline in this regard is *just* a pipeline. The recently constructed offshore 'Langeled' pipeline, which transports natural gas from Norway to the UK, could be interpreted in such a way. Few, if any, objections were made against the project prior to its realisation, and the construction of the pipeline was finished on schedule and within budget in 2006 (Stoltenberg 2006; Hydro 2006). The ease with which this project could be realised indicates that no third party considered it to be more than a bilateral trade-issue, or, in other words, just a pipeline (DN 2007a).

By contrast, the planned Nord Stream pipeline from Russia to Germany through the Baltic Sea does not appear as straightforward as Langeled despite its equal length of 1200 km and its role in supplying (parts of) Europe with large quantities of natural gas in decades to come. Although not yet realised, the project has, since its birth, been the subject of harsh criticism and opposition by a significant number of states that, implicitly or explicitly, consider themselves affected by the pipeline. Whereas the Baltic States and Poland have interpreted the pipeline as a politically motivated strategy that will increase Russia's leverage on them and

Bendik Solum Whist

threaten their energy security, the debate in Sweden was at first mostly concerned with the prospect of increased Russian military presence in the Swedish Exclusive Economic Zone. The potential environmental impact of the pipeline has been, and continues to be, an overarching concern shared by all the Baltic littoral states. Proponents of Nord Stream, most notably Germany, Russia and the Nord Stream consortium, have largely dismissed the concerns as unwarranted and argue that the pipeline is a common European project that all EU-members should embrace, as it will provide much-needed gas to an increasingly energy-thirsty union. There are indeed multiple interpretations of Nord Stream, some of which resonate in all the littoral states, whereas others are more state-specific, and this report seeks to explain why this is the case.

All the littoral states of the Baltic Sea will be mentioned in the analysis, but particular attention will be given to Sweden, Finland and Estonia, as these three have had (or have) the ability to play a decisive role in the course of events. Sweden and Finland have since the start had certain legal powers since their Exclusive Economic Zones (EEZs) have been chosen for the pipeline route, and Estonia was quite suddenly given a voice when the pipeline consortium submitted an application for a survey of the Estonian seabed, which the Estonian government rejected. A significant focus will also be on Russia and Germany; the former in terms of its reliability as an energy supplier, and the latter as the chief recipient of the gas supplied through Nord Stream. Poland, Lithuania and Latvia have not had (and do not have) any legal rights to directly influence the project, but their concerns regarding energy security will nevertheless be briefly discussed.

An important finding of the analysis is that history plays a decisive part in shaping the divergent views on Nord Stream in the littoral states. Their very different debates and official reactions to Nord Stream reflect the fact that they have different histories, but perhaps more importantly, that they have different historical experiences with Russia (and the former Soviet Union) and Germany. Certainly, contemporary aspects such as energy import dependence and environmental concerns are important explanatory factors, but the history of the Baltic region appears to be a recurrent underlying component without which the debates would probably have looked substantially different.

1.1 The Structure of the Report

Following the introduction is a brief chapter (2.0) outlining the Nord Stream project; that is, when the planning started, who is involved, which legal frameworks are relevant, and the current state of affairs. The elements included here are those considered necessary for the subsequent analysis, which has been structured by singling out four different interpretations of the Nord Stream project (chapters 3-6). Such a thematic (rather than a country-based) subdivision has been chosen because it enables good coverage of the breadth of arguments that have surged in the multifaceted Nord Stream debate, and it also makes it easier to contrast where, how, and by whom the different arguments have been employed.

Chapter 3 is an analysis of the arguments put forward by proponents of the project, primarily the Nord Stream consortium, Germany, and Russia. First, the official story will be presented, i.e. that this is a *European* project providing energy security for the EU (3.1). Then an alternative explanation is offered, namely that Germany needs gas and that the European focus is only a way to legitimise the project (3.2). Finally, a more historical and theoretical argument, often pushed forward by Germany, will be assessed, namely that the EU-Russian relationship may benefit from the interdependence resulting from pipelines (3.3).

Chapter 4 is an analysis of the view that Nord Stream, from an energy security point of view, divides Europe and strengthens Russia's leverage on the bypassed states. It will first present the main sources of concern, e.g. why an onshore solution through the Baltic States and Poland has not been presented as an alternative to the offshore plan (4.1). Then, Russia's reliability as an energy supplier will be analysed from the point of view of the Baltic States. It will show that since the dissolution of the Soviet Union, Russian energy interruptions have largely occurred in the post-Soviet territory; therefore, it will be discussed whether one can talk of a neo-imperial Russian energy (foreign) policy, and, in the extension of this, how Nord Stream could represent a threat to the Baltic States (4.2). Finally, it will be argued that regardless of Moscow's foreign policy intentions, which are difficult to prove, the most serious threat to these states' energy security is that Russia in the near future may not be able to produce enough gas to cover all of its export commitments, and this would be a bigger threat to small gas markets than to large ones like that of Germany (4.3).

Chapter 5 is an analysis of the military-strategic concerns that have been raised about Nord Stream. It will first explain how and when military issues became relevant in the Swedish debate (5.1), followed by a brief comparison of the Swedish, Finnish and Estonian debates about the pipeline (5.2). Finally, it will offer both a historical and a geopolitical explanation as to why the Swedes and Estonians were openly worried about military-strategic aspects of Nord Stream when the Finns were not (5.3).

Chapter 6 provides a discussion of the environmental concerns regarding Nord Stream that have been shared by most of the littoral states. First, it will explain what is special about the Baltic Sea from an ecological viewpoint, and what the possible impact of Nord Stream may be according to the pipeline critics (6.1). In light of other similar projects, such as the Langeled pipeline in the North Sea, a discussion will follow of whether the environmental arguments have been exaggerated, and whether it is fair to draw the North Sea analogy in the first place (6.2). Finally, it will be shown that foreign policy decisions regarding Nord Stream may have been significantly affected by domestic political disputes in some of the littoral states, and that this may be very difficult to discern if one only looks at the official statements and decisions (6.3).

Since the analysis has been thematically structured, the conclusion (7.0) will, for the sake of clarity, recapitulate the main findings from a more state-based-perspective.

1.2 Source Material and Selection

This report is based on a variety of sources, ranging from first-hand interviews with researchers and government officials in the Baltic Sea region to printed sources such as Nord Stream official documentation, EU data sets, government feedback to the Nord Stream consortium (published on the company website), newspaper articles, and secondary printed analyses. The Swedish debate has largely been traced through Swedish newspapers, and has been supplemented by interview material. German newspapers have provided information about the domestic political situation in Germany, which is key to understand the German stance on Nord Stream. As for the Estonian and Finnish debate (or lack thereof), the author has to a large extent relied on interviews with Estonian and Finnish researchers, as well as statements made by government officials quoted in the international media. Secondary sources and energy-data from the EU have provided important background information particularly on energy security related issues. All quotes from non-English sources, including interviews not conducted in English, are the author's own translations.

2 What is Nord Stream?

Nord Stream, formerly known as the North European Gas Pipeline (NEGP), is a planned 1200 km long dual pipeline for natural gas from Vyborg in Russia to Greifswald in Germany through the Baltic Sea. If constructed, Nord Stream will be among the longest offshore pipelines of the world, and will have the capacity to supply 55 billion cubic metres (bcm) of natural gas each year. The gas will originate in the already developed Yuzhno-Russkoye field, and, later on, in the Yamal Peninsula, Ob-Taz Bay and the Shtokmanovskoye (Shtokman) fields (Nord Stream 2008b).

Figure 1: Nord Stream Pipeline Route (incl. Service Platform Location)



Source: Nord Stream 2008j

2.1 Companies Involved

In 1997 Russia's Gazprom and the Finnish company Neste (later known as Fortum) established a shared company, North Transgas Oy, to examine alternative gas pipeline routes from Russia to Germany through the Baltic Sea. Their 1998 feasibility study, which also included partly land-based routes through Finland and Sweden, concluded that an offshore project would have the best chance of implementation. German companies E.ON Ruhrgas and BASF/Wintershall became associated with the project through agreements of 2001 and 2004 respectively. In May 2005 Fortum withdrew from the project, presumably due to Gazprom's 2004 announcement that the offshore Shtokman gas field would be used for LNG (liquefied natural gas) exports, which would make the Finnish part of the pipeline unnecessary (Riley 2008: 3). Nonetheless, in September 2005 Gazprom, E.ON Ruhrgas and BASF/Wintershall agreed to construct the North European Gas Pipeline. Present at the signing of the agreement were the then Russian President Vladimir Putin and German Chancellor Gerhard Schröder, both of whom had been proponents of the project (Tarnogórski 2006: 104). The North European Gas Pipeline Company, which is today known as Nord Stream AG, was incorporated in Zug,

Bendik Solum Whist

Switzerland, in November the same year with Gazprom as majority shareholder (51%), and the two German companies with a 24.5% stake each. North Transgas Oy was officially dissolved as soon as all information about the project had been transferred to the new firm (Nord Stream 2007a: 4). In November 2007, the Dutch gas company Gasunie bought a 9% stake in the Nord Stream project, whilst each of the two German companies ceded 4.5% of their share (leaving them with a 20% share each). Gazprom thus remains the majority shareholder with its 51% (Nord Stream 2007b). Former German Chancellor Schröder has, since 30 March 2006, been heading the shareholders' committee of Nord Stream AG (Süddeutsche Zeitung 2006c).

2.2 Technical Features, Timeframe and Budget

Nord Stream will have two parallel legs, each of which will have an annual capacity of 27.5 bcm of natural gas. According to the original schedule, construction of the first leg was set to start in January 2008 and finish by February 2010. The second leg is scheduled for construction between 2011 and 2013. Nord Stream AG estimates that full capacity, 55 bcm per year, will be reached in 2013. The gas transmission system will have an estimated lifetime of 50 years, after which it will be decommissioned (Nord Stream 2006a: 2-3).

Originally, the pipeline plans included an offshore service platform, which would be placed northeast of the Swedish island of Gotland in the Swedish EEZ (see triangle in Figure 1). On 8 April 2008, however, Nord Stream AG announced that it had withdrawn its application to the Swedish government for the construction of the platform. The official statement concluded that 'in view of the debate and concerns in Sweden regarding the platform, Nord Stream is pleased that technological advances obviate the need for a platform at the mid-point of the planned pipeline route' (Nord Stream 2008c). Thus, the platform is no longer a part of the pipeline plan, but it is nevertheless crucial to include in this analysis, as it played a decisive role in shaping the Swedish Nord Stream debate.

The cost of the Nord Stream project was initially (in 2005) estimated at €4 billion, but the projected cost has gradually risen and is now (spring 2008) set to €7.4 billion (Nord Stream 2008b; BarentObserver 2008a). According to a spokesperson for BASF/Wintershall, the company assumed as early as 2006 that the cost could rise to as much as €9 billion (Reuters 2007b). It should be noted that these estimates only cover construction costs. Operation-, maintenance- and decommissioning costs are not included, which means that the end total may become significantly higher (Larsson 2007: 34). Although the Schröder government, only weeks before the end of its term, granted Gazprom a €1 billion loan guarantee for the project (Süddeutsche Zeitung 2006d), the financial situation is still not settled. Financing can only be finalised when the final route of the pipeline is ready, which is subject to the consent of the coastal states involved. Nord Stream AG estimates that 30% of the costs will be taken by the shareholders, and 70% will be financed through loans and export credit agencies (Nord Stream 2008f).

2.3 Legal Framework

According to the 1982 UN Convention on the Law of the Seas (UNCLOS) Article 79, 'All States are entitled to lay submarine pipelines and cables on the continental shelf [of another state].' The coastal state may not impede the laying of pipelines *per se*, but it may take 'reasonable measures' to preserve the environment and its natural resources, and the delineation of the pipeline 'is subject to the consent of the coastal State' (UN 1982). Regarding installations and structures in the Exclusive Economic Zone (EEZ), such as the planned service platform, UNCLOS Article 60 gives the coastal state 'the exclusive right to construct and to authorise and regulate the construction, operation and use of' such installations, as well as 'exclusive jurisdiction' over the structure once it has been built (UN 1982).

In addition to UNCLOS, the Convention on Environmental Impact Assessment in a Transboundary Context, commonly known as the Espoo Convention or EIA Convention, sets out an obligation to prepare an Environmental Impact Assessment (EIA) of any project 'that is likely to cause a significant adverse transboundary impact,' including 'largediameter oil and gas pipelines' (UN 1991: 4, 12). The EIA, which in this case will be prepared by the Nord Stream consortium, must include 'possible alternatives to the proposed activity, including a no-action alternative' (UN 1991: 5). Sweden, Finland, Denmark and Germany are so-called Parties of Origin to the Espoo Convention, as the pipeline will pass through their EEZs. Russia would also have been a Party of Origin, had it ratified the Espoo Convention. Currently Russia is only a signatory power but still takes part in the EIA process. Construction permits are given by Parties of Origin when they have approved that the EIA is satisfactory. Affected Parties (such as Poland, Estonia, Latvia and Lithuania) have no legal say in the approval / licensing process, but they may take part in the EIA process and, hence, voice their opinion in the matter (DG Internal Policies 2007b: 4; Nord Stream 2008i).

2.4 Recent Developments and Current State of Affairs

In September 2007, following a Finnish request that Nord Stream AG consider Estonian waters instead of the originally planned stretch through the Finnish EEZ, Estonia rejected the consortium's application for a seabed survey in the Estonian EEZ. Finland wanted an alternative route because it was assumed that the Estonian seabed would be less rocky than the Finnish and would thus be better suited for the pipeline. Estonia's official explanation for the rejection was that the application itself had legal contradictions and could therefore not be evaluated in its current state (Murd, interview). Although Nord Stream AG could have taken the case through the Estonian legal system, or even resubmitted the application, the consortium returned to its original plan and is therefore currently negotiating with the Finnish government regarding the pipeline stretch in the Gulf of Finland (Nord Stream 2007c; Spiegel 2007c).

As of August 2008, construction of the offshore pipes has yet to start, as no construction permits have been granted. In accordance with the Espoo Convention, Nord Stream AG has prepared an EIA, which needs to be

Bendik Solum Whist

approved by the Parties of Origin before any construction can start. On 21 December 2007, the Swedish government was the first party to receive an EIA from Nord Stream AG. Less than two months later, on 12 February 2008, the Swedish Minister of the Environment, Andreas Carlgren (2008), announced that the assessment needed significant improvements before it could be considered, and Nord Stream is thus currently in the process of improving the EIA. The final EIA report to Finland was scheduled for April 2008, but the deadline was missed, and the Finnish Minister of the Environment, Paula Lehtomaki, now expects it to be ready in January 2009 at the earliest. The Russian onshore section, which is to connect to Nord Stream, has been under construction since December 2005 (Reuters 2008b; Gazprom 2005).

8

3 First Perspective: 'Bringing Gas to Europe'

In their recent book Der neue Kalte Krieg: Kampf um die Rohstoffe, the two Der Spiegel-journalists Erich Follath and Alexander Jung argue that the world has entered into 'a new Cold War' - an age of dramatic fights over increasingly scarce natural resources. International politics, they posit, is increasingly determined by questions of energy security, and the 'cards that are currently being dealt' create new winners and losers (Follath and Jung 2006: 9-10). In this context, the EU as a whole has a growing need for external energy supplies, and increased diversification of supply routes. There are several reasons for the increased focus on energy security in the EU, but the 2006 gas dispute between Russian Gazprom and the Ukraine undoubtedly served as a catalyst.¹ Approximately 80% of Russia's gas exports to European markets flows through the Ukraine, and when Gazprom on 1 January 2006 reduced the supply levels to the Ukraine, this also affected Western Europe. According to the International Energy Agency (IEA 2006a: 88) 'about 100 mcm [million cubic metres] that was expected in countries west of Ukraine was not delivered. In addition, Ukraine itself suffered a shortfall of 150 mcm.' Although the supply interruption only lasted three days and was relatively easily coped with through fuel-switching, the interruptions had caused broad concerns in Europe regarding energy security (Stern 2006: 13; EIA 2008: 88).

3.1 The Nord Stream Consortium's Explanation: The EU Needs Gas

According to Nord Stream AG, the planned pipeline through the Baltic will be one – if not *the* – answer to Europe's energy challenge. The official documentation states that 'it is evident that without Nord Stream, the EU will not be able to cover its gas needs. Therefore, Nord Stream is an important contribution to security of supply, as it will meet a quarter of additional import needs of Europe' (Nord Stream 2008d).

Indeed, the development within the EU in the past 20 years shows a clear trend towards increasing import dependency. Whereas both demand and production grew until the mid-1990s, production has since stabilised, and from 2002 it has been declining, whilst the consumption level has kept rising (Figure 2). Gas imports as percentage of consumption rose from approximately 40% in 1994 to almost 60% in 2006 (Figure 3).

A reference to historical developments, although serving a powerful rhetorical point, is not sufficient to warrant the building of a controversial pipeline, but projections of EU's gas import needs show a similar trend. As pointed out by Dieter Helm (2007: 13), 'Gas is the fuel of choice for electricity generation in Europe, and demand is projected to rise steadily over the next decade.' Nord Stream AG, officially relying on data from the IEA, projects EU'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 company, the share of imported

¹ For a thorough analysis of the Russian-Ukrainian gas dispute, see Stern (2006).

gas will rise from 57% in 2005 to 75% in 2015 (Nord Stream 2006b: 4, 2008a). The Nord Stream pipeline will thus be *one* answer to Europe's import challenge.

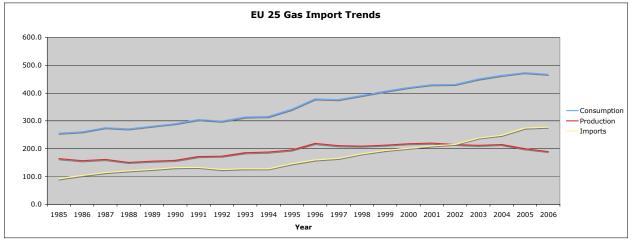


Figure 2: EU 25 Gas Import Trends

Source: BP (2007)

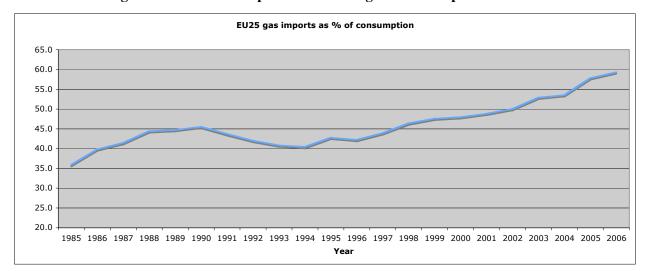


Figure 3: EU 25 Gas Imports as Percentage of Consumption

Source: BP (2007)

It should be noted, however, that the numbers referred to in the Nord Stream documentation do not fully correspond with IEA's *World Energy Outlook 2006*, according to which the annual gas demand in the EU will have risen to (only) 609 bcm by 2015. Not only is this significantly lower than 712 bcm, but, as pointed out by the Swedish defence analyst Robert 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." What the *World Energy Outlook* also includes, however, is an Alternative Policy Scenario, which 'analyses how the global energy market could evolve if countries were to adopt all of the policies

they are currently considering ... [including] efforts to improve efficiency in energy production and use, [and] increase reliance on non-fossil fuels' (IEA 2006b: 161). According to this potential development, EU's annual gas demand may in fact be 38 bcm less in 2015 and 90 bcm less in 2030 than is projected in the reference scenario (Table 1). Larsson (2007: 28) 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.

	2004	2015	2030
Reference Scenario	508	609	726
Alternative Policy Scenario	508	571	636
Difference		38	90

Table 1: EU Natural Gas Demand (bcm/year) - IEA Projections

Source: IEA 2006b:112,183

Regardless of the need to scrutinise the figures presented by Nord Stream AG, few seem to fully deny the need for increased gas supplies to the EU. In March 2006, the European Commission published its Green Paper on energy, A European Strategy for Sustainable, Competitive and Secure *Energy*, which acknowledged precisely that in terms of energy supply there are critical times ahead. Although not using labels such as 'new cold war' or 'war over natural resources,' the Green Paper clearly echoes many of the arguments put forward by Follath and Jung (2006) in Der *neue Kalte Krieg.* To handle the upcoming energy security challenges the Commission sees a need to take several important steps, of which one has proved especially useful as an argument for Nord Stream proponents: diversification of supply routes. Although this is but one point from an exhaustive list of steps the EU should take, it has nevertheless become a very central argument for the Nord Stream consortium, which posits that the new direct energy link between the EU and Russia is an important step on the way to increased route diversification and secure supplies (Nord Stream 2008g).

To underline this point, it is emphasised that the EU Commission has given the pipeline status as a priority project under the TEN-E guidelines (Trans-European Energy Network),² which are meant to help increase competitiveness in the energy market and increase security of supply. By giving priority to certain projects, the EU aims to 'accelerate the implementation and construction of connections and to increase the incentives for private investors' (EU Commission 2006b: 2, 2007: 15). Thus, the TEN-E status is inevitably important for a project of such a scale as Nord Stream, and according to the company website, 'The European Union appreciates Nord Stream as one of the priority energy projects of Euro-

² Although a 'correct' abbreviation would be T-EEN, the abbreviation 'TEN' is used for all Trans-European Networks, followed by a specification of network type, e.g. TEN-E for Energy, TEN-T for Transport, and so on.

pean interest. ... This means that Nord Stream is a key project for sustainability and security of supply in Europe and must be supported by EU-member states' (Nord Stream 2008e).

A few things should be noted, however: Although TEN-E status may be necessary to attract investors in an early phase, it is by no means sufficient and does not automatically imply that the pipeline will be constructed. Several commentators and officials have therefore criticised the Nord Stream consortium of distorting the facts when it refers to widespread EU support. As pointed out by the Swedish parliamentarian Carl B. Hamilton (2007: 24), 'that the project is on the TEN list does neither mean that a final decision for its realisation has been made, nor does it imply that a construction permit has been given.' It should also be noted that the label 'project of European interest' under the TEN-E guidelines does not imply that all of Europe will benefit from it. In fact, many such priority projects are, and have been, more local or subregional (EU Commission 2006c). Finally, a senior official in the Energy Security Policy Division of the Lithuanian Ministry of Foreign Affairs (MFA) has underlined that:

TEN-E is support for a project, but it is not support for a concrete route. It can be built on land, and it would be the same project. ... Nord Stream likes to mention that 'this project is written, marked and underlined as TEN-E, to which all countries agreed', but again, the route can be slightly different, and it will solve a lot of problems. (Lukoševičius, interview).

Nonetheless, Nord Stream is frequently promoted as a pan-European endeavour. During his first visit to Germany as Russian President, Dmitry Medvedev, stated that 'this project serves equally the interests of reliable energy supplies and energy security for all the countries on the European continent' (RIA Novosti 2008a). Medvedev, not surprisingly, echoes his predecessor, current Prime Minister Putin, who on several occasions has made similar statements. The words could, however, just as well have come from former German Chancellor Schröder or his Chief of Cabinet, Frank-Walter Steinmeier, who currently serves as Minister of Foreign Affairs under Chancellor Angela Merkel in a grand coalition of Christian Democrats (CDU/CSU) and Social Democrats (SPD).³ Both Schröder and Steinmeier have argued that Nord Stream is a European-scale project, and underscored that it should be supported by all European states (Süddeutsche Zeitung 2006b, 2006e).

Many expected Merkel to have a different approach to this question than her predecessor; first of all because she has generally been less accommodating towards Russia, but also because she openly criticised Schröder for mixing roles when he started working for the pipeline consortium

³ The coalition was a result of the 2005 German federal election, after which none of the traditional 'blocs' were able to form a majority government. Although the two biggest parties, SPD and CDU/CSU, had been the main competitors in the election, they ended up forming a grand coalition with Angela Merkel (CDU) as Chancellor. Important aspects regarding this government will be discussed in further detail shortly.

after approving the project as Chancellor. Nonetheless, Merkel has done little to satisfy those who criticise the Nord Stream project. During her first meeting with President Medvedev she underscored that her country would keep supporting Nord Stream, which she regarded as 'strategically important for the whole of Europe' (RIA Novosti 2008b). At a conference about Nord Stream's implications for Europe in February 2007, Dr. Frank Umbach (2007: 12) from the German Council on Foreign Relations in Berlin pointed out that there are, in fact, several contradicting factors and policies within the Merkel government. Notwithstanding Merkel's criticism of Russia and Schröder, the German Nord Stream policy has not changed. Although this may seem surprising, the next section will show that certain domestic forces make it difficult to expect otherwise.

3.2 Alternative Explanation: Germany Needs Gas

No matter how much the EU's gas demand is to increase, one cannot escape the fact that Nord Stream will run ashore in Germany, and that the project will serve this state more than any other within the union (the bulk of the gas is earmarked for the German market). According to the 2007 IEA review of Germany, the country's annual gas need was then approximately 92 bcm, of which only 20% was of domestic origin. Russian gas supplies account for some 40% of the total - a share that has been increasing in recent years (IEA 2007: 33, 93). Germany is indeed Russia's main partner among the old EU member states, and the annual volume of imported Russian gas, which was some 40 bcm in 2007, will within a few years exceed 50 bcm. According to Proedrou (2007: 345) there are two main reasons why this relationship is unlikely to change, the first of which is the Nord Stream pipeline. The second reason, he believes, is Gazprom's 2006 commitment to redirect the gas from the Shtokman field in the Barents Sea to the German market instead of the United States. It should be noted that the latter is a long-term plan, as the Shtokman field has yet to be developed. Although Gazprom (2008) claims the field will be operational in 2013, most analysts see this as highly optimistic and hold that the development may take at least 10-15 years (Riley 2008: 7; Godzimirski 2005: 27). Nevertheless, the trend towards increased German dependence on Russian gas is unlikely to change, and it is therefore important to assess if, and why, Germany accepts this development.

In 2000 the German government and energy utilities made an agreement to shut down all nuclear power stations as they age, reaching a complete shut-down of all plants by 2022. As of today, nuclear power accounts for some 12% of the primary energy supply in Germany, and over 25% of the electricity generation (see Appendix). According to the IEA (2007: 8) 'the loss of nuclear power will lead to reduced supply diversity, negatively impacting energy security.' Inasmuch as nuclear energy is a largely domestic resource, it reduces the need to import fossil fuels, such as natural gas. Germany's reliance on Gazprom is therefore likely to increase significantly as a result of the nuclear phase-out. Moreover, it is worth noting that in terms of emission levels, the nuclear shut-down brings serious challenges to Berlin. Even though increasing the use of renewables may help Germany cope with the emission dilemma, the IEA believes it is likely that the phase-out will lead to increased use of coal and gas, and hence, prevent Germany from reaching its emission goals. While gas is more environmentally friendly than coal, it is nonetheless a fossil fuel and not emission-free. Based on these considerations, the agency thus 'strongly encourage[s] the government to reconsider the decision to phase out nuclear power' (IEA 2007: 9).

This dilemma has caused much debate within the grand coalition of the Christian Democrats (CDU/CSU) and the Social Democrats (SPD). It was the latter that, whilst in government with the Green Party, agreed on the nuclear phase-out, and the party still stands by its decision. CDU/CSU, however, has been somewhat critical of the plan, and this has inevitably led to tensions within the government on questions of dependence on Russia, what a climate-friendly energy mix should look like, and how electricity and gas prices can be kept low. Spiegel (2007a) concludes that on questions of energy 'the views of Merkel's Christian Democrats differ from those of the Social Democrats on virtually every important issue.' If this was not discernible during the 2006 Russo-Ukrainian gas dispute, it became particularly apparent following the 8-10 January 2007 Russo-Belarusian energy dispute, during which Russia halted oil deliveries through the Druzhba-pipeline, which passes through Belarus and supplies Germany with 20 per cent of its annual oil imports. The reason for the disruption of oil supplies was a commercial dispute between Moscow and Minsk, which was related to Russian export tariffs on oil to Belarus, and the transit fees demanded by the latter. On 9 January 2007, when the dispute was still unsettled, Chancellor Merkel stated that, first of all, it was 'not acceptable for energy transit or supplier countries to halt deliveries without consultation,' and secondly, that 'we must think about the consequences of shutting down nuclear power plants' (Deutsche Welle 2007). As late as June 2008 Merkel reiterated this position and argued that 'the phase-out decision was absolutely wrong' (WNN 2008a). The Chancellor's and CDU/CSU's problem, however, is that SPD will not budge on the phase-out plan. For instance, the relationship between the Minister of Economics, Michael Glos (CSU), and Minister of the Environment, Sigmar Gabriel (SPD), has been described as 'an embittered small-scale war' over energy issues within the government (Spiegel 2007a). As of August 2008 the German government has not changed its nuclear phase-out policy, and this may also help understand why Berlin's stance on Nord Stream has persisted despite Merkel's tougher line with Russia. In light of the effect that Russia's energy disputes with neighbouring transit states has had on Germany's perception of energy security, and considering the current improbability of a change in the nuclear phase-out plan, the pipeline through the Baltic Sea makes much sense.

Another contributing factor is the strong energy lobby in Germany. First, the two second-largest shareholders of the Nord Stream consortium, E.ON Ruhrgas and BASF/Wintershall, are both German companies, and they inevitably have a strong economic interest in the project. Second, Lucas (2008: 19) has argued that Germany indeed has a 'pro-Russian business lobby that has beguiled the foreign-policy establishment.' Decades of trade and investment in Russia have made many German companies willing to go to great lengths to make sure Russo-German relations remain friction free. So even if Chancellor Merkel, for political reasons, wanted to lead Germany in another direction on the pipeline

issue, she would find herself pressured by 'a strong business lobby that wants good relations with Russia no matter what' (Lucas 2008: 189, 226).

In light of the above, Germany's own needs can hardly be trivialised when assessing the rationale behind, and arguments for, the Nord Stream pipeline. And even though there is a persistent *European* focus amongst pipeline proponents, one might ask whether Nord Stream would ever have left the drawing board had it not been for the current energy dilemma facing Germany. Although certain factions within the German political sphere, as well as analysts outside Germany, are concerned about too much dependence on Russia, the current government deadlock makes Nord Stream stand out as a good solution. Furthermore, the dependence–argument is not a one-sided one, and the question of mutual dependence – or *inter*dependence – has been central in this regard. The following section will explore how the concept of interdependence can serve as a normative argument when discussing EU-Russia relations generally, and Nord Stream specifically.

3.3 Overarching Assumption: Harmony through Interdependence

In an October 2006 interview, President Putin was asked if he could understand the concern some Germans have about becoming too dependent on Russian gas supplies, to which he responded:

No, I don't understand that. It is artificially politicised. There are people that are trying to heat up this issue to gain from it politically. These people are either provocateurs or very stupid. I say this quite often, even if it sounds harsh. It is, however, the fact that when we have a common pipeline system, we are equally dependent on each other. (Süddeutsche Zeitung 2006a).

The interdependence argument is not a new one, neither with regard to gas transmission systems, nor related to trade in general. What Putin refers to in his statement is that pipelines, once constructed, are stationary and do not allow for the gas to be sent elsewhere on a short notice. Although Liquefied Natural Gas (LNG) can be quickly redirected, it is currently no competitor to pipeline gas over shorter distances. Because of the expensive liquefaction process, as well as the need for specially designed ships, LNG is only a real competitor to pipeline gas when the transportation distance is over 4000 km onshore, or 1500-2000 km for sub-sea pipelines (Kasekamp et al. 2006: 22). Furthermore, LNG currently only accounts for some 10% of the global gas supplies, and it is not likely to compete with pipeline gas any time soon (Helm 2007: 15-16). Proedrou (2007: 343) has emphasised that EU-Russia energy relations are characterised by lack of feasible alternatives for both sides. About 50% of all Russian energy exports go to the EU, which in turn has Russia as its decidedly most important supplier. In 2006, the EU imported some 33% of its crude oil and 42% of its natural gas from Russia. By comparison, the corresponding numbers for Norway, which is the second-largest exporter of oil and gas to the Union, were 16% and 24% (EU Commission 2008). Had Russia had the infrastructure in place to divert its energy sources to the expanding markets in Asia, the EU would have a better reason to worry. However, since this is currently not the case, Proedrou argues, 'Moscow has no other option but to sustain its energy trade with the EU ... Any other option would entail a tremendous loss of income.'

Therefore, Putin may talk about mutual dependence stemming from the nature of pipelines, and from this viewpoint the Germans may have little reason to worry. This can be seen as a descriptive argument of interdependence, but there is also a normative one, which significantly predates the emergence of gas pipelines, namely that interdependence fosters peace. The idea that trade can create amicable relations amongst states is not new; it has existed for centuries and has been promoted by a wide range of thinkers and statesmen, such as Hugo Grotius, Baron de Montesquieu, Adam Smith and Richard Cobden. The notion is that mutually beneficial exchange – trade – creates a condition in which conflict becomes less likely because the parties involved gain more from the commerce than from any potential hostilities. In the words of Montesquieu, 'peace is the natural effect of trade' (cited in Polachek 1997: 307).

As regards EU-Russian energy relations, the 'interdependence fosters' peace'-argument has been particularly popular in Germany. Foreign Minister Steinmeier, for instance, has asserted that Europe needs to deepen its energy and trade relations with Russia in order to ensure amicable relations. Not unlike Willy Brandt's Ostpolitik of the 1970s, the mantra seems to be 'engage Russia' to create harmony (Rahr 2007: 141). Nord Stream, from this point of view, represents an important step along the way towards strengthened economic ties between the two parties, and hence, peaceful coexistence. Indeed, parallels have been drawn to the European integration process following the Second World War. In the words of the former Swedish ambassador to Russia, Sven Hirdman (interview), 'The more economic and industrial cooperation we have in Europe, the better. Nord Stream is comparable to the European Coal and Steel Community [ECSC] back in the days.' And just as war between Germany and France is unlikely today, the assumption is that similar economic integration with Russia will reduce the chances of EU-Russian conflict.

Nonetheless, some have questioned the accuracy of the ECSC-analogy. Larsson (2007: 29), for instance, argues that since the Russo-German interdependence is quite asymmetric and Moscow is aiming at more independence, 'it is questionable whether it will be a security provider in the same way as the Coal and Steel Union in Europe was between Germany and France.' It is of course central that there is balance in an interdependent relationship for it to promote entirely peaceful relations. As pointed out by Keohane and Nye (2000), any asymmetry may be exploited by the least dependent actor in order for him to gain more from the interdependence. This, in turn, means that interdependence may lead to both cooperation and conflict, but it is not always straightforward to assess which of these it will be (Proedrou 2007: 332). Thus, Larsson (interview) calls for European caution in the EU-Russian energy relationship. With regard to Nord Stream and the interdependence argument, he believes this is more a question of how one can legitimise such a project rhetorically. In reality, he holds, it is unlikely that German politicians believe that the Russo-German relationship is a completely balanced one. Moreover, Germany's position as a priority partner for Russia should not be exaggerated, especially in light of the Russo-Belarusian energy dispute, before which Moscow did not warn Berlin. Larsson sees this as an example that Germany is not shielded from potential problems with regard to Russian energy. Hirdman (interview), by contrast, does not believe that the asymmetry is so dangerous. Like Proedrou (2007), he focuses on the *mutual* dependence and lack of good alternatives for both sides, and argues:

It depends on how one sees Russia. If one believes that Russia is an aggressive actor that wants to turn off the gas supply to Europe, then, of course this is dangerous. But if one has another image of Russia, namely that it is a European state that is aiming at its economic and political development, and that is being globalised and modernised, then it is not that dangerous. We are always getting back to the 'images of Russia'. (Hirdman, interview).

The point about diverging images of Russia will be discussed in more depth below, but for now it is worth mentioning that such images are very much a result of different historical experiences, and the same can be said about the interdependence argument. Director of the Estonian Foreign Policy Institute, Andres Kasekamp (interview), underlines that from an Estonian point of view, the prospect of more EU dependence on Russia is a frightening one, and regarding the Germans' argument about interdependence, he asserts that:

Apparently this is some deep and grand way of thinking in the German foreign ministry ... And it seems to me that we [Estonians] are accused of making our decisions based on our history, but ... the Germans are also making their decisions based on *their* history. And the wrong history lesson that they are drawing on interdependence is that they see everything through the prism of the successful ... reconciliation of Germany and France after World War II in Europe ... And now they hope to overcome the differences with Russia by becoming more closely intertwined ... But although this theory sounds nice, I think it has pretty serious flaws, not the least of all is that Vladimir Putin is not Konrad Adenauer. (Kasekamp, interview).

Thus, the interdependence argument may not only be a theoretical and a descriptive one, but also strongly embedded in the historical experiences of those using it. The Germans would probably not have used the interdependence argument if their history had taught them that economic integration 'does not work', or perhaps more importantly, if their historical energy relations with the Russians had been highly unstable. By and large, there have been few problems in Russo-Germany energy relations. The importance of this will be further highlighted in the next chapter, which analyses *inter alia* Russia's reliability as an energy supplier. The important issue here is that few, if any, of the EU members in Centraland Eastern Europe have an energy history with Moscow similar to that of Germany. On the contrary, their historical experiences have taught them that very few positive things derive from dependence on Moscow, and this is one of the reasons why they do not accept the interdependence argument for the EU as a whole.

4 Second Perspective: 'Dividing Europe'

Unfortunately for the proponents of Nord Stream, the implementation of the project has not gone ahead as rapidly as planned, much due to stark criticism from littoral states and actors that do not accept the arguments outlined in the previous chapter. For instance, the project's 'pan-European' status has been called into question on a number of occasions, and 'critics within the European Union have complained that Germany is guilty of putting its own interests above those of other member states' (BBC 2005a). At a conference in Brussels in May 2006, the Polish Minister of Defence, Radoslaw Sikorski, went so far as to compare the project with the Molotov-Ribbentrop Pact of 1939, which effectively divided Poland between Germany and the Soviet Union (Godzimirski 2007: 13). Similarly, Vytautas Landsbergis, former Lithuanian president and currently Member of the European Parliament, has called the project a Russo-German pact and argued that Russo-German cooperation, throughout history, has always led to problems for the countries between them (SvD 2005). This chapter will first discuss the main concerns voiced by pipeline sceptics who believe Nord Stream is part of a broader Russian energy-political strategy (4.1). Then, a discussion will follow of whether it is fair, based on historical examples of supply interruptions, to assume that the Kremlin uses energy as a political lever or even pursues a 'neoimperial' energy policy (4.2). Finally, it will be argued that the question of intent may in fact not be the most crucial one regarding Russia's reliability as an energy supplier. The main problem - at least in the short run - is more likely to be Russia's inability to balance production, on the one hand, and domestic consumption and export commitments on the other. If Nord Stream is constructed, such a scenario may be just as big a threat to states of the former Eastern Bloc as any hostile intentions.

4.1 Main Sources of Concern

In his recent book, The New Cold War, Edward Lucas (2008: 218) states that 'though Nord Stream's backers insist that the project is business pure and simple, this would be easier to believe if it were more transparent.' First, the pipeline consortium chose to be incorporated and have its base in Switzerland, whose strict banking secrecy laws makes the project less transparent than it would have been if based within the EU. Second, the Russian energy sector in general lacks transparency, and the majority shareholder of the Nord Stream consortium, Gazprom, is no exception. Larsson (2007: 32-33) points out that the Russian energy giant has 'a tradition of being related to rather dubious companies ... [and that] Gazprom and Nord Stream could use shady subcontractors, intermediaries or subsidiaries (that may be registered offshore) and thereby dodge environmental or other responsibilities.' Third, many have questioned the project's financial situation, which, as of June 2008, is still unsettled. As mentioned, the official estimated costs have gradually risen from an initial €4 billion in 2005 to €7.4 billion in April 2008, and according to Dr. Alan Riley (2008: 5-6) the costs may reach as much as €12 billion 'given the increase in steel prices and energy services, operational costs, environmental requirements and seabed preparation.'

The almost doubled price tag and the prospects of further cost increases, combined with Nord Stream AG's persistence that the project shall and will be implemented, has made opponents of Nord Stream question whether there are political motivations involved that trump the economic ones. Rhetorically, they are asking why an onshore solution, which may be considerably cheaper, has not been chosen. Indeed, even states that are officially positive towards the project, such as Finland, have asked why the consortium in its Environmental Impact Assessment (EIA) has not considered any land-based alternatives. In its answer to the consortium's Project Information Document of 2006, the Finnish Ministry of Foreign Affairs declared that:

The project's EIA programme and the affiliated 'Project Information Document' only propose a so-called '0-alternative' or the alternative that no pipeline will be constructed as the alternative required by the EIA procedure. It would have been positive from the viewpoint of the EU solidary energy policy and development of the EU natural gas market to also take into account the interests of the other Baltic Sea states in planning of the project, either in the form of an alternative pipeline routing or in that of connections to any states interested' (MFA Finland 2007: 1).

A similar critique and call for alternatives can be found in corresponding official documents from Estonia, Lithuania, Poland and Sweden, as well as in statements from several non-governmental agencies in the Baltic Sea region (MFA Estonia 2006: 1; MoE Lithuania 2007: 1-2; MoE Poland 2007: 2; SEPA 2007: 2; Nord Stream 2008k). There are mainly two alternatives that have been proposed in this regard, namely, the Yamal 2 pipeline and the so-called Amber pipeline, both of which are illustrated in Figure 4.

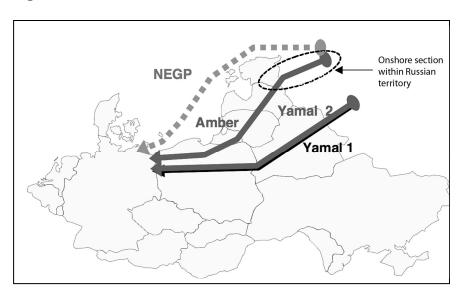


Figure 4: Alternative Onshore Routes -'Yamal 2' and 'Amber'

Source: Janeliunas & Molis (2005: 219). (Oval and 'onshore section' text added)

The Yamal 1 pipeline currently brings natural gas from Russia via Belarus and Poland to Germany, and Yamal 2 is a proposed additional pipeline along the same route. Several commentators have claimed that this option would be considerably cheaper than the offshore pipeline in the Baltic Sea (Umbach 2007: 11, Riley 2008: 8); not only because laying an onshore pipeline is cheaper in itself, but also because the first Yamal pipeline was constructed in such a way that it would be possible to add a second pipeline at a later stage (Murd, interview). The counter-argument from the Nord Stream consortium is that there is a need to become independent of politically unstable transit states, and that a second Yamal pipeline will not contribute to route diversification (Nord Stream 2006b: 28). In light of the Russo-Ukrainian and Russo-Belarusian energy disputes of 2006 and 2007, it may appear logical to circumvent these transit states to ensure stability of supplies to the EU. But, as the opponents argue, this does not automatically imply a need for a sub-sea pipeline, which may cost more and is politically controversial. Therefore, as early as in 2004, Poland and the Baltic States proposed a third alternative, Amber, which would bring Russian gas through Latvia and Lithuania to Poland, where it would join the Yamal route to Germany (Götz 2006: 13). The Amber pipeline would thus contribute to route diversification and bring Russian gas to Germany and the EU without passing through non-EU transit states. Larsson (interview) believes that by choosing Amber over Nord Stream, one would get all the benefits at a lower overall cost; that is, if the main goal is energy security. According to the First Secretary in the Energy Policy Division of the Lithuanian MFA, Tomas Grabauskas (interview):

Amber, financially, would be three times less expensive than the Nord Stream project. If you look from an economical point of view, Germany and Russia are choosing a three times more expensive project, so it looks like it is politically motivated ... When we have discussions with the Russian diplomats, they are saying that they would like to avoid transit countries that are not reliable ... They are referring to Belarus and Ukraine, and we are asking, have you ever had any problems with Latvia or Lithuania? No, they have not.

It is, of course, important to consider Nord Stream AG's response to the scepticism outlined above. First, Chief Executive of Nord Stream, Matthias Warnig, has stated that 'the shareholders gave our company the order to build an offshore pipeline through the Baltic Sea and in that they are investing millions of Euros ... The order is not – and it is not up for debate - to have an overland route as an alternative solution for Nord Stream' (Reuters 2008a). Second, during a European Parliament petition hearing on the pipeline project on 29 January 2008, the consortium claimed that 'an onshore pipeline, whilst cheaper to construct, would be much more expensive to maintain over its lifespan due to the necessity of compressor stations every 200 km along the route' (Nord Stream 2008h). It was also pointed out that these calculations did not even include transit fees, which would push the cost even further. As argued by the editorial of the Swedish newspaper Expressen (2006), 'That the Baltic States and Poland would rather see the pipeline laid within their territory has to do with economic considerations. They are dreaming about shining millions in transit fees, and that is not an argument that should be supported.'

Whilst this may serve as a powerful rhetorical point, the actual numbers must be assessed. Although transit fees are commercially confidential,

which makes exact calculations difficult, Riley (2008: 7) has produced some estimations based on the current Ukrainian transit fees (which have had some publicity). Currently, gas flows through the Ukraine at the price of US \$1.60 per mcm per 100 km, a transit fee that was negotiated in 2006 and will be frozen until 2011 (World Bank 2006: 1). For a 1200 km pipeline transporting 55 bcm of natural gas per annum, the yearly cost would be about \$1 billion (some €630 million).⁴ But since a certain part of an onshore stretch would be on Russian territory (see Figure 5), the annual transit cost would probably be lower. Moreover, there is great uncertainty regarding how quickly the Shtokman and Yamal peninsula gas fields can be developed and become operational. So even though the first Nord Stream leg may successfully get its gas from the Yuzhno-Rosskoye field, either of the two former will have to supply the gas for the second leg, and this may not happen until 2020 at the earliest. Hence, Riley concludes, 'for the next decade at least the transit fee gain for Nord Stream ... is likely to be closer to \$300 million than \$1 billion per annum, hardly a substantial offset for an offshore pipeline costing upward of €12 billion (US \$17.5 billion)' (Riley 2008: 7). Furthermore, Mati Murd (interview) in the Estonian MFA underlines that lumping the Baltic States and Poland together in the transit fee question is inaccurate, since none of the proposed land-based alternatives involve Estonia as a transit state. Thus, he holds, it is not correct to argue that the Estonian position is based on economic considerations, as suggested by the Swedish newspaper Expressen. As regards the two other Baltic States and Poland, Yamal 2 or Amber would inevitably involve transit fees, but few believe that their considerations are purely based on these. Acting Director of the Centre for Strategic Studies of Lithuania, Žygimantas Vaičiūnas (interview), argues that even though it would be fairly easy to calculate how much his country loses by not becoming a transit state, the Lithuanian opposition against Nord Stream is to a much larger extent based on energy security calculations.⁵ The same can be claimed for the other bypassed states, all of which have only one possible gas supplier, Russia. Although they are not equally dependent, Nord Stream AG's seemingly endless willingness to accept higher costs for its offshore pipeline has led many to believe that there are political motivations behind the project. The German newspaper Berliner Zeitung (2007), for instance, has noted that 'not even the costs, which have skyrocketed, have given the consortium second thoughts ... Gazprom, in particular, is insistent on building the pipeline, as it will decrease Russia's dependence on transit countries like the Ukraine, Belarus, and Poland.'

Evidently, there is concern that Nord Stream is part of a broader political strategy. In bypassing the Baltic States and Poland (as well as the Ukraine and Belarus), Russia increases its leverage on these states, and there is fear that should a bilateral or regional dispute occur, they may become

 $^{^4}$ Based on June 2008 exchange rates (1 USD \approx 0.63 EUR, or 1 EUR \approx 1.6 USD).

⁵ Officially Lithuania opposes Nord Stream because it may jeopardise the Baltic Sea environment, but Vaiciunias and other commentators hold that the environmental arguments are in reality secondary to the energy security ones. This point is discussed in subchapter 4.3.

victims of supply interruptions and other strong-arm tactics (Larsson 2007: 7; Baran 2006: 38). The important question is whether such fears are warranted or not. According to ex-Chancellor Schröder 'the EU is hostage of a nationalistic anti-German, anti-Russian policy' (Welt 2007a), and he cannot understand such fears, as 'there are no safer energy suppliers than Russia' (Spiegel 2007b). Robert Larsson (interview), by contrast, holds that 'if Russia had been like Norway, then this would all be much simpler; Norway does not cut off gas supplies to Sweden, for instance.' These statements clearly rest on different assumptions, and the next section will therefore discuss whether there is reason to be wary about Russia's intentions and energy policy.

4.2 Russian Energy Policy: Neo-Imperialism in the Making?

The question of what drives Moscow's energy policy is a complex one. Like any other energy exporter, Russia must always make both economic and political considerations when engaging in infrastructure projects. With respect to Nord Stream, the crucial question is how these considerations are balanced. Even though the pipeline will bypass certain states and connect directly with the German market, this does not immediately mean that Russia will use energy supplies to blackmail Eastern Europe. As with any other capability energy only becomes a lever when used as such (Larsson 2006: 177). Regarding Nord Stream it is therefore important to ask how Russia sees the rest of Europe. In an interview with the Russian newspaper Kommersant (2008b), Vice President of the European Parliament, Marek Siwiec, stated that 'for Russia, there are 'good guys' in the EU, with whom she deals, and 'bad guys' with whom she does not deal ... Russian elites want to maintain a certain imperial entourage, and an empire should have a large army and influence its neighbours.' Similarly, the Director of the International Centre of Defence Studies in Estonia, Kadri Liik, argues that:

Russia does not regard Estonia as a country similar to Finland. It is like we are bound to be someone's vassals, and now they think that happens to be the United States. They do not see us as a country capable of independent thinking. Whereas Finland – and this is really an exception – Finland is a small country next to Russia that has managed to convince Russia that they can act independently ... And that does not even have to do with size; I think their opinion about Poland is the same as the one about us. (Liik, interview).

Although the Kremlin would probably deny that EU members of 'old' and 'new' Europe are treated differently, or that energy is being used for political purposes, Larsson (2007: 77-81) claims that Russia has used energy as a political tool on more than 55 occasions since 1991. The aim has allegedly been to affect policy changes in the targeted countries, and the 'weapons' used have included supply interruptions, explicit threats, coercive pricing policies, and hostile take-overs of infrastructure or companies. For instance, in January 2003 Russia suspended its oil deliveries to the Latvian port of Ventspils. The official justification for the cut-off was that the Latvian tariffs were too high, and that it was more reasonable to ship the oil from the Russian terminal in Primorsk in the Gulf of Finland. However, critics noticed that the embargo coincided perfectly with Latvia's refusal to sell its oil transit company Ventspils Nafta to the Russian oil company Transneft, and many saw the oil cut-off as Russia's way of punishing Latvia for insubordination. This suspicion was not reduced when the Vice President of Transneft, Sergei Grigoriev, blatantly declared: 'Oil can only flow from Russia. You can of course sell [the port] to Westerners, but what are they going to do with it? Turn it into a beach?' (cited in Baran 2006: 38).

Lithuania has had similar experiences with the Russians. Between 1998 and 2000, Transneft cut off oil supplies no less than nine times in order to stop the Lithuanians from selling their port, pipeline and refinery to the American company Williams International (Hamilton 2008b: 120-121). Moreover, in July 2006, deliveries of crude oil through the Druzhba pipeline to the Mažeikių Nafta refinery were abruptly stopped. The refinery is the biggest commercial actor and most important taxpayer in Lithuania, so the economic effect of the cut-off was significant. As with the Ventspils cut-off, this one also followed a Russian failure to gain control over energy infrastructure. In the preceding months, the Polish energy company PKN Orlen had, through open auctions, acquired 84.36% ownership of Mažeikių Nafta at the expense of Russian companies. Therefore, when oil supplies to the refinery were stopped on 29 July 2006, officially due to a leak on Russian territory, suspicion grew that this was an intentional cut-off (Baran 2006: 133; 2007: 14-15). As of 2008, the pipeline is still broken, and it is not likely that it will be repaired. On 1 June 2007, the Russian Energy and Industry Minister Viktor Khristenko announced that Russia in the future would supply the Mažeikių refinery exclusively via the Baltic Sea, which significantly raises the cost for Lithuania and PKN Orlen. Interestingly, the announcement was made the day after Vilnius declared that it wanted to join the U.S. plan for a missile defence system in Europe (Stratfor 2007). Although Moscow would probably argue that its decision is based purely on economic considerations, few Lithuanians are likely to be convinced that the timing of the announcement was a coincidence.

In Estonia, a Russian gas cut-off occurred in 1993 after the implementation of a new law on citizenship, which was aimed at clearing up the legal status of non-Estonian residents. After its recent independence Estonia had only granted automatic citizenship to those whose families had been living in the country before the annexation by the Soviet Union in 1940; others could become legal Estonians after a two-year waiting period and by passing a demanding language test. As a result, some 600,000 people (almost 40% of a population of 1.6 million) had become stateless. Under the new law all non-Estonians, most of whom were Russians, would have to apply for a residence permit within two years or else leave the country. The law infuriated Moscow, which condemned it as 'a form of ethnic apartheid' (New York Times 1993), and when gas deliveries were subsequently halted it was difficult not to interpret it as a form of retaliation. Perhaps to no surprise, Gazprom's official explanation for the cut-off was economic, namely that Estonia had unpaid debts of 10.5 billion roubles (US \$11 million) and that recent negotiations with the Estonian government had not given the 'desirable results' (New York Times 1993).

Besides this incident there have been few energy-related problems in the Russo-Estonian relationship. This may stem from the fact that Estonia is

significantly less dependent on Russia than the other Baltic States, and that the Russo-Estonian relationship is less strategic than Russia's energy relations with the two other Baltic States. Latvia, for instance, has an underground storage facility for natural gas, which supplies the St. Petersburg region during wintertime, and Lithuania transports gas from Russia to the exclave Kaliningrad region.⁶ Nonetheless, the Russo-Estonian relationship per se is not friction-free, as witnessed when the Estonian government in April 2007 moved a Red Army war memorial from the centre of Tallinn to a military cemetery. The act infuriated the Kremlin, which did little to prevent the Estonian embassy in Moscow from being besieged by pro-Kremlin youth groups. Not only were the protestors able to use loudspeakers to blast non-stop Soviet-era military music into the embassy, they also significantly damaged the outer walls and attacked the cars of the visiting Swedish ambassador and the Estonian ambassador (New York Times 2007; Socor 2007). Furthermore, following the events in Tallinn. Russia significantly reduced its use of Estonian railways and ports for its export goods, which had a noticeable economic effect. In June 2007 the port of Tallinn handled 17.5% less freight than the year before, and by September the volume of Russian goods being transported with Estonian railways had dropped 30% since the incidents in April/May, resulting in 200 rail workers losing their jobs. This development is unlikely to be a result of business fluctuations alone, and it shows that although the former Soviet states are not equally dependent in terms of energy, they may be susceptible to other forms of pressure (Stupachenko 2007). Although it may be difficult to prove that the economic development after the bronze soldier incident was not coincidental, the Kremlin's inaction during the siege of the Estonian embassy highlights the tension between the two states and underlines how strongly history and emotions are present in Russo-Estonian (and Russo-Baltic) relations.

The examples from the Baltic States are a few out of many similar incidents in Russia's neighbouring countries. Supply interruptions such as the ones mentioned above, have primarily occurred in states within the former Soviet territory (the CIS and the Baltic States), and this has led some to argue that there is a neo-imperial slant to Russia's energy policy (Salukvadze 2006). Hedenskog and Larsson (2007: 9), for instance, argue that 'a key strategic goal for Russia is to keep and restore the former CIS area intact as an exclusive zone of Russian influence.'

However, the former British ambassador to Russia Sir Roderic Lyne (2006: 9) does not consider 'neo-imperial' an accurate description. He characterises the actions of Russia's energy companies in the post-Soviet space a 'post-imperial hang-over not wholly unlike the British experience for a generation and more after the Second World War.' Similarly, the Director of the independent Institute of Energy Policy in Moscow, Vladimir Milov (2006: 15) uses the term 'post-imperial syndrome' and describes the Russian energy diplomacy as 'highly unpredictable.' In contrast with those who talk of neo-imperial aspirations, he does not believe that Moscow has a clear long-term strategy on how to use energy

⁶ These issues are discussed in depth in the next subchapter.

for political purposes. Furthermore, Hirdman (interview) argues that 'the Russians have learnt from their mistakes and realised that these kinds of actions will not benefit them in the long run. So, during the latest dispute with the Ukraine, they did not turn off the gas but tried to negotiate a deal.'

As already indicated, the Russian energy companies always seem to have reasonable and *economic* explanations at hand when energy supplies are halted, and even if intentions are hostile they can hardly be proven. The Baltic and Polish fears regarding Nord Stream can therefore easily be dismissed as unwarranted by simply asking: 'Why would anyone spend billions of Euros on a pipeline, and then cut off supplies to the bypassed states? It does not make any economic sense.' Nonetheless, it can also be argued that the Balts, based on their recent energy history with Russia, cannot be expected to react differently to Nord Stream. Just like the Germans' recent historical experiences have taught them that Russia can be a reliable partner, the Baltic States' recent history has taught them quite the opposite. This, in turn, helps explain why the German argument of interdependence and stronger ties with Russia is not accepted by the Baltic States. Moreover, it should not be forgotten that Germany is a giant in the European context. With a population of 82.3 million and the world's third largest economy (2007) - almost 40 times the size of the three Baltic economies combined, and 2.5 times the size of the Russian economy -Germany has a far better chance at balancing Russia than its smaller eastern neighbours (World Bank 2008: 1-2). This fact is closely linked to the topic of the next sub-chapter, which assesses another possible threat related to Russia as an energy supplier that does not involve intentions, namely that Russia in the very near future may not have enough gas for everyone. It will be shown that should this scenario unfold, Nord Stream may in fact pose a significant threat to some of the countries east of Germany.

4.3 The Real Threat: A Coming Russian Gas Deficit

There is little doubt that Russia has abundant natural gas resources. According to BP Statistical Review of World Energy 2008, the Russian Federation possesses the largest proven gas reserves of the world: almost 45 trillion cubic metres (tcm) – some 25% of the world total (177 tcm). The problem, however, is that the Russian gas sector for decades has suffered from underinvestment. Coupled with stagnating production in existing fields, fast-growing domestic consumption, and increasing export commitments, this leads to grim projections for the near future (Mandil 2007: 5; IEA 2006c; Mäe 2007: 106; Riley 2006). In 2004 Russia had a domestic gas deficit of 69 bcm, and by 2010 the deficit may be significantly higher, as indicated below.

	2004 (bcm)	2010 (bcm)
Gazprom's gas production ^a	545	550
Gazprom's export to Europe/CIS ^b	191	312 ^c
Remaining volume for domestic consumers	354	238
Russia's domestic demand	402 ^d	469 ^d
Gap	69	231 ^d
		(202) ^e
Gas deliveries from Central Asia ^f		105
Total gap		126
		(97) ^e

Table 2: Projected Russian Gas Deficit

^a Without new Yamal fields, optimistic forecast

^b Excluding Asian exports

^c Includes 200bcm to Europe & 112bcm to CIS

^d Probable scenario, 4.3% growth

^e Reduced scenario, 2% growth

^fBest possible scenario

Source: Milov et al. (2006: 305)

Chairman of the Board of the Russian electricity company RAO UES, Anatoly Chubais, therefore believes Russia should focus less on exports and more on the needs of the domestic market. 'We have this western stream, northern stream, south stream ... What I believe we need is a Russian stream' (BarentsObserver 2008b). Robert Larsson (interview) makes a similar point:

If one only looks at what Europe needs, then that is only one side of the story. But if you turn it around to look at what Russia is able to deliver, then you see that it may be very difficult for the Russians to supply sufficient amounts of gas. Then you might ask if we need South Stream [another planned Russian gas pipeline], the existing pipelines, LNG and Nord Stream, when there is too little gas on the other side. There will be an excess capacity in the export pipelines, and too little capacity in production pipelines.

Mati Murd (interview) in the Estonian MFA explains why this is crucial for the Baltic States, or any other small state highly dependent on Russian gas: 'The main issue is that all the Baltic countries, as well as Finland, have only one supplier, which is Russia. Technically, we are not connected to the rest of Europe.' Indeed, these states are 100% dependent on Russia for their natural gas supplies, which means that any supply interruption, regardless of the reason, cannot be compensated for by buying similar amounts of gas elsewhere. It is important to keep in mind, however, that natural gas is not equally important for all these countries (see Appendix).

Finland, for instance, has a relatively diverse energy mix with five different fuels each accounting for 10% or more of the total supply – gas

having the lowest share of 10%. The country's energy import dependence (54.6%) is only slightly above the EU average (53.8%, see Table 3), and since Finland is currently building its fifth nuclear reactor and planning a sixth, this dependence may even decrease in the near future (Vaahtoranta and Murd interviews). In Latvia and Lithuania, by contrast, the share of gas is significantly higher -30% and 29% respectively - and energy import dependence is also higher than the EU average. Latvia's energy security, and use of gas, depends much on the country's gas storage facility, Incukalns, which is filled with Russian gas in the summer and supplies Latvia, Estonia, and Russia during wintertime. Although the facility gives Latvia some security of supply, it also contributes to dependence on Russia, and it should be noted that Gazprom owns most of the gas stored there (Kasekamp et al. 2006: 21; Baran 2006: 29). With regard to Nord Stream, some have argued that the reason why Latvia gradually has appeared less critical about the project than Estonia and Lithuania is the prospect of a spur pipeline from the Nord Stream that could connect with the gas storage facility and thus enhance Latvia's energy security. This, however, is not a part of Nord Stream AG's official plans (Welt 2007b; Mäe interview, Kasekamp interview).

For Lithuania, the main problem is that nuclear energy, which up to now has contributed the most to the primary energy supply, will soon be affected by the 2009 shutdown of the Ignalina nuclear power plant. The two reactors at Ignalina have since the days of the Cold War supplied Lithuania with most of its electricity, but as a condition for Lithuania's accession to the EU, the country would have to close the two Soviet-era nuclear reactors. The first was shut down in 2004, the result of which has been increased energy import dependence (as reflected in Table 3), and the decommissioning of the second reactor will undoubtedly exacerbate this tendency. A new reactor is under planning but it will not be operational before 2015-18 at the earliest, resulting in a significant short-term energy deficit (Baran 2006: 18, WNN 2008b). According to the Acting Director of the Lithuanian Centre for Strategic Studies, Žygimantas Vaičiūnas (interview) Lithuania's gas demand will increase by approximately 75% when the second Ignalina reactor is shut down, and this may help explain why there is so much concern about Nord Stream. Vaičiūnas argues that although the Lithuanian government officially opposes the project because of its potential negative impact on the Baltic Sea environment, in reality energy security considerations are far more important. The best scenario from Vilnius' point of view would undoubtedly be the Amber route, as this would enhance energy security by making Lithuania a transit state for Russian gas going to Germany. The second-best option, he asserts, is the status quo; that is, import of Russian gas, but at the same time transit of gas to the Kaliningrad region, which gives Lithuania some counter-leverage on Russia. Nord Stream is perceived as a worst-case scenario, particularly because there has been fear that a spur pipeline to Kaliningrad may be added to the project (although this is not a part of Nord Stream AG's official plans), thus removing the current Lithuanian counter-leverage on the Russians (Vaičiūnas, interview; Janeliunas & Molis 2005: 211; Larsson 2007: 23).

Estonia is seemingly in the best position from an independence point of view. The country's import dependence is significantly lower than the EU

average – at a mere 33.5% – and primary energy supply is dominated by solid fuels, particularly oil shale, with which Estonia is abundant. The share of gas in the energy mix (15%) is also low compared to the other Baltic States, which makes the Estonians less susceptible to energy pressure than their southern neighbours. Unfortunately for Estonia, this state-of-affairs cannot last, due to the high CO₂ emission levels of oil shale, and natural gas has been presented as a feasible alternative. The use of gas has been steadily increasing in the past 20 years, and it is projected its importance will soon exceed that of oil (20%) in Estonia's energy mix (Kasekamp *et al.* 2006: 7).

Finally, it is worth mentioning that Poland, a state that has also voiced criticism for being bypassed by Nord Stream, is among the least dependent EU states in terms of energy, due to its vast hard coal resources. Import dependency is only 19.9%, and natural gas accounts for only 12% of the energy mix, making Poland less vulnerable than the Baltic States.

	Import dependence, %		Import dependence, %	
	2003	Relative to EU Average	2006	Relative to EU Average
Finland	59.2	10.3	54.6	0.8
Estonia	26.3	-22.6	33.5	-20.3
Latvia	62.5	13.6	65.7	11.9
Lithuania	45.2	-3.7	64	10.2
Poland	13.2	-35.7	19.9	-33.9
EU Average	48.9		53.8	

Table 3: Import Dependence of the Baltic States, Finland & Poland(2003 & 2006)

Source: EU Commission (2008)

Hence, the three Baltic States are either *already* heavily dependent on Russian gas, or they will become increasingly dependent very soon, and this is why the Nord Stream pipeline is of such interest to them. As discussed in the previous subchapter, their perception of energy security (or lack thereof) is undoubtedly based on recent historical experience with Russia. And, surely, if it could be *proven* that Moscow is pursuing a neo-imperial foreign policy by means of energy levers, then Nord Stream could easily be interpreted as a means to put pressure on the Balts by halting their gas supplies without it affecting Western Europe. The problem is that motivations are never clear-cut; rather, they are contingent on interpretations, which will differ greatly depending on the interpreter.

Regardless of foreign policy intentions, however, the Russians may simply not be able to produce enough gas to cover all of their commitments. Should Russia then have to choose where to send its scarce gas, it is fairly safe to assume that Germany will be higher on Moscow's list than most Central and Eastern European states. The numbers speak for themselves: In 2004, the EU members that were formerly under Soviet influence in the Warsaw Pact (the Baltic States, the Czech Republic, Slovakia, Poland, Hungary, Romania and Bulgaria) imported a total of 42.69 bcm of gas from Russia, whereas Germany alone imported 40.87 bcm (Stern 2005: 69, 110). In the event of a severe scarcity of gas, Nord Stream could contribute to a real division of Europe because it would enable Moscow to supply its single most important market, and decidedly most important European partner, at Eastern Europe's expense. Today this is not possible because all the gas from Russia to Germany flows through Eastern Europe. Should the 'scarcity-of-gas'-situation occur it would also be difficult to criticise Moscow for hostile intentions, since the Kremlin would have no choice but to cut supplies to someone. Berlin, at least, would hardly object to such cuts if the alternative were reduced supplies to Germany.

5 Third Perspective: 'A Military-Strategic Problem'

On 14 November 2006 the Swedish Defence Minister Michael Odenberg was quoted stating that 'we will get a gas pipeline that motivates Russian naval presence in our economic zone, and that the Russians, if they feel like it, can use for intelligence gathering. Of course this is a problem' (DN 2006a). This quote is indeed illustrative for the debate that erupted in Sweden in the latter half of 2006, following inter alia a critical commentary in Dagens Nyheter by former Swedish Ambassador Krister Wahlbäck (2006), who called for a clear Swedish stance on the pipeline issue. According to Alyson Bailes (interview), 'The first Swedish reaction was very much along military lines, and very much defensive, and reminiscent of the old worries about Soviet submarines coming close to Sweden. And even people that one would normally regard as quite sensible ... started finding military arguments why one should be worried.' By contrast, the Finnish Nord Stream debate was never focused on militarystrategic issues but centred purely on the environmental aspects. Interestingly, however, the Estonian debate in the autumn of 2007 very much resembled the one in Sweden, and this sub-chapter will give an explanation as to what may have caused the similarities and differences between these three debates.

5.1 The Swedish Debate: Paranoia or Cold War Revisited?

It should be noted that the debate that took place in Sweden was not government-led, although some government politicians, such as the Defence Minister, spoke out individually. The debate was more a result of the public's wish that the government take a stand on the pipeline issue. The official Swedish position was, and has remained, quite neutral and focused exclusively on the legal aspects of the EIA procedure. None-theless, several politicians, both from the opposition and from the parties within the current coalition government,⁷ voiced their concerns publicly in the autumn and winter of 2006/2007. For instance, on 14 November 2006, Defence-Political Spokesperson for the Social Democrats (opposition), Ulrika Messing, declared that:

The gas pipeline has a clear defence- and security-political aspect that the Swedish government cannot trivialise. The pipeline and the riser platform, which is to be placed outside Gotland, are very problematic for Sweden in a defence-political perspective ... Russian soldiers will be placed only a few kilometres from the Swedish coast ... Even today, Russia uses similar installations to gain intelligence about other states, and with a gas pipeline in the Swedish EEZ they will be able to obtain information about Swedish defence matters. (DN 2006b).

⁷ The current Swedish government is a centre-right coalition, which includes the Moderate Party (Moderata Samlingspartiet), the Centre Party (Centerpartiet), the Liberal Party (Folkpartiet Liberalerna), and the Christian Democrats (Kristdemo-kraterna).

Similarly, Member of the European Parliament for the Swedish Centre Party, Lena Ek, stated that it was 'unacceptable to discuss whether a debatable installation in the EEZ of an EU country should be looked after by troops from a third country [and] this should be made clear to Russia' (SvD 2007b). Hence, a primary concern was the question of manning and supervision of the planned riser platform outside the Swedish island of Gotland, and several newspaper articles in the autumn of 2006 had headings implicating that the platform could become a 'spy base' (SvD 2006a; DN2006b; Spiegel 2006). The initial concern was presumably rooted in the vagueness of Nord Stream AG's Project Information Document, which did not clearly specify whether the platform would be permanently manned. The only information given was that 'for now Nord Stream considers it necessary to plan with living quarters for maintenance and inspection crew in the order of 8 to 10 people' (Nord Stream 2006b: 11). It was not clarified who these people would be, or if they would always be present, but Gazprom's 51% share of the Nord Stream consortium led many to presume that they would be Russians. In a statement to the Ministry of Defence, the Swedish Defence Research Agency (FOI) speculated that if the platform were to be manned by Russians, Moscow would inevitably demand to arrange for their protection, even though this would be Sweden's legal responsibility (according to UNCLOS Article 60). In light of the Kremlin's rhetoric about protection of citizens abroad, the agency argued, one could imagine increased military friction in the event of a crisis situation. If Sweden were to show any form of weakness or lack of resources in such a time, it would 'be used by Russia as a pretext for the intervention of Russian naval forces or special forces' (FOI 2007: 17). Professor at the Swedish Defence Academy, Bo Huldt, had earlier underlined the same point by saying that 'one can just look at how Russia has acted before against Kazakhstan and Azerbaijan around platforms in the Caspian Sea' (DN 2006a). As regards the intelligence aspects, FOI (2007: 16) acknowledged that it was unlikely that the platform would become a spy base, but the agency nonetheless emphasised that 'there is a well established system of cooperation between energy companies and the military or security authorities in Russia,' so even though the equipment and sensors attached to the platform would be legitimate and necessary, it would be difficult to control whether they served dual purposes.

In fact, these concerns were not only related to the platform; the point was also made that Russia could attach sensors to the pipeline itself, which would give them the ability to detect anything happening around it. By using hydrophone buoys, pressure metres, and the like, it would be possible to detect any vessel movement in the water above. If these movements were then matched with a registry of vessels and other intelligence about the Swedish military, Russia could quite easily find out what vessels were passing by (DN 2006a).

These arguments and concerns, however, did not pass without a debate. In a 13 February 2007 interview with Swedish Radio, the Russian ambassador, Alexander Kadakin, made the following verbal counter-attack on the platform sceptics: All the accusations that have been made are politically motivated, and the arguments often lack grounding. ... The debate has been about stupidity, yes, pure stupidity, when some are claiming that the service platform ... will be some kind of spy central directed against Sweden. I cannot understand what kind of an idiot would claim this in reports to Swedish superior officials. It may very well be Swedish technicians and engineers that will be working on the platform. ... Finally, why would we need a spy central on a platform in the Baltic Sea when we already today, in real time, have the possibility to read the licence plate on every car in Stockholm using satellites in outer space? (Sveriges Radio 2007).

Although the ambassador's intention may have been to calm down those who, in his view, were having unwarranted fears about the platform, his statement proved to have the opposite effect. Instead of reducing tension, he may in fact have intensified the debate and created more suspicion amongst Swedish politicians and the public. Swedish parliamentarian Mats Johansson (Moderate Party), for instance, stated that the ambassador's 'great power arrogance' was unacceptable and that the Kremlin should recall him to Moscow (Expressen 2007). According to Larsson (interview) it is, in fact, not possible for Russia to read any licence plates using satellites, so the ambassador was presumably just exaggerating to make a point. Nonetheless, his bluntness was considered untimely by many and did not help promote Nord Stream in Sweden.

The pipeline consortium, for its part, also made its efforts to calm down the platform sceptics. On 4 June 2007, the company's Deputy Technical Director, Dirk von Ameln, wrote a piece in the Swedish newspaper Svenska Dagbladet, in which he declared that Nord Stream AG was in a constructive dialogue with the Swedish defence forces in order to make sure there would be no misunderstandings. 'We have nothing to hide, and we have even offered the Swedish Armed Forces full insight in the construction phase, as well as when the pipeline is in operation.' He further underlined that the platform was necessary for the successful operation of the pipeline but would not be manned permanently, and that security and surveillance would be the responsibility of the Swedish Coast Guard alone. 'If other Swedish authorities also want access to the platform, they are more than welcome' (SvD 2007c). Insofar as von Ameln's piece and other similar statements from the pipeline consortium proved somewhat reassuring for the Swedish public, and the debate in Sweden gradually centred more on the environmental issues, Nord Stream AG nonetheless withdrew its application for the riser platform in April 2008. The company announced that it was 'pleased that technological advances obviate the need for a platform at the mid-point of the planned pipeline route,' and that maintenance would be handled by so-called intelligent 'pigs' (pipeline inspection gauges) that could travel the full length of the pipeline. It was also acknowledged that the debate in Sweden had played its part in the decision to withdraw the application (Nord Stream 2008c).

Here it is worth noting that the platform application was the only one that Sweden could *definitely* have rejected according to UNCLOS Article 60. As mentioned, the coastal state enjoys the exclusive right to construct, or authorise the construction of, such installations. In light of the Swedish concerns – be they unwarranted or not – it is not unlikely that Nord Stream AG has calculated that the realisation of the platform was in jeopardy, or that the friction in Sweden would delay the project so much that they decided to let the platform go. What is curious about this, however, is that the platform had previously been presented as crucial for successful operation of the pipeline. Swedish parliamentarian and opponent of the project, Carl B. Hamilton, has commented that if the platform were vital for Nord Stream, then Sweden could in fact veto the whole project by rejecting the platform application - regardless of Sweden's legal rights with respect to the pipeline itself (Hamilton 2007: 19-20). But what is even more remarkable is that Russian ambassador Kadakin, as early as February 2007, stated that 'it is even imaginable that the platform will not be built. It is technically possible to have a pipeline without such a platform, as a worst-case scenario' (Sveriges Radio 2007). Although the ambassador is no spokesperson for the Nord Stream consortium, Hamilton (2007: 20) believes either von Ameln or Kadakin 'knew more than they were willing to say publicly.' In his newsletter of 8 April 2008, Hamilton (2008a) declared that 'the withdrawal of the application for the platform confirm[ed] [his] own suspicion that Nord Stream AG knew from the beginning that it would be able to do without it - even if it would cost more in terms of bigger pipes.' Therefore, even if some Swedes were relieved that the platform plan has been abandoned, and the intelligence-related arguments are somewhat weakened, Wahlbäck (forthcoming) holds that the constantly changing argumentation from the consortium 'does not inspire confidence in Nord Stream's thoroughness.' He believes it is not very confidence-building that the pipeline company all of a sudden realised that there are other sub-sea pipelines, such as the Langeled (1200 km) and Franpipe (840 km), that successfully use intelligent 'pigs' over longer distances (see for instance Nord Stream 2008c). How is it possible, he rhetorically asks, that they did not know about this, and if they did, why did they lie to the public? Furthermore, it is worth noticing that Langeled actually *does* have a midway service platform, Sleipner (see Figure 6, chapter 6.2), and one might therefore ask if the Nord Stream platform application has been temporarily dropped for tactical reasons. If permission to lay the pipeline is given, and it becomes clear when it is under construction that the operation of the pipeline will be much safer *with* the platform, then it will be very difficult for the Swedish government to say no, at least from an environmental point of view. In any event, this may become a case of being 'damned if you do, and damned if you don't', and opponents of the pipeline may have been given a new reason to question the project.

5.2 Comparing Debates: Sweden, Finland and Estonia

Although the platform as a security issue was a purely Swedish concern, the pipeline route was also planned through the Finnish EEZ, and it is therefore relevant to ask how the Finns reacted to the issue. Interestingly, the debate in Finland never resembled the one in Sweden, not even regarding the possibility of sensors on the pipeline. The Swedish Defence Research Agency had argued that since the pipeline would pass through the exercise area of the Finnish armed forces, the Russians could possibly 'monitor Finnish, Swedish and NATO exercises and naval activities without any apparent presence of military vessels or submarines' (FOI 2007: 16). If this was a disconcerting scenario to the Swedes, one might expect the Finns to share the concern, but even if they did, it is difficult to

detect in the Finnish Nord Stream discourse. To be sure, there has been debate in Finland, but as pointed out by Tapani Vaahtoranta (interview), 'what is typical about our debate is that we only discuss the environmental aspects of the pipeline.' In general, the Finnish debate was, and continues to be, much calmer and less political than in Sweden, the reasons for which will be discussed shortly.

By contrast, Estonia witnessed a debate much similar to the one in Sweden, following Finland's request in the spring of 2007 that Nord Stream explore an alternative route through the Estonian EEZ. According to the Director of the Estonian Foreign Policy Institute, Andres Kasekamp, the Estonian view on Nord Stream had since the Putin-Schröder agreement in 2005 been generally critical, but since the planned route did not involve Estonia there was little one could do. However, Finland's request for a more southern pipeline route and Nord Stream AG's subsequent application to the Estonian government changed this completely.

All of a sudden Estonia was given an opportunity to be a deciding voice ... but we were not prepared because the route was not initially meant to go through Estonian waters. ... So when the Finns threw it into our hands it came unexpectedly. There was not much advanced work. (Kasekamp, interview).

This may be one of the reasons why some of the elements from the Swedish debate were picked up in Estonia, and fuelled the debate there, which reached its peak in the early autumn of 2007. The platform in the Swedish EEZ was, of course, no issue for the Estonians, but there were nevertheless military-strategic arguments present in the debate. Indeed, there was fear that the pipeline could become 'one big spying infrastructure,' and, perhaps more importantly, 'there was no argument that could trump ... Putin's own statement about increasing the Russian Baltic Fleet's presence near the pipeline' (Kasekamp, interview). On 25 October 2006, in a televised interview, President Putin had talked about how the Russian Navy was about to be significantly upgraded through the construction of new vessels, and regarding the Baltic pipeline he declared that:

The Baltic Fleet also has the task of ensuring our economic interests in the Baltic Sea. We have enough of them. ... [Nord Stream] is a major project, very important for the country's economy, and indeed for all Western Europe. And of course we are going to involve and use the opportunities offered by the navy to resolve environmental, economic, and technical problems because since the Second World War no one knows better than seamen how to operate on the bottom of the Baltic Sea. (Vladimir Putin, cited in Hirdman 2007: 3).

Not unlike the statement by the Russian ambassador to Sweden, Putin's declaration about possible new areas of work for the Russian Navy did not help promote Nord Stream – at least not in Estonia and Sweden. Quite the contrary, it significantly raised the level of concern and 'proved right' those who may have appeared the most paranoid about Russian intentions. Although the Russian president focused mostly on how the Navy could help with regard to ecological issues during construction of the pipeline, and made reference to other states' navies performing similar tasks, it was the prospect of increased military presence that seemed to

interest people the most. Thus, when Putin was quoted in the subsequent Estonian debate, he was rarely cited in full (Mäe 2008), and it more or less became a mantra that 'Putin said so,' and 'that was such a strong, emotional argument that nothing could counter it' (Kasekamp, interview). Why, then, can no similar tendency be found in Finland when it was so strong in Estonia and to a considerable extent also in Sweden? In the following subchapter it shall be shown that a combination of history and geopolitics may help explain the difference.

5.3 The Role of History and Geopolitics

It is necessary to note that tracing and explaining 'lack of debate' may not be as straight-forward as elucidating aspects of a full-blown debate. When an argument is not present in a discourse it could be because it is not considered relevant by the actors involved, or it could be because this particular aspect is actively suppressed in the debate for other reasons. As regards the Finnish Nord Stream debate and why it has not involved military-strategic issues, Vaahtoranta (interview) proposes two different explanations:

Either we [the Finns] are so concerned with Russia that we do not want to raise the other dimensions of the pipeline. Or ... it doesn't change our position in any way regarding Russia. Russia is already so close to Finland. It doesn't bring Russia any closer. ... If you look at the public debate, it is impossible to say which explanation is correct.

It can be argued that the geopolitics of the Baltic region plays a decisive role in shaping public debates and sense of threat. For the Finns, who share a 1340 km border with the eastern giant, a pipeline will hardly make a military-strategic difference. By contrast, Nord Stream would undoubtedly bring Russian interests closer to Sweden, perhaps particularly if the platform were to be realised. Thus, geopolitics may be a contributing factor that sheds light on the Finnish-Swedish differences, but it does not help explain why the Estonian debate differed so much from the Finnish. Estonia and Finland are both small EU-states,⁸ they both border on Russia, and they are both 100% reliant on the eastern giant for their gas supplies. Nonetheless, the Estonian debate had more similarities with the Swedish than with the Finnish in that it was very heated and political, and involved more than environmental issues. Surely, one must keep in mind that the official positions of Finland and Sweden are much alike in that their governments have claimed to be quite neutral with regard to Nord Stream and will only take a stand on the legal questions and the EIA procedure. Similarly, the Estonian government's rejection of the application for a seabed survey was officially based on a legal contradiction in the application itself.⁹ The main difference, therefore, lies in the

 $^{^{8}}$ Of course, Finland is much bigger than Estonia in terms of both population (4x bigger) and territory (7.5x bigger), but compared to large states like Germany and Russia they are both small.

⁹ Regardless of official explanations, however, several Estonian researchers have claimed that the Estonian rejection of the application was much more complex (as will be explored in subchapter 6.3).

public debates of these states, and this is where geopolitics must be supplemented by history.

Few would deny that history plays its part in shaping internal political debate and external political 'behaviour' of states, but in the case of Finland and Estonia and their relationship with Russia, the importance of history is particularly visible. Tomas Ries and Tapani Vaahtoranta (interviews) point out that Finland's experience during the Cold War is especially important. During these difficult years the Finns acquired crucial knowledge about how they could deal with the Russians, and whilst most Estonians would claim that there is no negotiating with Russia, there is in Finland a feeling that one *can* in fact secure Finnish vital interests through dialogue with Moscow. This Finnish confidence, however, does not imply that everything could be debated publicly during the Cold War. On the contrary, a prerequisite for Helsinki's negotiations with Moscow was that some issue areas were never up for discussion. It was a relationship with pragmatics at the core, in which it was especially important for the Finns to pick their fights carefully, or more precisely, make sure they did not accidentally pick any fights. Through strong selfcensorship in the media, warranted and wanted by the government and long-term President Urho Kekkonen (1956-81), Finland was able to create a modus vivendi with the Soviet Union (Singleton 1985: 530). The process through which such a policy emerges is commonly known as Finlandisation, but it can apply to other countries as well. In general, the term refers to a situation where a powerful state has great influence over a smaller (neighbouring) state, which takes on a highly accommodating attitude in order to secure its own survival. In the Finnish case, selfcensorship was a main component, and 'if Finlandisation does matter today, it is mainly because of the political culture it created in Finland itself' (Hanhimäki 2000: 304). In fact, it can be argued that the Finnish Nord Stream debate reflects a 're-Finlandisation of Finland':

If you look at the public debate in Finland about Russia, more of our debate has started to resemble the debate we had during the Cold War. This Finlandisation approach, I think, has come back. And we are much more careful when we discuss Russia now than just some years ago. As I said, when we discuss the pipeline, we only discuss the environmental issues. (Vaahtoranta, interview).

As indicated earlier, the fact that the environmental impact of the pipeline is the only thing being discussed in Finland may very well be because this is the only aspect that Finns are really worried about. But researchers in Finland and elsewhere are not entirely convinced that this is the case. For instance, it is argued that when the Russians first started discussing the possibility of a Baltic pipeline, there was indeed concern within the Finnish government, as this would bring Russia's strategic interests further out in the Gulf of Finland and the Baltic Sea, which in turn would lead to increased Russian military presence. 'But this, of course, is something that would never be announced publicly. Because history has taught the Finns that if you want to get anywhere with Russia, you must act cautiously' (Ries, interview). So maybe the concern about Russia stepping up its military activities was just as present in Finland as in Sweden, although not visible in the public debate. Research fellow at the Swedish Institute of International Affairs, Jakub Swiecicki (interview), supports this view and holds that 'Finland is in a much more sensitive position than Sweden. And this has to do with historical experiences ... The Finns would also like to stop this project, but then again, Finland is more susceptible to Russian pressure.' If this assertion is correct, then there might in fact be some Finlandisation at play in this case. But, as pointed out by Vaahtoranta (above), this is very difficult to determine by looking at the public debate. However, the Director of the International Centre for Defence Studies in Estonia, Kadri Liik, seems convinced that Finland's Nord Stream debate does not reflect the Finns' *real* fears:

Finland has a strong self-censorship. Their relation with Russia is not a healthy one. They do not discuss the issues that have to do with Russia. This is Finlandisation, and that is getting stronger now. ... And of course, from our [Estonian] point of view, this is just sad to see. It is supposed to be a free country, but it is not free in its expressions and thoughts. (Liik, interview).

Of course, this assumption is based on the view that Finland shares the Estonian and Swedish concerns about Russia and Nord Stream but refrains from letting it show publicly. But what if they do not? Certainly, Finland's Cabinet has expressed support for the project and underscored its importance for EU energy supply (Moscow Times 2008; DG Internal Policies 2007a: 4). Moreover, the Finnish Prime Minister, Matti Vanhanen, has on several occasions underlined that for Finland the pipeline is only an environmental question and that there are no political or securityrelated problems with it (St. Petersburg Times 2008). Finnish research fellow Nina Tynkkynen, however, makes the point that the prime minister's constant reiteration that Finland has no political problem with Nord Stream, may in fact reveal that the opposite is the case - 'why else would he have to emphasise it all the time' (Tynkkynen, interview). On the other hand, as Kasekamp (interview) suggests, the Finns 'could be devilishly clever in a very deep sense, that ... in their rhetoric they are being Finlandised, but what they are doing is more effective [in delaying the project].' In any case, it can be concluded that those who do not take the Finnish debate at face value will have much difficulty assessing what the Finnish politicians and public feel about Nord Stream. In Estonia, at least, 'nobody understands what Finland is up to' (Liik, interview).

Bringing the discussion back to the debates that have, without question, involved signs of fear and military-strategic concern, it is important to assess why such elements were brought into the debates. If, as discussed above, Finland does *not* consider the possible military-strategic implications of Nord Stream a problem at all (meaning that Finland has not become re-Finlandised and that the debate is in fact quite 'honest'), then why did the Swedes have such a vibrant debate about military implications? Does it mean that they are paranoid and the Finns are not?

As mentioned earlier, Sweden has had the Soviet Union and Russia at a safe distance. Apart from some incidents during the Cold War when Soviet submarines turned up in Swedish waters, the Soviet Union never posed such an immediate threat to Sweden as it did to Finland (Vesa 1989: 43). Nonetheless, during the Cold War, the Swedes, who, like the Finns, never joined NATO, preferred to have a strong territorial defence. The end of the Cold War, however, led to a gradual change of Sweden's

threat assessment, and by the end of the 1990s, significant reforms had been proposed to change the Swedish defence concept. According to the Swedish Ministry of Defence (2004), 'The Swedish defence system is undergoing one of the largest military reforms to be undertaken by Sweden in modern times as it is transformed from a defence force against invasion to a mobile, flexible operational defence which can both defend Sweden and take part in international operations.' Hence, the Swedish government has deemed that a Cold War-style defence concept is obsolete, and that the new threats and challenges are best met with a new type of military. 'We will be fewer, but better' seems to be the catchphrase (Local 2008). Although the fewer soldiers may very well be better, many believe they do not constitute an army suitable for territorial defence, and there is currently an intense debate in Sweden about this. Regarding the strategic implications of the pipeline, Vaahtoranta highlights what can be considered a contradiction in the Swedish debate:

On the one hand, they have the security concerns [but] at the same time they are reforming their whole defence concept. They are giving up their territorial defence because they are saying that Russia is no longer a threat, and they are putting all their emphasis on international crisis management. Whereas in Finland we are not doing that because we are thinking that we still need a territorial defence in case Russia attacks us. (Vaahtoranta, interview).

Estonian defence analyst Riina Kaljurand (interview) believes that the Swedes' focus on military-strategic aspects of the pipeline is indeed a result of their recent defence reforms. The combination of having Russian interests coming closer to Sweden, and the fact that 'they basically have no army left,' has led to uncertainty and intensified a debate that may otherwise have been calmer. Hirdman (interview) also emphasises the effect that the military reforms have had on the Swedish debate. He argues that 'even though Russia is not dangerous for Sweden now, that does not mean that Sweden should not have a strong military. Nobody knows what Russia will be like in 50 years.'¹⁰ As regards the pipeline debate, however, he does not believe that the military reform is the *only* reason for Swedish scepticism. Hirdman also argues that historically, Sweden's relationship with Russia has been a strained one, and that the current debate has more to do with Sweden's relationship with Russia than the pipeline itself.

Sweden has a certain Russia complex ... just like Poland has a German complex. So that is what the debate is about: how one should look at Russia. ... It is strange that we are having this debate in Sweden when they do not have similar debates in, for instance, Finland or Denmark. Finland, after all, is much closer to Russia. ... In Sweden it is always the issue of Russia being dangerous. (Hirdman, interview).

¹⁰ It should be noted that Hirdman does not believe that Russia will pose a threat in any immediate future (if at all). Having spent 12 years in Russia, he argues that Russia is moving towards stronger rule of law, better living standards for most Russians, and that the recent presidential shift from Putin to Medvedev shows that there may be a slow, but steady, generational shift in Russian politics.

Swiecicki (interview) confirms that there is in fact an expression called 'Russia anxiety',¹¹ which has been a part of the Swedish language ever since Russia replaced Sweden as the great power of the Baltic Sea in the 18th century. Furthermore, he states, 'there is no other enemy for Sweden than Russia - whether it is communist or something else. And it is clear that here we have historical experiences and emotions involved in the debate.' Hirdman agrees that the emotional aspect is the key to understanding the Swedish debate, and underlines the point by asserting that 'if there was a lot of natural gas in Finland, and the exact same pipeline were to be laid from Finland to Germany, then you would not find one single person objecting in Sweden.' Perhaps to no surprise, the Russian ambassador to Sweden, Alexander Kadakin, has made a similar point about Swedish-Russian relations. He believes the Swedish view of Russians is based on stereotypes, and argues that 'if you ever hear an anti-Swedish ... word in Russia, then you can be sure that it is a madman talking ... In Russia, Sweden and Swedes are considered something positive at all levels ... Unfortunately we cannot say the same thing about Swedes' views of Russians.' The ambassador acknowledges that it may have to do with a history including many wars, but, like Hirdman, he underlines that 'these wars happened some two-three hundred years ago' (Sveriges Radio 2007).

¹¹ The exact Swedish term he uses is 'rysskräck'. 'Russia anxiety' is my own translation of the term.

6 Fourth Perspective: 'A Threat to the Baltic Sea Environment'

The Russo-German pipeline ... will become an immediate threat to the Baltic Sea ... Whilst laying the pipeline, the Russo-German consortium will stir up poisonous bottom sediments and ... they will have to remove all kinds of remnants [scrap] that has been laying quietly at the bottom since the Second World War, remnants that are filled with lethal substances: thousands of undetonated mines, great amounts of dumped munitions and chemical weapons. In other words: All the things that the environmental experts are telling us not to do, [Nord Stream] will be doing, and thereby create an immediate threat to the Baltic Sea. (Wahlbäck 2006).

This statement by the former Swedish ambassador elucidates the environmental concern that rapidly spread across the Baltic Sea region from 2006 on. Following Nord Stream AG's preparation and distribution of the Project Information Document to Affected Parties, as part of the Espoo/EIA procedure, several issues related to the Baltic Sea environment were raised by different actors in the littoral states. Most of the concern stemmed from the nature of the Baltic Sea itself, which is widely known as 'one of the most seriously polluted marine environments in the world' (Westing 1989: 9), and several prominent politicians and accredited personalities in the region were early voicing their unease regarding the project (Halonen 2008; New Europe 2008; SvD 2006b). For instance, Endel Lippmaa, chairman of the Council for Energy at the Estonian Academy of Sciences, claimed that 'if the entire gas [sic] that is inside the pipe detonated, the total explosive force would equal that of about 50 Hiroshima bombs' (Baltic Times 2007). Pipeline proponents, on the other hand, argued that the whole environmental debate was being politicised and that the potential impact of the pipeline was being exaggerated. In this chapter it will be assessed to what extent the different arguments used by the two sides hold.

6.1 The Baltic Sea: Not Like Other Seas

From an international and ecological point of view, the Baltic Sea is quite special. Measuring some 415,000 km², this semi-enclosed sea is the world's largest body of brackish water, and with an average depth of only 52 metres it is also among the shallowest seas of the world. If the Nord Stream pipeline is constructed, it will thus be the shallowest (and longest) dual sub-sea pipeline worldwide. Since the only connection with the North Sea and the Atlantic is through the narrow Danish Straits (see Figure 5), the Baltic Sea has a very slow water turnover rate. It takes about eight years to replace 50% of the water, and some 30 years for all the water to be replaced, but the replacement water is not necessarily clean. This means that any waste discharge from littoral states, of which there is plenty, will remain in the water for a long time. The generally low water temperatures also contribute to a slow rate of decomposition of pollutants introduced in the water (Westing 1989: 9; MoE Finland 2008).



Figure 5: The Baltic Sea (incl. the narrow Danish Straits)

Source: MoE Finland (2008). (Oval indicating connection with world oceans added).

According to Zmudzinski (1989: 49) 'the congestion of people, agriculture, industry, and trade in the Baltic drainage basin poses an increasingly sever threat of intoxication to the environment of the small semi-enclosed sea.' There is a significant concentration of heavy metals in the bottom sediments, resulting from all the industrial waste that has been discharged over the years. Such waste, however, is not the only non-natural substance challenging the Baltic environment; the Second World War has also had its impact. During the war, the sea was heavily mined and immediately after the war, the Allies dumped enormous amounts German chemical weapons in the Baltic Sea, as this was considered the best way of disposal for such ammunition (Boczek 1989: 24-25; Nehring 2007: 23). A 1994 study for the Helsinki Commission concludes 'with relative certainty that around 40,000 tonnes of chemical munitions have been dumped in the Helsinki Convention Area [the Baltic Sea].'

Nord Stream AG, officially relying on data from HELCOM, reports that it has taken into consideration all the known munitions dumpsites in the optimisation of the pipeline route. The consortium also argues that there have never been any unintentional detonations of weapons in the Baltic Sea, 'nor has there been any accident during the handling of found munitions' (Nord Stream 20081). This information is worth scrutinising for the following reasons: Although the official dumpsites can easily be avoided, Nord Stream AG fails to mention that many dumped weapons are also scattered along the bottom, as recognised by HELCOM (1994: 38). Marine biologist Dr. Stefan Nehring points out that much is still unknown about the dumped weapons, due to the chaotic circumstances under which the disposal took place in 1945-46. As much as three metric tons of munitions end up in fishermen's gear every year, and, contrary to Nord Stream AG's information, there have in fact been numerous accidents involving dumped munitions, although the exact number is difficult to ascertain. In Denmark, the only state that releases official numbers, some 20 people are reported injured by dumped explosives and chemicals each year (Spiegel 2007d).

With regard to the munitions and poisonous sediments, Wahlbäck (forthcoming) argues: 'While we may assume that the Nord Stream Company will do its best to prevent mines from blowing up its pipe-laying barges and pipeline, they will not have the same self-interest with regard to pollutants and chemical weapons.' Furthermore, Professor at the Ecological Institute of Vilnius University, Janina Barsiene, states that 'when the sediments are not disturbed they are not dangerous, but as soon as one starts digging, it becomes a problem' (SvD 2007d). Indeed, there has been concern that the dredging and explosions that are necessary to even out the seabed before pipeline construction, will release phosphate, heavy metals, and organic poisons, which in turn will increase the incidence of algae and threaten important fisheries (Wikström 2007).

These environmental fears, however, have not been shared by everyone. On 6 November 2006, in the midst of the heated pipeline debate, the editorial of the Swedish newspaper *Expressen* (2006) declared that:

The reasoning against the Russian-German gas pipeline is probably based on real concern, but it does not hold. The environmental consequences appear extremely exaggerated; it is not about a giant tunnel but a 1.2 m diameter pipeline. The Baltic Sea bed is full of other sorts of pipelines and cables, and no gigantic environmental catastrophe has occurred when they have been laid.

Along the same lines, Hirdman (interview) argues that 'the technology exists to make these projects work without jeopardising the environment. ... In the North Sea the Norwegians can construct their pipelines without any debate at all.' Consequently, he asserts, 'the environmental arguments are not particularly strong.' It has been common for pipeline proponents to use the North Sea analogy, and the next subchapter will therefore assess to what extent this analogy is accurate.

6.2 The North Sea Analogy

Surely, it is true that there are numerous offshore pipelines elsewhere. For example, the Norwegian continental shelf in the North Sea has some 7800 km of pipelines bringing gas to the UK and the Continent. Interestingly, however, there is currently no environmental debate about gas pipelines in Norway (DN 2007a). Even when the 1200 km long Langeled pipeline was planned and constructed in 2004-2006 there was remarkably little, if any, environmental debate (see introduction).





Source: Hydro (2004: 2)

Thus, it would appear correct to claim that there is no need to worry about the equally long Nord Stream pipeline in the Baltic Sea, and that the current debate stems from the region's lack of experience with such pipelines rather than actual environmental threats. There are, however, important differences between the North Sea and the Baltic Sea, as well as between Langeled and Nord Stream, which make the analogy somewhat inaccurate. First, the nature of the Baltic Sea makes it much more sensitive to environmental impacts than the North Sea. Mati Murd (interview) argues that 'it is not acceptable if the company says that there are thousands of pipes in the North Sea. Our Baltic Sea is different because it is almost a closed ecological system. It is very shallow water, and if something happens, it will have very long-term consequences.' Second, Wahlbäck (interview) underlines that even though the North Sea is also shallow, the average depth is twice that of the Baltic Sea. And since the North Sea has open access to the world oceans, resulting in a much higher water turnover rate, potential accidents would have less devastating effects here than in the Baltic. Third, that there was little environmental debate in Norway regarding the construction of Langeled does not automatically mean that the environmental debate in the Baltic region is driven by paranoia. According to Truls Gulowsen in Greenpeace Norway, the current state of affairs in Norway is a result of numerous hard fights put up by environmentalists ever since petroleum was discovered in the Norwegian continental shelf in the late 1960s. Gulowsen therefore advises Baltic friends of the environment to demand as extensive efforts in the Baltic Sea as Norwegian environmentalists have demanded in the North Sea. 'The shortest distance between A and B is not always the best for the environment and nature ... For each metre of the pipeline, several potential stretches should be considered' (DN 2007a).

Another problem with the Nord Stream-Langeled analogy is the question of who will be involved and who will benefit. In the case of Langeled, it is quite clear that Norway and the United Kingdom, whose EEZs are used for the pipeline, both gain from the project. The UK needs gas that Norway can provide, and no third party is directly involved. Moreover, these two states, unlike Russia and Germany, have no onshore alternative if they want a pipeline connection. By contrast, Nord Stream will traverse the EEZ of no less than three other states, of which only one (Denmark) has a direct interest in the pipeline (Nord Stream 2008a), in order to bring gas from Russia to Western Europe. Sweden and Finland will not benefit from the project. Quite the contrary, Wahlbäck (forthcoming) argues, they 'will unfortunately be much more affected by any damage to the marine environment than Russia or Germany.' Russia's ambassador to Sweden, however, believes that such arguments are being used very selectively and makes the point that:

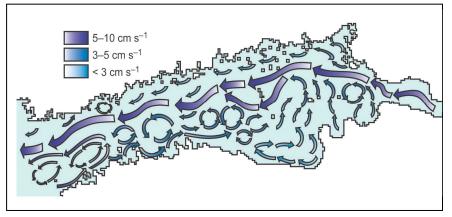
Russia is also a Baltic Sea state. And we are not idiots who want to pollute our own sea. We also live there. We have several coastal areas, such as St Petersburg and Kaliningrad, with millions of Russians that need a clean ocean. We are not suicidal. Actually, we are quite practical, thinking human beings. That is often forgotten. There is too much talk about the evil, terrible Russians. Those are stereotypes! (Sveriges Radio 2007).

What he may be referring to here is statements such as the editorial of the Swedish newspaper Aftonbladet (2006), which bluntly stated that 'Russia is the big problem. ... The decision-makers in Moscow have no wish to accept tough environmental demands.' Although such statements may seem harsh and may be exaggerated for the sake of rhetoric, it is in fact true that in Russia, environmental issues have in recent years been marginalised through different administrative reforms. For instance, there is currently no separate ministry for the environment in Russia (Rowe et al. 2007: 15), and this probably sends a strong signal to neighbouring states, in which having such a ministry may be taken for granted. Furthermore, Russia has not ratified the Espoo Convention, and had it not been for the fact that all the other littoral states of the Baltic Sea have ratified the convention, it is not certain that Moscow would have engaged in an EIA procedure that undoubtedly delays the project implementation. These factors lead to concerns that Russia, although bordering on the Baltic Sea, is willing to accept more environmental problems than its neighbours, especially when there is profit involved (in this case for Gazprom). If this is the case, the states close to Russia have a good reason to be worried.

The Finnish environmental administration, for instance, has criticised the Nord Stream consortium for not clarifying where in the Gulf of Finland the seabed will be dredged (SvD 2007e). To be sure, the Finns may have a lot, if not the most, to lose from poisonous sediments 'on the run'. Nord Stream AG confirms that a significant dredging process will be necessary before the pipeline can be laid and acknowledges that previously dredged

material from the Baltic Sea has contained considerable quantities of heavy metals (Nord Stream 2006b: 55). Ostensibly, the Russian seabed is the most polluted, and sediments will inevitably be stirred up during the construction of the pipeline. This had not been a problem for Finland if the pollutants would then remain in Russian waters, but since the sea currents enter the Gulf of Finland in the south, turn near Russia and then leave off the northern coast (Figure 7), much of this toxic mud will be transported into Finnish waters, which are also shallower than the Estonian (Liik, Mäe, Juntunen [interviews]).





Source: Andrejev et al. (2004: 11)

Hence, the ecological argument is undoubtedly an important and strong one for Helsinki, but since the country is officially supporting the project, Finnish environmental organisations are worried that their government will make hastened decisions to accommodate Russia and Germany, and thereby jeopardise the environment in the Gulf of Finland (Moscow Times 2008). Jakub Swiecicki (interview) argues that one should not trivialise the fact that the pressure to build the pipeline comes from Moscow and Berlin. On the one hand, Finland is dependent on Russia for much of its energy, and maintaining good relations with the Kremlin is therefore important. During a meeting between the Finnish Foreign Minister Alexander Stubb and his Russian counterpart Sergei Lavrov, the latter emphasised Russia's appreciation 'that Finland is not politicising the issue, but is demonstrating a purely pragmatic attitude in terms of environmental safety' (RIA Novosti 2008c). On the other hand, Swiecicki argues, one should also keep in mind that the Finns received significant military support from Germany whilst fighting the Soviet Union during the Second World War. Although Finns today consider this an alliance of necessity and do not wish to be linked with Nazi Germany, Head of the Finnish Institute in Germany, Marjaliisa Hentilä, holds that Finnish independence would not have been secured without German assistance (Spiegel 2007e). Consequently, Finland is somewhat susceptible to pressure from both ends of the pipeline, and this is what the Finnish friends of the environment are worried about. Of course, one can debate how much influence such an historical relation has on current political issues. A more important factor may be that the Finns, like the Swedes, have been Germany's partners in the EU since 1995; therefore, it is probably important for them to maintain good relations with Berlin. The Baltic States, by contrast, have only been members of the EU since 2004, and Kasekamp (interview) illustrates this difference in stating that: 'We see the same pipeline from the opposite ends. The Estonians see where it is coming from, and the Finns look at where it is going. ...We see Russia; they see Germany's needs.'

In light of the above, it seems fair to claim that the North Sea analogy is somewhat inaccurate. Indeed, Nord Stream and Langeled are equally long sub-sea gas pipelines, but the environmental, geopolitical and historical context in which they appear are very different. Furthermore, with regard to the likeliness of hastened decisions resulting from political pressures, this should not merely be analysed from a foreign policy point of view. In the final subchapter it will be discussed how domestic politics has influenced the environmental debate about Nord Stream in some of the Baltic littoral states, and whether there has been a politicisation of the environmental issues, as suggested by Russia's Foreign Minister Lavrov (Reuters 2007a).

6.3 Politicisation and the Role of Domestic Politics

The environmentalists mentioned above were primarily concerned about external pressure from Russia and Germany, but the restraining effect of domestic politics should not be forgotten. Surely, no Finnish government would gain from an environmental catastrophe caused by a project it had explicitly supported. A crucial aspect of democratic governance is that politicians are awarded and punished for their policies in national elections – a point, which Wahlbäck has also made about Sweden:

It does not require much imagination to envisage the scene in the Baltic Sea in the summer of 2010 if big pipe-laying barges are scurrying up and down the seabed and defacing the waters along the coast of Sweden's favourite vacation island, Gotland, while the media are busy measuring the increasing phosphor and heavy metal content of the waters. No Swedish government could survive in September [election] after such a summer. (Wahlbäck, cited in Dresen 2006).

It may, of course, be that this scenario applies more to Sweden than to Finland, considering that the latter has not witnessed such a heated and political debate about the pipeline. In Sweden, the opposition parties have indeed made it their task to criticise the government for not taking a clear stand on the pipeline issue. On 26 November 2006, for instance, leader of the Swedish opposition Mona Sahlin (Social Democrat) warned against potential environmental risks of Nord Stream, and claimed that accepting it would be 'a tacit acceptance of increased emission levels and serious environmental problems for the Baltic Sea' (SvD 2007f). On the following day, the editorial of Svenska Dagbladet noted that when Sahlin was a minister in the previous Swedish government, she did little to oppose the planned gas pipeline, 'but now, while leading the opposition, her job is to be a menace to the current government' (SvD 2007g). Sahlin's argument about CO_2 emissions is particularly interesting. Indeed, natural gas is a fossil fuel and not emission free, but it is important to remember that this particular pipeline debate is not a question of *if*, but *how*, Germany will get natural gas from Russia. If the gas were not to be sent, then the Germans would have to compensate by using other forms of energy, and in light of the nuclear phase-out discussed in chapter 3.2, this would most likely be coal (IEA 2007: 9). Nord Stream representative Dirk von Ameln (2008: 2) has emphasised that natural gas has the lowest CO_2 emission level of all fossil fuels – 40% lower than coal – and that 'therefore, it has to be regarded as a bridge towards the sustainable era.' Admittedly, the latter argument is debatable, but if the choice is between coal and gas, then von Ameln has a point. With reference to the Swedish CO_2 argument, he has stated that 'for Sweden, there are not as many direct advantages of the project as for the countries that are to use the gas. But since the environmental problems are global, Sweden will also reap the benefits of reduced emissions of CO_2 ' (DN 2007b). In light of this, Sahlin's argument, despite being theoretically correct regarding emissions, appears a bit selective. Hirdman , for instance, argues that:

The important environmental question of the Baltic Sea is not the gas pipeline but the transport of 100 million tons of Russian oil from Primorsk. ... Statistically, there will be a collision at some point, and *then* you will have an environmental problem in the Baltic. ... So the friends of the environment should focus a bit more on oil transport and a bit less on the gas pipeline. (Hirdman, interview).

Walhbäck (interview) believes that the domestic political situation in Sweden may be the key to understand how the Swedish government positions itself on the Nord Stream issue. In view of the scepticism voiced by the opposition and the public, the government is probably best served by not making any final decisions regarding the EIA before the upcoming election in 2010. If a construction permit is given before then, and the work causes environmental problems, it will reduce the government's chance of re-election.

A similar 'domestic politics edge' can be traced in the Estonian debate about Nord Stream AG's application for a seabed survey. According to Kasekamp (interview), the debate and the subsequent rejection of the application were very much a result of tensions within the government. Key politicians in the coalition government,¹² such as Prime Minister Andrus Ansip and Foreign Minister Urmas Paet, were initially intent on granting the exploration permit, as this was considered the best move from a foreign policy point of view. With the bronze soldier incident of April 2007 in fresh memory, they thought it would be wise for Estonia to keep a low profile and not choose any action that could appear Russophobic. Their problem, however, was that Mart Laar, former Estonian Prime Minister (1992-94 and 1999-2002) and current leader of one of the other governing parties, made the pipeline issue his own personal crusade. By quoting the environmental arguments of Endel Lippmaa (for instance that of the 50 Hiroshima bombs, but also other less apocalyptic

¹² The government was elected in March 2007 and is a three-party coalition of the Estonian Reform Party (31 mandates in the election), the Pro Patria and Res Publica Union (19 mandates), and the Social Democratic Party (10 mandates). Both the Prime Minister and Foreign Minister represent the Reform Party.

ones), Laar began to gain ground at the expense of the Prime Minister, who, according to Kasekamp (interview)

was being pounded, not only by the opposition, but more importantly by the main competitor for his own electorate within the government ... He claimed to never have supported it [granting the permit] at all, but that is not true, of course. So when the cabinet met, the second last week of September, they had a unanimous decision [to reject the application] ... It was clear that Ansip had reversed himself because he realised that he had nothing to gain and everything to lose.

As mentioned earlier, the official explanation given for the rejection was that the application had legal contradictions and could therefore not be evaluated in its current state. Mati Murd (interview) in the Estonian MFA states that 'it was even amazing that this kind of company, a subsidiary of the biggest energy companies, used a lawyer who was not in a position to make a legally correct application.' Nonetheless, Moscow's interpretation of the decision was crystal clear. In the words of the Russian Energy Minister, Viktor Khristenko: 'To use such tools, as the Estonian government did, it's in my view pure politicisation, and done in a rude way' (Financial Times 2007). The Kremlin's problem, of course, was that it could not be proven that there were other motivations behind the rejection. Estonian defence analyst Riina Kaljurand (interview), however, believes that 'for most Estonians it may have been logical that we should say no [and] this legal argument was something that they used to support that.' Similarly, Kasekamp (interview) holds that 'it was agreed to say no, and then we had to find the legal justification for it because there wasn't anything else to cling to.'

First, this highlights how problematic it can be to take government statements at face value. Not wholly unlike the energy interruptions discussed in chapter 4.2, this is another example that it is difficult to prove official explanations right or wrong. Whether a statement comes from an energy company or the government, it will inevitably be contingent on interpretation, and the only certain thing is the action itself (i.e. that supplies were interrupted, or in this case, that Estonia rejected an application). Regardless of official declarations from Sweden, Estonia, or even Finland, there is always a chance that there is 'more to it' than what is announced officially (a point also made in the discussion about Finlandisation). Second, politicians in opposition, or even within the government, may certainly have a reason to heat up an issue if it will help them in a subsequent election. This is not to say that those who have voiced environmental, or other, concerns about Nord Stream have been purely cynical, but doing so may have coincided perfectly with their domestic political interests.

As this chapter shows, environmental concern regarding Nord Stream may certainly be justified, as the Baltic Sea arguably contains enough waste and pollutants to cause significant harm if disturbed or not managed properly. However, it seems clear that other factors cannot be excluded from the equation, be it politicisation due to domestic political tensions, or more historical aspects. Finally, an interesting feature about the environmental argument is that it may carry with it a discernible altruism. Since environmental problems in the Baltic would definitely have transboundary effects, those who focus on such issues can hardly be attacked, as they are speaking for the whole region and not only their narrow national interests.

7 Conclusions

An important aim of this report has been to show that the multitude of interpretations of Nord Stream makes the project more than 'just a pipeline'. The controversy surrounding the project indicates that most of the states in the region consider the pipeline to be of great importance, but they do so for different reasons. Therefore, the overall objective has been to provide plausible explanations as to why the reactions to Nord Stream have differed to such an extent. Where relevant, attempts have also been made to scrutinise the different arguments and reveal their strengths and weaknesses.

The thematic organisation of the analytical chapters enabled broad coverage of the different interpretations of Nord Stream and simplified the comparison of debates and views. For the sake of clarity, however, it may now be helpful recapitulate the main findings from a more state-based perspective.

For Germany Nord Stream may be of pivotal importance for several reasons. To contextualise the issue, it is first worth mentioning what Germany represents on the European continent and internationally. Not only is Germany the biggest EU member state in terms of population, it also has the union's largest and the world's third largest economy. Germany is a great power in the heart of Europe, but one that does not possess nuclear weapons, and whose power therefore largely rests on its economic strength. An important foundation for economic growth and stability is secure energy supplies, and for a state the size of Germany this cannot be underestimated. The crucial issue at the moment appears to be the nuclear phase-out, which inevitably will lead to an energy shortfall. Compensating for the energy loss means increasing the use of other forms of energy, and natural gas is a logical choice for several reasons. First, the intra-government discord reduces the chance of reconsideration of the nuclear phase-out plan. Second, renewable energy sources can hardly, at least not in the short run, compensate for the loss of nuclear power. Third, Germany's CO₂ emission goals make it difficult to resort to increased use of other fossil fuels than natural gas, which is environmentally friendlier than oil and coal. It is therefore not surprising that gas stands out as a good overall alternative for Berlin. That the gas will come from Russia seems obvious, considering Russia's vast proven reserves and geographical proximity.

These factors are all contemporary, as it were, and they may appear sufficient to explain why Germany needs and supports Nord Stream. What is also important, however, is the Russo-German energy history, which has largely been a stable one. This becomes clearer when contrasting the Russo-German energy relationship with the Russo-Baltic. Whereas Nord Stream may be an answer to Germany's energy dilemma, the Baltic States have perceived of the pipeline as a problem in itself, and this is to a large extent due to their history with Moscow. As the analysis revealed, all the three Baltic States have experienced energy cut-offs or other strong reactions from Russia following political or commercial disputes, and this gives them little reason to embrace a pipeline that will bypass them. In contrast with Germany, which has only accidentally felt the impact of Russian supply cuts, the Baltic States have been the direct targets, or unlucky victims, of supply interruptions. If Nord Stream is constructed, Russia could potentially cut supplies to Eastern European states without it affecting the supply levels to Germany. In light of the turbulent historical relationships many of these states have with Moscow, it can hardly come as a surprise that they have been sceptical about the project. The core problem, however, is that the motivation for Russia's past energy actions cannot be proven; they are contingent on interpretation. And as long as the burden of proof rests on those who have previously been under Soviet influence, Moscow can quite easily dismiss their fears as a result of Russophobia. In a sense, then, the historical argument serves both sides. Similarly, Germany and other Western European states that have had good energy relations with the Russians can argue that Russia in fact is a reliable supplier, and far more stable than other potential gas suppliers, for instance in the Middle East. Hence, whether Nord Stream in fact represents a threat to the Baltic States' energy security is not clear-cut if one only considers what has happened in the past.

As discussed, the crucial issue may in fact be that the Russians, due to lack of investments in new gas fields and infrastructure, soon will have problems balancing production, rising domestic demand and growing export commitments. Should there be a scarcity of gas, it could be less relevant whether Moscow sees the old and new EU members differently; someone will have to tackle reduced gas supplies, at least until new fields and transport infrastructure have been developed. Considering the German gas market's size and importance for Russia one can imagine that it will be given priority over the smaller gas markets in Eastern Europe; that is, if Nord Stream is constructed so that Russia can supply Germany directly. Seeing that the three Baltic States are likely to become increasingly dependent on Russian gas, it appears clearer why they may have reason to worry. It should be noted that a gas deficit, be it temporary or permanent, would also affect non-EU states such as the Ukraine and Belarus.

For Russia, Nord Stream appears to be a win-win project. On the one hand, if Moscow indeed seeks to use energy as a political lever against states within its former sphere of influence, then Nord Stream will make this possible. On the other hand, if a gas deficit is 'brewing', then the offshore pipeline will enable Moscow to supply its allegedly most important partner in the EU whilst cutting supply levels elsewhere, and hence, stable relations with Berlin can be maintained.

Interestingly, the prospective scarcity of gas also makes Nord Stream the best choice for Germany. Being the first recipients of gas from Nord Stream, the Germans would not have to worry about transit states taking their shares. During the Russo-Ukrainian gas dispute this is precisely what happened; Germany experienced what it can be like to be at the end of the supply chain when the pressure in the pipeline drops. The essential issue, however, is that Germany, since the Nord Stream project was announced, has maintained that it is a pan-European rather than a Russo-German project. None of the official announcements indicate that Berlin sees a Russian gas deficit coming and therefore wants to cover its own needs while letting the new EU members deal with the potential problems. Surely, such an announcement would hardly have been perceived as politically correct within the EU, which, after all, is in the process of developing a common energy policy. In any case, Nord Stream appears to solve so many potential problems for Berlin that it would be strange if such considerations had not been made. It should also be kept in mind that the whole debate about a common energy policy, and the related critique of Germany for choosing a strategy that does not take into consideration the energy needs of the most recent EU members, is relatively new. When the plans for Russo-German pipeline through the Baltic Sea were initiated, the Baltic States and Poland were some six years away from becoming EU members. And when the European Commission issued its Green Paper on Energy in March 2006, which declared *inter alia* that the Baltic States remain an 'energy island', the memorandum regarding the construction of Nord Stream had been signed half a year earlier. This is not to suggest that talk of a common energy policy was entirely new when the Green Paper was issued, but it is important to keep in mind that as long as there is no common policy for an issue area, every state will have to find its own solutions.

Nonetheless, the interpretation that Nord Stream divides Europe is very much a result of Germany's choice not to include its eastern neighbours in the pipeline plans, and may also have to do with the newest EU members' feeling of not entirely belonging to 'Europe proper'. Mati Murd (interiew) in the Estonian Ministry of Foreign Affairs gives an interesting summary of how the Europe-focused arguments have been perceived in Estonia:

Maybe one more issue will explain a little bit: The emotional background. And this is about the rhetoric used by Nord Stream, by Gazprom, but also by the European partners of the project. All these companies say that this project is important because it allows for us to supply Europe, or the European Union, directly. In this context we are questioning, 'Where is the border of Europe or where is the border of the European Union?' If Gazprom or the Russian government thinks the EU starts at the German border, this is not acceptable. This is clearly a policy of divide and rule, and it is very unfortunate that the European partners of this project use the same rhetoric.

Clearly, the feeling of not being regarded as fully European should not be underestimated as a contributing factor in the new EU member states, as was also reflected in the statements about Nord Stream being a Russo-German pact.

As mentioned in the analysis, Estonia has less energy-related interest in Nord Stream than Latvia and Lithuania, and the Estonian opposition against the project must therefore also be explained by other factors. Officially, Estonia rejected Nord Stream's application for a seabed survey because of a legal contradiction in the application itself. And, as with the Russian supply interruptions, it cannot be proven that there were other motivations involved. However, the vibrant public debate preceding the rejection indicates that numerous other issues influenced the decision. First of all, the prospect of Russia stepping up its military presence in the Baltic Sea in order to protect the pipeline was a non-welcome one for most Estonians, perhaps to no surprise if one considers their recent history. Second, there was indeed concern about the environmental impact of the pipeline, and even though some of the arguments employed may have been exaggerated, the discussion in chapter 6 revealed that there are in fact several good reasons to be worried about the Baltic Sea environment in general and the Gulf of Finland in particular. Third, several disputes, and notably the recent bronze soldier incident, had played its part in souring the general Russo-Estonian relationship. Finally, the intragovernment disagreement, which was indeed driven by domestic politics and probably influenced by the result of the bronze soldier affair, became an important driving force in the Estonian debate.

For Sweden and Finland the starting point is somewhat similar: First, their EEZs have been part of the Nord Stream plans from the beginning, and although the Swedish EEZ is bigger than the Finnish, they both have a substantial coastline in the Baltic. Second, neither country would benefit from the proposed land-based routes, Yamal 2 or Amber. Third, they are both long-time members of the EU compared to the Baltic States, and their energy-relations with Russia have been either stable (Finland) or close to non-existent (Sweden). Fourth, neither state has joined NATO but has during and after the Cold War preferred a policy of non-alignment. Finally, both states' governments have focused solely on the legal aspects of the EIA procedure and refrain from *officially* commenting on other aspects of the project than the environmental ones. As regards the public debates about Nord Stream, however, Finland and Sweden are miles apart, and it is therefore interesting to sum up their debates, or lack thereof, at the same time.

In Sweden, the military-strategic aspects of the pipeline and service platform were at the core of the public debate that erupted in late 2006. Not only did independent defence analysts and researchers focus on such aspects; politicians both from the government and opposition parties voiced their concerns publicly. In Finland there was never such a military-strategic debate, and the analysis provided several possible reasons for this divergence: First of all, the Swedish debate may be explained by geopolitics. Sweden is used to having Russia at a safe distance but with Nord Stream Russian interests will come closer to Sweden, which could lead to increased Russian military presence in Swedish waters. For Finland, Russia is already so close that a pipeline hardly will make a strategic difference. Second, the fact that Sweden has scaled down its military in recent years may contribute to the increased sense of threat. Finland, by contrast, has not redefined its military concept and still has an army that is suitable for territorial defence; hence, the Finns may feel more secure than the Swedes and have little reason to engage in a military-strategic pipeline debate. Third, it is possible that the Finns, regardless of their territorial defence capabilities, do not see the militarystrategic implications of Nord Stream as relevant at all. If this is the case, they are likely to consider the Swedish debate to be somewhat paranoid, and the argument that Sweden has a historical Russia-complex becomes more interesting. Fourth, the reason for Finland's calmness may be of the more historical kind, namely that there is some Finlandisation at work in the Finnish Nord Stream debate. This would mean that other issues than the purely pragmatic ones related to the EIA procedure are suppressed in the debate in order not to upset the relationship with Moscow. That Finland, unlike Sweden, imports all its gas from Russia may also influence Helsinki's attitude towards Moscow. As was noted in the analysis, it is very difficult to ascertain whether Finland has become 're-Finlandised', or whether the military issues are simply considered irrelevant. Finally, both Sweden and Finland may be reluctant to work against Berlin's interests because of their common EU-affiliation. By and large, the difference between the Finnish and Swedish debates can be explained by some contemporary factors, but the picture becomes richer when the historical elements are included in the equation.

What the Swedish and Finnish debates have had in common, which has also been the case for most of the other littoral states, is a considerable concern for the Baltic Sea environment. Even the Nord Stream consortium has focused extensively on preserving the Baltic environment during construction of the pipeline, which is probably an appreciation of the fact that without such an environmental focus the project's chance of success would be significantly smaller. Nonetheless, as chapter 6 revealed, Sweden and Finland may have good reasons to demand the strictest environmental assessments before any construction begins. Considering that they have nothing to gain from Nord Stream from an energyperspective, but may lose significantly in case of an environmental catastrophe, their environmental concern may not appear as exaggerated. It is interesting to note that Sweden has already sent the first EIA back to Nord Stream because it was considered incomplete. The Finns could potentially do the same when their EIA is ready, thus not expediting construction but rather slowing the process down and increasing the cost for the consortium. There are indeed those who hope that Finland, or perhaps more likely Sweden, will keep delaying the project through the EIA process by demanding more thorough assessments, thus driving the price tag upwards, and that the pipeline consortium in the end will have to abandon the whole offshore idea and settle with a less costly landbased route (Swiecicki and Wahlbäck interviews). Whether this is a likely scenario does not fall within the scope of this report, but suffice it to say that the possibility exists. If the Swedish and Finnish governments are in reality opposed to Nord Stream, the most efficient way of working against it without angering Moscow and Berlin may be by focusing solely on the environmental issues, which, after all, concern the Baltic Sea as such and not only narrow national interests.

This report has hopefully made clearer why the interpretations of Nord Stream, since the project was announced, have differed to such an extent in the different littoral states of the Baltic Sea. Contemporary energyissues are naturally a key factor; that is, who needs gas and where they can get it. But, as has been shown, the historical energy relations of the states in question are also of great importance for how Nord Stream has been interpreted. The environmental concern can be seen as a somewhat contemporary factor but it is nevertheless linked to the history of the region, both in relation to dumped munitions, pollution, and Russia's environmental track record. Finally, the military-strategic concern about the pipeline can in part be explained by geography and the fact that Nord Stream brings Russian interests further out in the Baltic Sea, but essentially the issue is deeply embedded in the history of the region, in particular Russia's relations with the smaller littoral states. The objective of this report was never to find the one truth about Nord Stream, as such a truth is unlikely to exist. Rather, the aim has been to show that the actors involved focus on different aspects of the pipeline because they have diverging starting points and conflicting political agendas. Hence, there may in fact be several 'truths' about Nord Stream; a point one should keep in mind when trying to comprehend the multitude of arguments being used about the pipeline. As Nord Stream has yet to be constructed there is certainly a need to keep a close eye on the project's development in the time to come. The author hopes that this report can be useful for people with a genuine interest in Nord Stream and related issues, and that it can inspire other researchers to keep highlighting the complexities of the project rather than a limited number of aspects.

Appendix: Energy Mix Charts

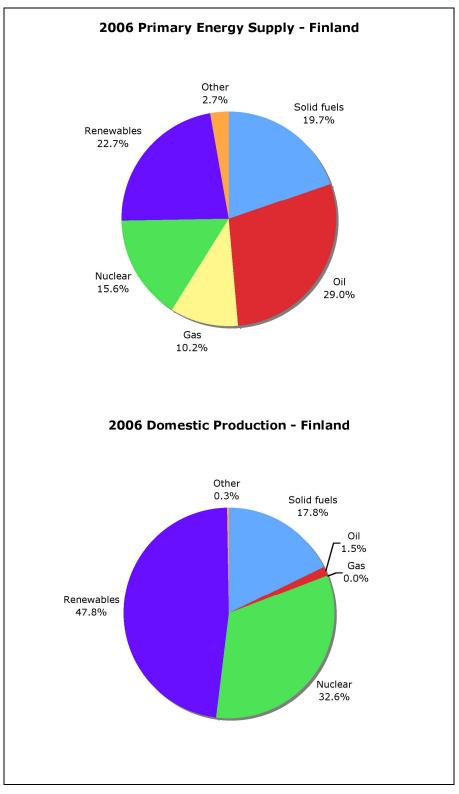


Figure 8: Energy Mix of Finland

Source: EU Commission (2008:67)

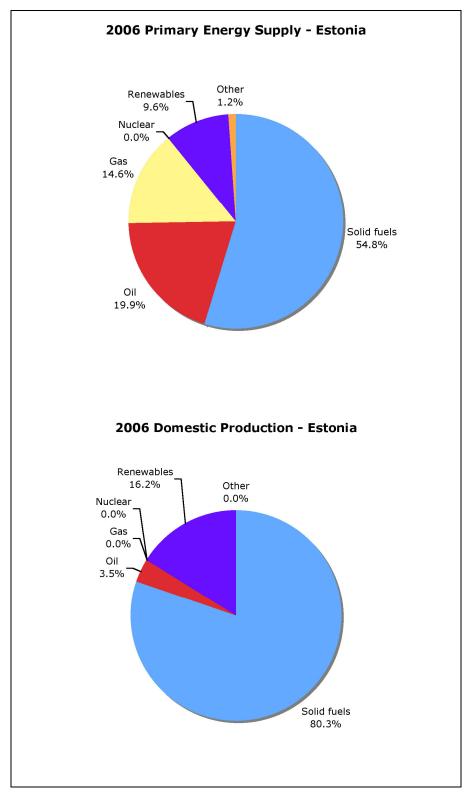


Figure 9: Energy Mix of Estonia

Source: EU Commission (2008:48)

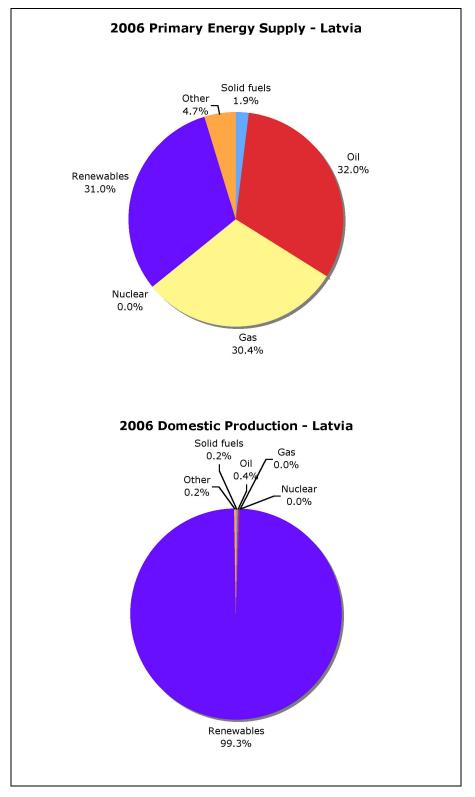


Figure 10: Energy Mix of Latvia

Source: EU Commission (2008:55)

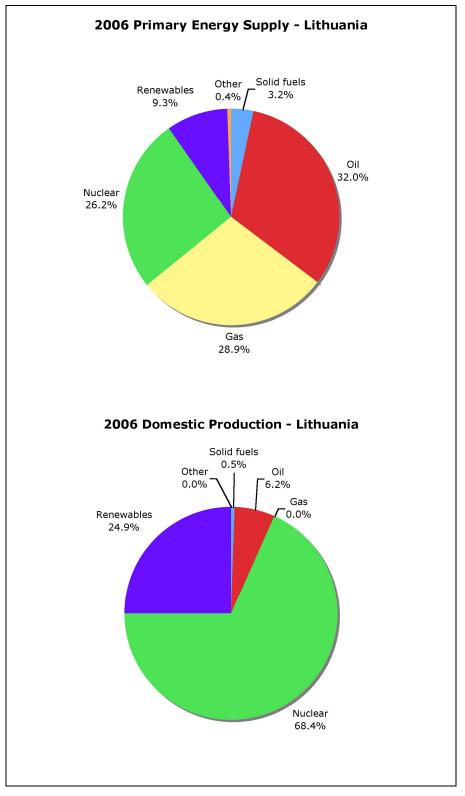


Figure 11: Energy Mix of Lithuania

Source: EU Commission (2008:56)

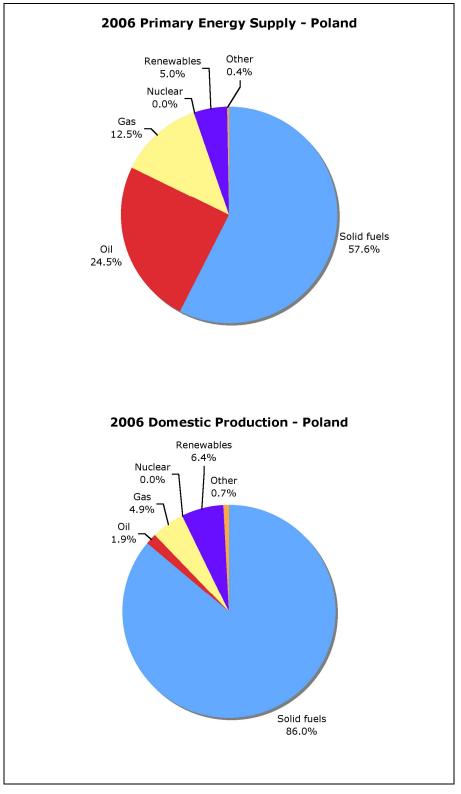


Figure 12: Energy Mix of Poland

Source: EU Commission (2008:62)

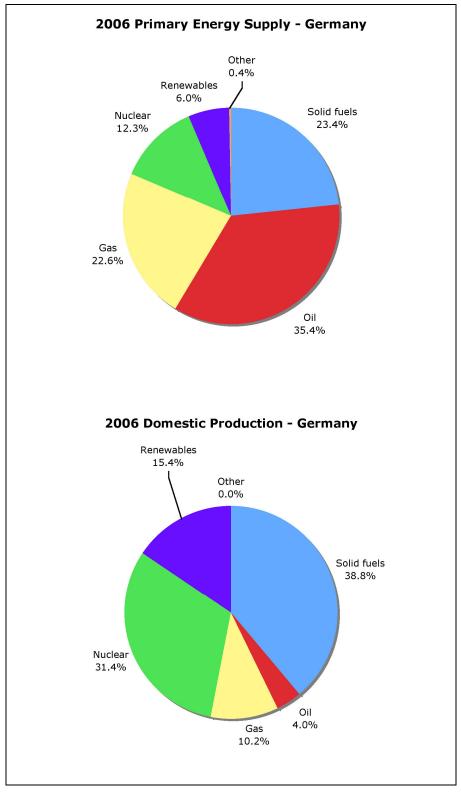


Figure 13: Energy Mix of Germany

Source: EU Commission (2008:47)

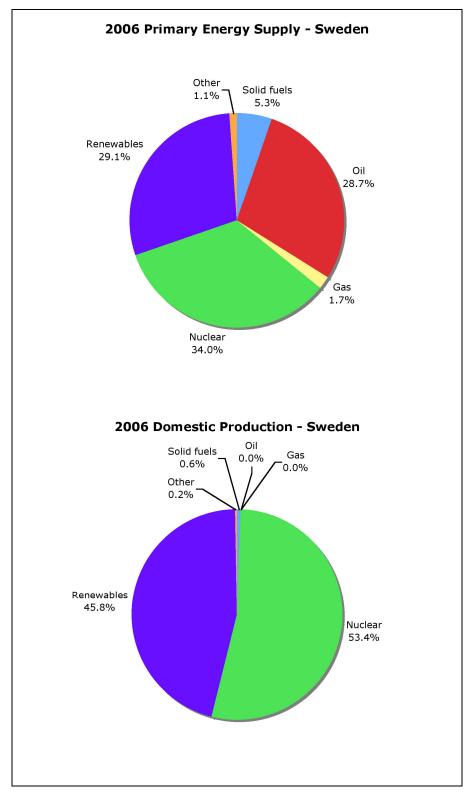


Figure 14: Energy Mix of Sweden

Source: EU Commission (2008:68)

References

8.1 Interviews (by the Author)

- Auglys, Vitalijus (Head of Environmental Impact Assessment Division, Ministry of the Environment of the Republic of Lithuania). Written notes. 3 June 2008. Vilnius, Lithuania.
- Bailes, Alyson (former British Ambassador to Finland (2000-2002) and Director of Stockholm International Peace Research Institute (2002-2006), from 2007: Visiting Professor at the University of Iceland). Tape recording. 12 April 2008. Oslo, Norway.
- Grabauskas, Tomas (First Secretary, Energy Policy Division of the Economic Security Department, Lithuanian Ministry of Foreign Affairs). Tape recording. 2 June 2008. Vilnius, Lithuania.
- Hirdman, Sven (former Swedish Ambassador to Russia (1994-2004)). Tape recording. 27 May 2008. Stockholm, Sweden.
- Janeliunas, Tomas (Associate Professor, Institute of International Relations and Political Science, Vilnius University). Tape recording. 3 June 2008. Vilnius, Lithuania.
- Juntunen, Alpo (Senior Research Fellow, Finnish National Defence University). Tape recording. 28 May 2008. Helsinki, Finland.
- Kaljurand, Riina (Deputy Director, International Centre of Defence Studies, Estonia). Tape recording. 29 May 2008. Tallinn, Estonia.
- Kasekamp, Andres (Director of the Estonian Foreign Policy Institute, and Professor at the University of Tartu, Department of Political Science). Tape recording. 31 May 2008. Tallinn, Estonia.
- Larsson, Robert (Defence Analyst at the Swedish Defence Research Agency (FOI)). Tape recording. 26 May 2008. Stockholm, Sweden.
- Lejins, Atis (Director, Latvian Institute of International Affairs). Tape recording. 5 June 2008. Riga, Latvia.
- Liik, Kadri (Director, International Centre of Defence Studies, Estonia). Tape recording. 29 May 2008. Tallinn, Estonia.
- Lukoševičius, Tomas (Officer, Energy Policy Division of the Economic Security Department, Lithuanian Ministry of Foreign Affairs). Tape recording. 2 June 2008. Vilnius, Lithuania.
- Mäe, Andres (Research Fellow, Estonian Foreign Policy Institute). Tape recording. 29 May 2008. Tallinn Estonia.
- Murd, Mati (Director, Division for Energy and Environment, Estonian Ministry of Foreign Affairs). Tape recording. 29 May 2008. Tallinn, Estonia.
- Ries, Tomas (Director, Swedish Institute of International Affairs). Tape recording. 26 May 2008. Stockholm, Sweden.
- Swiecicki, Jakub (Research Fellow, Swedish Institute of International Affairs). Tape recording. 26 May 2008. Stockholm, Sweden.

- Tynkkynen, Nina (Research Fellow, Finnish Institute of International Affairs). Tape recording. 28 May 2008. Helsinki, Finland.
- Vaahtoranta, Tapani (Programme Director, Finnish Institute of International Affairs). Tape recording. 28 May 2008. Helsinki, Finland.
- Vaičiūnas, Žygimantas (Acting Director, Center for Strategic Studies, Lithuania). Tape recording. 3 June 2008. Vilnius, Lithuania.
- Wahlbäck, Krister (former Swedish Ambassador to Finland (1986-1991) and Security Policy Advisor to Swedish Prime Minister Carl Bildt (1991-1994)). Tape recording. 27 May 2008. Stockholm, Sweden.
- Zysk, Bozena Katarzyna (Senior Research Fellow, Norwegian Institute for Defence Studies). Tape recording. 16 May 2008. Oslo, Norway.

8.2 Printed Sources

- Aftonbladet (2006). 'Visst kan vi säga nej till gasledningen' [Of course we can say no to the gas pipeline]. *Aftonbladet*. 15 November 2006. Available at:
 - www.aftonbladet.se/ledare/fredagmed/matsengstrom/article456768.ab (accessed 9 December 2007).
- Ameln, Dirk von (2008). 'Preserving the Environment: Nord Stream Pipeline Across the Baltic Sea.' Presentation during European Parliament hearing, 29 January 2008.
- Andrejev, Oleg *et al.* (2004). 'Mean circulation and water exchange in the Gulf of Finland a study based on three-dimensional modelling'. *Boreal Environment Research* No.9: 1-16.
- Baltic Times (2007). 'Estonia says 'No' to Nord Stream.' *Baltic Times*. 20 September 2007. Available at: www.baltictimes.com/news/articles/18860 (accessed 18 June 2008).
- Baran, Zeyno (2006). Lithuanian Energy Security: Challenges and Choices – White Paper. Center for Eurasian Policy, Hudson Institute. Available at: www.hudson.org/files/publications/LithuanianEnergySecurityDecem
- Baran, Zeyno (2007). 'EU Energy Security: Time to End Russian Leverage.' *The Washington Quarterly* Vol.30 No.4 (Autumn 2007): 131-144.

ber06.pdf (accessed 29 November 2007).

- BarentsObserver (2008a). 'Nord Stream Price Tag Doubled,' *BarentsObserver*. 2 April 2008. Available at: www.barentsobserver.com/nord-stream-price-tag-doubled.4472135-16178.html (accessed 4 April 2008).
- BarentsObserver (2008b). 'More Russia gas for domestic market.' *BarentsObserver*. 19 May 2008. Available at: www.barentsobserver.com/more-russian-gas-for-domesticmarket.4484193-16178.html (accessed 19 May 2008).

- BBC (2005a). 'Russia and Germany sign gas deal.' *BBC News*. 8 September 2005. Available at: http://news.bbc.co.uk/2/hi/business/4225736.stm (accessed 15 March 2008).
- BBC (2005b). 'Putin deplores collapse of USSR.' *BBC News*. 25 April 2005. Available at: http://news.bbc.co.uk/2/hi/europe/4480745.stm (accessed 20 July 2008).
- Berliner Zeitung (2007). 'Die Mühen der Tiefe' [The troubles of the deep]. *Berliner Zeitung*. 1 September 2007. Available at: www.berlinonline.de/berliner-zeitung/archiv/.bin/dump.fcgi/2007/ 0901/meinung/0049/index.html (accessed 10 December 2007).
- Boczek, Bolesław A. (1989). 'The Baltic Region in its Historical Context.' In Arthur H. Westing (ed.), *Comprehensive Security for the Baltic: An Environmental Approach*. Oslo: PRIO, International Peace Research Institute.
- BP (2007). 'Historical data from 1965-2006.' Available at: www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/re ports_and_publications/statistical_energy_review_2007/STAGING/l ocal_assets/downloads/spreadsheets/statistical_review_full_report_w orkbook_2007.xls (accessed 28 May 2008).
- BP (2008). BP Statistical Review of World Energy June 2008. Available at: www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/re ports_and_publications/statistical_energy_review_2008/S (accessed 28 July 2008).
- Carlgren, Andreas (2008). 'Regeringens prövning av gasledning i Östersjön' [The government's review of the gas pipeline in the Baltic Sea]. Press Conference, 12 February 2008. Presentation notes available at: www.regeringen.se/download/0cf2cc25.pdf?major= 1&minor=95113&cn=attachmentDuplicator_0_attachment (accessed 15 March 2008).
- Davis, Joshua (2007). 'Hackers Take Down the Most Wired Country in Europe.' *Wired Magazine* Sept 2007. Available at: www.wired.com/politics/security/magazine/15-09/ff_estonia (accessed 23 July 2008).
- Deutsche Welle (2007). 'Merkel Puts Germany's Nuclear Phase-Out in Question.' *Deutsche Welle*. 9 January 2007. Available at: www.dw-world.de/dw/article/0,2144,2304599,00.html (accessed 20 June 2008).
- DG Internal Policies (2007a). 'The Nord Stream Gas Pipeline Project and Its Strategic Implications.' Briefing Note. December 2007. Available at: http://epp-ed.europarl.eu.int/Press/peve08/docs/080129nordstream_

impli_en.pdf (accessed 15 June 2008).

DG Internal Policies (2007b). 'The Nord Stream Gas Pipeline Project: Environmental Issues.' Briefing Note. December 2007. Available at: www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/703/70 3357/703357en.pdf (accessed 15 June 2008).

- DN (2006a). 'Rysk gasledning säkerhetspolitiskt problem' [Russian Gas Pipeline is a Security-Political Problem]. *Dagens Nyheter*. 14 November 2006. Available at: www.dn.se/DNet/jsp/polopoly.jsp?d= 147&a=588619 (accessed 9 December 2007).
- DN (2006b). 'Gasledningen ett militärt hot mot Sverige' [The gas pipeline is a military threat to Sweden]. *Dagens Nyheter*. 14 November 2006. Available at: www.dn.se/DNet/road/Classic/ article/0/jsp/print.jsp?&a=588544 (accessed 9 December 2007).
- DN (2007a). 'Norskt gasrör visar vägen' [Norwegian gas pipeline shows the way]. *Dagens Nyheter*. 25 February 2007. Available at: www.dn.se/DNet/road/Classic/article/0/jsp/print.jsp?&a=622003 (accessed 9 December 2007).
- DN (2007b). 'Sverige kan inte stoppa rysk-tyska gasledningen' [Sweden cannot stop the Russo-German gas pipeline]. *Dagens Nyheter*. 7 January 2007. Available at: www.dn.se/DNet/road/Classic/article/0/ jsp/print.jsp?&a=730592 (accessed 24 January 2008).
- Dresen, F. Joseph (2006). 'Russian Energy and Northern Europe: How Much Scope for Political Pressure?.' Meeting Report from lecture with Krister Wahlbäck, 23 October 2006. Available at: www.wilsoncenter.org/index.cfm?topic_id=1424&fuseaction=topics. publications&doc_id=209100&group_id=7718 (accessed 18 April 2008).
- EIA (Energy Information Administration) (2008). 'Oil Exports.' Available at: www.eia.doe.gov/emeu/cabs/Russia/Oil_exports.html (accessed 23 June 2008).
- Eni (2006). *World Oil and Gas Review 2006*. Available at: www.eni.it/wogr_2006/xls/en/gas/impo/gas_imp_europa.xls (accessed 21 July 2008).
- EU Commission (2006a). Green Paper: A European Strategy for Sustainable, Competitive and Secure Energy. Brussels: The European Commission. Available at: http://ec.europa.eu/energy/green-paper-energy/ doc/2006_03_08_gp_document_en.pdf (accessed 4 May 2008).
- EU Commission (2006b). *TEN-E Guidelines specify a European-wide* energy transmission network. MEMO/06/304, 25 July 2006. Brussels: The European Commission.
- EU Commission (2006c). 'TEN-E financed projects 1995-2006.' Available at: http://ec.europa.eu/ten/energy/studies/doc/ten_e_ financed_projects_95_06.pdf (accessed 17 June 2008).
- EU Commission (2007). *Energy Corridors: European Union and Neighbouring Countries*. Report EUR 22581. Brussels: The European Commission.
- EU Commission (2008). *EU ENERGY IN FIGURES 2007/2008*. Available at: http://ec.europa.eu/dgs/energy_transport/figures/ pocketbook/doc/2007/2007_energy_en.pdf (accessed 28 July 2008).

- EU Parliament (2008a). 'Environmental impact of the planned gas pipeline in the Baltic sea to link up Russia and Germany.' Plenary sitting, 8 July 2008. Video from session available at: www.europarl. europa.eu/wps-europarl-internet/faces/vod/player.jsp?date=20080708 (accessed 8 July 2008).
- Expressen (2006). 'Oseriöst om gasledningen' [Nonsense about the gas pipeline]. *Expressen.* 15 November 2006. Available at: www.expressen.se/1.464369 (accessed 9 December 2007).
- Expressen (2007). 'Ambassadören: Messing en idiot' [The Ambassador: Messing – An Idiot]. *Expressen*. 15 February 2007. Available at: www.expressen.se/1.558113 (accessed 19 June 2008).
- Financial Times (2007). 'Russian anger at Estonia over survey.' *Financial Times*. 16 October 2007. Available at: http://us.ft.com/ftgateway/superpage.ft?news_id=fto101620072102458770&page=1 (accessed 10 December 2007).
- Financial Times Deutschland (2007) 'Moskau fürchtet um Ostsee-Pipeline' [Moscow worried about Baltic Sea pipeline]. *Financial Times Deutschland*. 16 October 2007. Available at: www.ftd.de/ politik/europa/:PR%20Kampf%20Ostseepipeline/206773.html (accessed 10 December 2007).
- FOI (2007). 'Statement to the Ministry of Defence concerning Nord Stream and the gas pipeline through the Baltic Sea.' Available at: www.nord-stream.com/uploads/media/fois_yttrande_ga%CC%88 llande_nord_stream_-_slutdokument-en.pdf (accessed 18 June 2008).
- Follath, Erich and Alexander Jung (eds.) (2006). *Der neue Kalte Krieg. Kampf um die Rohstoffe*. München: Deutsche Verlags-Anstalt.
- Gazprom (2005). 'Gazprom launches construction of onshore section of North European gas pipeline.' Available at: www.gazprom.ru/ eng/news/2005/12/18470.shtml (accessed 10 August 2008).
- Gazprom (2008). 'Project Major Specifications.' *Shtokman Project*. Available at: www.gazprom.ru/eng/articles/article21712.shtml (accessed 23 June 2008).
- Godzimirski, Jakub M. (2005). 'The New Geopolitics of the North?.' *Security Policy Library* 2-2005, Oslo: The Norwegian Atlantic Committee.
- Godzimirski, Jakub M. (2007). 'Energy and Identity Readings of Shtokman and NEGP.' *Security Policy Library* 2-2007, Oslo: The Norwegian Atlantic Committee.
- Goldman, Marshall I. (2004). 'The Yukos Affair.' *Current History* Vol.103 No.675: 319-323.
- Götz, Roland (2006). 'The NEGP: German and European Interests.' In Philip Kazin (ed.), *Baltic Mosaic*. St. Petersburg: Baltic Research Center.

- Halonen, Tarja (2008). 'Our Common Baltic Sea Region Future Challenges.' Speech at the Überseeclub, Hamburg 8 May 2008. Transcript available at: www.presidentti.fi/netcomm/news/showarticle.asp?intNWSAID=69 481&intSubArtID=27682 (accessed 5 July 2008).
- Hamilton, Carl B. (2007). *Naturgasledning på Östersjöns botten* [Natural gas pipeline on the bottom of the Baltic Sea]. Report 23 February 2007. Stockholm: Folkpartiet [The Swedish Liberal Party].
- Hamilton, Carl B. (2008a). *Gasledningen i Östersjön: Mycket viktig delseger att plattformen inte byggs!* [The gas pipeline in the Baltic Sea: Very important partial victory that the platform will not be built]. Electronic newsletter 8 April 2008.
- Hamilton, Daniel S. (2008b). 'The Baltics: Still Punching Above Their Weight.' *Current History* Vol.107 No.707 (March 2008): 119-125.
- Hanhimäki, Jussi M. (2000). 'Esko Salminen: The Silenced Media' [book review]. *The American Historical Review* Vol. 105 No.1: 304-305.
- Hedenskog, Jakob and Robert Larsson (2007). *Russian Leverage on the CIS and the Baltic States*. FOI Swedish Defence Research Agency. Report No. 'FOI-R--2280—SE'.
- HELCOM (1994). Report on Chemical Munitions Dumped in the Baltic Sea. Report to the 15th Meeting of the Helsinki Commission 8-11 March 1994. Available at: www.helcom.fi/stc/files/Publications/ OtherPublications/1994Report-ChemicalMunitionsDumpedInThe BalticSea.pdf (accessed 20 June 2008).
- Helm, Dieter (2007). *The Russian Dimension and Europe's External Energy Policy* Available at: www.dieterhelm.co.uk/publications/ Russian_dimension.pdf (accessed 29 November 2007).
- Hirdman, Sven (2007). Gasledningsprojektet i Östersjön [Gas Pipeline Project in the Baltic Sea]. Speaking notes from 16 January 2007 lecture with Folk och Försvar. Available at: www.folkochforsvar.se/ files/RK_2007/hirdman.pdf (accessed 21 May 2008).
- Honoré, Anouk (2006). Future Natural Gas Demand in Europe: The Importance of the Power Sector. Oxford: Oxford Institute for Energy Studies. Available at: www.oxfordenergy.org/pdfs/NG10.pdf (accessed 27 June 2008).
- Hydro (2004). 'Langeled Prosjekt.' Presentation notes, 10 March 2004. Available at: www4.hydro.com/ormenlange/library/attachments/Lan geled%20Gass%20Eksport_mars%2004.pdf (accessed 22 July 2008).
- Hydro (2006). 'Langeled Development Below Budget.' Available at: www4.hydro.com/ormenlange/en/media_room/news/2006_08/ons_la ngeled_en.html (accessed 10 May 2008).
- IEA (2006a). *Energy Policies of IEA Countries: 2006 Review*. Paris: International Energy Agency / OECD.
- IEA (2006b). World Energy Outlook 2006. Paris: International Energy Agency / OECD.

- IEA (2006c). *Optimising Russian Natural Gas.* Paris: International Energy Agency / OECD.
- IEA (2007). Energy Policies of IEA Countries: Germany 2007 Review. Paris: International Energy Agency / OECD.
- Janeliunas, Tomas and Arunas Molis (2005). 'Energy Security of Lithuania: Challenges and Perspectives.' *Lithuanian Political Science Yearbook* 1-2005: 200-223.
- Kasekamp, Andres et al. (2006). Energy Security of Estonia in the Context of the Energy Policy of the European Union. Tallinn: Estonian Foreign Policy Institute. Available at: www.evi.ee/lib/Security.pdf (accessed 3 May 2008).
- Kasekamp, Andres (2007). 'Gaasitorust ilma emotsioonideta' [Gas Pipeline Without Emotions]. *Postimees*. 10 September 2007. Available at: wwx.postimees.ee/100907/esileht/arvamus/282010.php (accessed 1 July 2008).
- Keohane, Robert and Joseph Nye (2000). *Power and Interdependence*. 3rd Edition. New York: Longman.
- Kommersant (2008a). 'Munich Talks: Dmitry Medvedev's debut in Europe.' Kommersant. 5 June 2008. Available at: www.kommersant. com/p899883/r_527/Dmitry_Medvedev_pays_a_visit_to_Germany/ (accessed 11 June 2008).
- Kommersant (2008b). 'EU simply wants timely gas supplies without any political games.' *Kommersant*. 17 April 2008. Available at: www.kommersant.com/p883267/ (accessed 19 June 2008).
- Larsson, Robert (2006). Russia's Energy Policy: Security Dimensions and Russia's Reliability as an Energy Supplier. FOI – Swedish Defence Research Agency. Report No. 'FOI-R--1934—SE'.
- Larsson, Robert (2007). Nord Stream, Sweden and Baltic Sea Security. FOI – Swedish Defence Research Agency. Report No. 'FOI-R--2251—SE'.
- Local (2008). 'Sweden's military plans further cuts.' *Local: Sweden's News in English.* 23 April 2008. Available at: www.thelocal.se/ 11306/20080423/ (accessed 1 July 2008).
- Lucas, Edward (2008). The New Cold War: How The Kremlin Menaces both Russia and the West. London: Bloomsbury Publishing.
- Lyne, Sir Roderic (2006). 'Russia At The Crossroads: Again?.' *The EU-Russia Review* Issue One (May 2006). Brussels: The EU-Russia Centre: 6-11.
- Mäe, Andres (2007). 'Estonia's energy security and the European Union.' In Andres Kasekamp (ed.), *The Estonian Foreign Policy Yearbook* 2007. Tallinn: Estonian Foreign Policy Institute.
- Mäe, Andres (2008). E-mail correspondence with author, 1-2 July 2008.

- Mandil, Claude (2007). 'Welcome and Scene Setting Remarks.' Speech at the Senior Expert Meeting on Caspian Gas Market Diversity & Southern Corridors. Notes available at: www.iea.org/textbase/work/ 2007/caspian_expert/mandil.pdf (accessed 4 August 2008).
- MFA Finland (Ministry of Foreign Affairs, Finland) (2007). 'Statement regarding Environmental Impact Assessment programme for Russia-Germany offshore natural gas pipeline.' Available at: www.nord-stream.com/uploads/media/mieb6f_1.pdf (accessed 18 June 2008).
- Milov, Vladimir (2006). 'The Use of Energy As A Political Tool.' *The EU-Russia Review* Issue One (May 2006). Brussels: The EU-Russia Centre: 12-21.
- Milov, Vladimir et al. (2006). 'Russia's Energy Policy 1992-2005.' Eurasian Geography and Economics Vol.47 No.3 (May-June 2006): 285-313.
- MoE Finland (Ministry of the Environment, Finland) (2008). 'The Baltic Sea.' Available at: www.ymparisto.fi/default.asp?contentid=263767 &lan=EN (accessed 4 July 2008).
- MoE Lithuania (Ministry of the Environment, Lithuania) (2007). 'Regarding the Notification of the Nord Stream Gas Pipeline Project.' Available at: www.nord-stream.com/uploads/media/litauen. pdf (accessed 18 June 2008).
- MoE Poland (Ministry of the Environment, Poland) (2007). [Untitled]. Answer to Nord Stream's Project Information Document. Available at: www.nord-stream.com/uploads/media/polen1_autorosiert.pdf (accessed 18 June 2008).
- Moscow Times (2008). 'Finnish Courts May Delay Baltic Gas Link.' *Moscow Times*. 17 January 2008. Available at: www.themoscow times.com/stories/2008/01/17/045.html (accessed 24 January 2008).
- Nehring, Stefan (2007). 'Pulverfass Ostsee' [Powder Barrels of the Baltic Sea]. *Waterkant* Vol.22 No.4: 23-28.
- New Europe (2008). 'Lithuania wants to sink the Nord Stream gas pipeline.' *New Europe*. 24 March 2008. Available at: www.neurope. eu/articles/84554.php (accessed 30 March 2008)
- New York Times (1993). 'Russia Cuts Gas Supply To Estonia in a Protest.' *New York Times*. 26 June 1993.
- New York Times (2007). 'Friction Between Estonia and Russia Ignites Protests in Moscow.' *New York Times*. 2 May 2007. Available at: www.nytimes.com/2007/05/03/world/europe/03estonia.html (accessed 23 July 2008).
- Nord Stream (2006a). 'North European Gas Pipeline (Offshore Section). Attachment to the Notification to the Affected Parties Under Article 3 of the Espoo Convention.' Available at www.nord-stream.com/ uploads/media/Summary_ENGLISH.pdf, accessed 28 Oct 2007.
- Nord Stream (2006b). *Project Information Document*. Available at www.nord-stream.com/uploads/media/PID_ENGLISH.pdf, accessed 28 Oct 2007.

- Nord Stream (2007a). *Project Information: Status of the Nord Stream pipeline route in the Baltic Sea*. Available at: www.nord-stream.com/uploads/media/Nord_Stream_Route_Status_ENGLISH.pdf (accessed 8 May 2008).
- Nord Stream (2007b). 'Gasunie and Gazprom Agree on Nord Stream Terms.' Available at: www.nord-stream.com/news_detail.html?&no _cache=1&tx_ttnews[pointer]=1&tx_ttnews[tt_news]=312&tx_ttne ws[backPid]=35&cHash=d0d3feec06 (accessed 12 December 2008).
- Nord Stream (2007c). 'Statement on the Estonian Government's Decision.' Available at: www.nord-stream.com/en/news-list/news/newsdetail/browse/2/article/statement-on-the-estonian-governmentsdecision.html?no_cache=1&tx_ttnews%5BbackPid%5D=35&cHash =26f3408107 (accessed 2 July 2008).
- Nord Stream (2008a). 'Gas for Europe.' Available at: www.nord-stream. com/gas_for_europe.html (accessed 20 May 2008).
- Nord Stream (2008b). 'Facts and Figures.' Available at: www.nord-stream.com/facts_figures.html (accessed 20 May 2008).
- Nord Stream (2008c). 'Maintenance of Nord Stream Pipelines Feasible Without A Service Platform.' Available at: www.nord-stream.com/ news_detail.html?&no_cache=1&tx_ttnews[tt_news]=428&tx_ttnew s[backPid]=35&cHash=cb9a42b6b2 (accessed 10 April 2008).
- Nord Stream (2008d). 'Secure Gas Supply.' Available at: www.nordstream.com/16.html?&L=0 (accessed 25 May 2008).
- Nord Stream (2008e). 'Status TEN.' Available at: www.nord-stream. com/status_ten.html?&L=1653 (accessed 25 May 2008).
- Nord Stream (2008f). 'Financing of Nord Stream Pipeline Well Underway.' Available at: www.nord-stream.com/en/news-list/news/newsdetail/article/financing-of-nord-stream-pipeline-well-underway.html? no_cache=1&tx_ttnews%5BbackPid%5D=35&cHash=85ca3a97a1 (accessed 10 June 2008).
- Nord Stream (2008g). 'Importance.' Available at: www.nord-stream.com /en/project/importance.html (accessed 17 June 2008).
- Nord Stream (2008h). 'Response to questions asked, and inaccurate statements made, during the Public Hearing of the Committee on Petitions, "THE NORD STREAM PIPELINE AND ITS IMPACT ON THE BALTIC SEA.'' European Parliament, Brussels, 29 January 2008. Available at: www.nord-stream.com/fileadmin/Doku mente/Company_events/Public_Hearing_Brussels/Nord_Stream_He aring_Q_A.pdf (accessed 28 June 2008).
- Nord Stream (2008i). 'Environmental Impact Assessment.' Available at: www.nord-stream.com/en/environment/eia.html (accessed 2 July 2008)
- Nord Stream (2008j). 'Route.' Available at: www.nord-stream.com/en/ project/route.html (accessed 6 July 2008)

Bendik Solum Whist

- Nord Stream (2008k). 'International Consultations on Environmental Impacts.' Available at: www.nord-stream.com/en/project/regulatoryaspects/international-consultations.html (accessed 15 June 2008).
- Nord Stream (20081). 'Safely Dealing with Munitions in the Baltic Sea.' Available at: www.nord-stream.com/fileadmin/Dokumente/eng/ Munitions_Baltic_Sea.pdf (accessed 4 August 2008).
- Polachek, Solomon W. (1997). 'Why Democracies Cooperate More and Fight Less: The Relationship Between International Trade and Cooperation.' *Review of International Economics* Vol.5 No.2: 295-309.
- Proedrou, Filippos (2007) 'The EU-Russia Energy Approach under the Prism of Interdependence.' *European Security*, Vol.16 No.3: 329-355.
- Rahr, Alexander (2007). 'Germany and Russia: A Special Relationship.' *The Washington Quarterly* Vol.30 No.2: 137-145.
- Reuters (2007a). 'Don't politicise Baltic gas pipeline, Russia says.' 18 December 2007. Available at: http://uk.reuters.com/article/ idUKL1830930320071218 (accessed 15 March 2008).
- Reuters (2007b). 'Nord Stream to hike cost estimates in early 2008.' 13 December 2007. Available at: http://uk.reuters.com/article/company News/idUKL1368466120071213?symbol=EONG.DE&sp=true (accessed 16 May 2008).
- Reuters (2008a). 'Nord Stream says overland route not an option.' 14 April 2008. Available at: http://uk.reuters.com/articlePrint?articleId= UKL1455560620080414 (accessed 15 April 2008).
- Reuters (2008b). 'Update 1 Nord Stream report ready in 2009 Finland.' 6 June 2008. Available at: http://uk.reuters.com/article Print?articleId=UKL0674822820080606 (accessed 10 June 2008).
- RIA Novosti (2008a). 'Nord Stream gas project serves Europe's energy interests Medvedev.' *RIA Novosti*. 5 June 2008. Available at: http://en.rian.ru/russia/20080605/109325451.html (accessed 10 June 2008).
- RIA Novosti (2008b). 'Russia, EU to address human rights, energy, conflicts.' *RIA Novosti*. 27 June 2008. Available at: http://en.rian.ru/russia/20080627/112411454.html (accessed 28 June 2008).
- RIA Novosti (2008c). 'Finland reaffirms Nord Stream needs more environmental checks.' *RIA Novosti*. 25 April 2008. Available at: http://en.rian.ru/russia/20080425/105932592.html (accessed 28 April 2008).
- Riley, Alan (2006). 'The coming of the Russian gas deficit: Consequences and solutions.' *CEPS Policy Brief* No.116 (October 2006). Brussels: Centre for European Policy Studies.

- Riley, Alan (2008). Nordstream: An Economic and Market Analysis of the North European Pipeline Project. Paper prepared for the European Parliament's Committee on Petitions, 29 January 2008. Available at: www.europarl.europa.eu/meetdocs/2004_2009/ documents/dv/peti20080129_economicanalysisriley_/peti20080129_ economicanalysisriley_en.pdf (accessed 29 February 2008).
- Rowe, Lars, Geir Hønneland and Arild Moe (2007). *Evaluering av miljø-vernsamareidet mellom Norge og Russland*. [An evaluation of the environmental cooperation between Norway and Russia]. FNI Report 7/2007. Lysaker: The Fridtjof Nansen Institute.
- Salukvadze, Khatuna (2006). 'Russia's New Doctrine of Neo-Imperialism.' *Central Asia-Caucasus Analyst* Vol.8 No.3: 9-10.
- SEPA (Swedish Environmental Protection Agency) (2007). 'Views in consideration of the preparation of Environmental Impact Assessment (EIA) for the planned northern European gas pipeline Nord Stream and tests under the Continental Shelf Act and the Swedish Economic Zone Act.' Available at: www.nord-stream.com/uploads/ media/naturvardsverket-382-316-07_ek_zon_en.pdf (accessed 18 June 2008).
- Singleton, Fred (1985). 'Roy Allison: Finland's Relations with the Soviet Union, 1944-84' [book review]. *International Affairs (Royal Institute* of International Affairs 1944-) Vol.61 No.3: 530-561
- Socor, Vladimir (2007). 'Russian Authorities, Media Inflame Situation in Estonia.' *Eurasia Daily Monitor*. 2 May 2007. Available at: www.jamestown.org/edm/article.php?article_id=2372137 (accessed 30 July 2008).
- Spiegel (2006). 'Sweden Afraid of Russian Spooks.' *Der Spiegel*. 15 November 2006. Available at: www.spiegel.de/international/0,1518,448652,00.html (accessed 28 October 2007).
- Spiegel (2007a). 'Can Germany Really Shut Down its Nuclear Reactors?.' *Der Spiegel*. 17 January 2007. Available at: www.spiegel.de/ international/spiegel/0,1518,460120,00.html (accessed 23 June 2008).
- Spiegel (2007b). 'Schröder auf Werbetour bei der EU' [Schröder on Advertising Tour to the EU]. *Der Spiegel*. 7 February 2007. Available at: www.spiegel.de/wirtschaft/0,1518,465013,00.html (accessed 28 October 2007).
- Spiegel (2007c). 'Schröder takes lobby work to Brussels.' *Der Spiegel.* 8 October 2007. Available at: www.spiegel.de/international/europe/ 0,1518,510015,00.html (accessed 28 October 2007).
- Spiegel (2007d). 'Gift und Sprengkraft aus der Tiefe' [Poison and Explosives in the Deep]. *Der Spiegel.* 2 April 2007. Available at: www.spiegel.de/wissenschaft/mensch/0,1518,475201,00.html (accessed 28 October 2007).

- Spiegel (2007e). 'Finns Snap Up Swastika Rings for Christmas.' Der Spiegel. 17 December 2007. Available at: www.spiegel.de/inter national/europe/0,1518,523784,00.html (accessed 5 July 2008).
- Spiegel (2008a). 'Putin Puts Europe In A Vice.' *Der Spiegel*. 18 January 2008. Available at: www.spiegel.de/international/europe/ 0,1518,529556,00.html (accessed 18 January 2008).
- Stern, Jonathan (2005). *The Future of Russian Gas and Gazprom*. Oxford: Oxford University Press.
- Stern, Jonathan (2006), *The Russian-Ukrainian gas crisis of January 2006*. Available at: www.oxfordenergy.org/pdfs/comment_0106.pdf (accessed 28 October 2007).
- Stoltenberg, Jens (2006). 'Speech at the Opening of Langeled.' Lancaster Hall, London, 16 October 2006. Available at: www.regjeringen.no/ nb/dep/smk/Statsministerens-kontor/Statsminister_Jens_Stoltenberg/ Taler-og-artikler/2006/Speech-at-the-Opening-of-Langeled.html?id= 420819 (accessed 10 May 2008).
- St. Petersburg Times (2008). 'Finland Says It Will Back Russia's WTO Bid.' *The St. Petersburg Times*. 1 April 2008. Available at: www.times.spb.ru/index.php?action_id=100&story_id=25523 (accessed 1 April 2008).
- Stratfor (2007). 'Russia: Punishing the Baltics with a Broken Pipeline.' Strategic Forecasting. 1 June 2007. Available at: www.stratfor.com/ russia_punishing_baltics_broken_pipeline (accessed 16 July 2008).
- Stupachenko, Ivan (2007). 'Russia: No Loyalty, No Cargo.' *Transitions Online*. Issue no.11/20/2007.
- Süddeutsche Zeitung (2006a). 'SZ-Interview mit Wladimir Putin' [SZ-Interview with Vladimir Putin]. *Süddeutsche Zeitung*. 10 Oct 2006. Available at: http://www.sueddeutsche.de/ausland/artikel/274/88186 (accessed 9 December 2007).
- Süddeutsche Zeitung (2006b). 'SZ-Interview mit Gerhard Schröder' [SZ-Interview with Gerhard Schröder]. Süddeutsche Zeitung. 27 Oct 2006. Available at: www.sueddeutsche.de/deutschland/artikel/14/ 89924 (accessed 9 December 2007).
- Süddeutsche Zeitung (2006c). 'Es geht um Gas und Kohle' [It is about gas and coal]. *Süddeutsche Zeitung*. 24 March 2006. Available at: www.sueddeutsche.de/deutschland/artikel/704/72632/ (accessed 12 May 2008).
- Süddeutsche Zeitung (2006d). 'Regierung Schröder half Gazprom bei Kredit' [The Schröder Government helped Gazprom with Credit]. *Süddeutsche Zeitung*. 1 April 2006. Available at: www.sueddeutsche. de/,tt2l3/wirtschaft/artikel/168/73095/ (accessed 9 December 2007).
- Süddeutsche Zeitung (2006e). 'SZ-Gespräch mit Steinmeier' [SZ-talk with Steinmeier]. *Süddeutsche Zeitung*. 20 December 2006. Available at: www.sueddeutsche.de/ausland/artikel/817/95722/ (accessed 17 June 2008).

- Süddeutsche Zeitung (2006f). 'Eine einzige Giftmüllkippe' [One big garbage dump]. *Süddeutsche Zeitung*. 28 August 2006. Available at: www.sueddeutsche.de/panorama/artikel/795/83712/ (accessed 9 December 2007).
- Süddeutsche Zeitung (2008a). 'Gazprom ist eine Waffe' [Gazprom is a weapon]. *Süddeutsche Zeitung*. 23 January 2008. Available at: www.sueddeutsche.de/ausland/artikel/943/153550/ (accessed 24 January 2008).
- SvD (2005). 'Östersjöstater i strid om tysk-ryskt avtal' [Baltic Sea states are battling over German-Russian deal]. Svenska Dagbladet. 20 September 2005. Available at: wwwc.svd.se/dynamiskt/naringsliv/ did_10580255.asp (accessed 9 December 2007).
- SvD (2006a). 'Plattform kan bli spionbas' [Platform may become spy base]. Svenska Dagbladet. 14 November 2006. Available at: www.svd.se/nyheter/inrikes/artikel_370108.svd (accessed 9 December 2007).
- SvD (2006b). 'Persson oroad över gasledning' [Persson worried about gas pipeline]. Svenska Dagbladet. 17 August 2006. Available at: www.svd.se/nyheter/inrikes/artikel_344784.svd (accessed 9 December 2007).
- SvD (2007a). 'Risk för kallt krig om gas och olja' [Risk of Cold War over Gas and Oil]. Svenska Dagbladet. 27 July 2007. Available at: www.svd.se/nyheter/utrikes/artikel_248467.svd (accessed 9 December 2007).
- SvD (2007b). 'Ek kritiserade Merkel för gasledning' [Ek Criticised Merkel for Gas Pipeline]. Svenska Dagbladet. 17 January 2007. Available at: www.svd.se/nyheter/utrikes/artikel_192491.svd (accessed 9 December 2007).
- SvD (2007c). 'Nord Stream har inget att dölja' [Nord Stream has nothing to hide]. Svenska Dagbladet. 4 June 2007. Available at: www.svd.se/ opinion/brannpunkt/artikel_234303.svd (accessed 9 December 2007).
- SvD (2007d). 'Litauer tar gasledning till EU-organ' [Lithuanians take gas pipeline to the EU]. Svenska Dagbladet. 24 October 2007. Available at: www.svd.se/nyheter/utrikes/artikel_526833.svd (accessed 9 December 2007).
- SvD (2007e). 'Finländsk miljökritik mot gasledning' [Finnish environmental critique of gas pipeline]. Svenska Dagbladet. 27 February 2007. Available at: www.svd.se/nyheter/utrikes/artikel_205629.svd (accessed 9 December 2007).
- SvD (2007f). 'Oppositionsnej til gasledning' [Opposition-no to gas pipeline]. Svenska Dagbladet. 26 November 2007. Available at: www.svd.se/nyheter/inrikes/artikel_628825.svd (accessed 9 December 2007).

- SvD (2007g). 'Nej till gasledning I Östersjön' [No to gas pipeline in the Baltic Sea]. Svenska Dagbladet. 27 November 2007. Available at: www.svd.se/opinion/ledarsidan/artikel_632727.svd (accessed 9 December 2007).
- Sveriges Radio (2007). 'Ryske ambassadören: Gasledningen var EUs idé' [The Russian ambassador: The gas pipeline was the EU's idea]. Interview with the Russian Ambassador to Sweden, 13 February 2007. Available at: www.sr.se/cgi-bin/ekot/artikel.asp?Artikel=1198 646 (accessed 18 June 2008).
- Swedish Ministry of Defence (2004). 'Försvarsreformen' [The Defence Reform]. Available at: www.regeringen.se/sb/d/526 (accessed 2 July 2008).
- Tarnogórski, Rafal (2006). 'North European Gas Pipeline. Legal Aspects.' *The Polish Quarterly of International Affairs* No. 1-2006: 104-118.
- Tompson, William (2005). 'Putting Yukos in Perspective.' *Post-Soviet* Affairs Vol.21 No.2: 159-181.
- Umbach, Frank (2007). 'Nord Stream Project The Strategic Importance to Russia and the EU.' Presentation notes for Nord Stream conference, 12 February 2007 in Vilnius. Available at: www.tspmi.vu.lt/ files/mokslkonfer/umbach.ppt (accessed 3 May 2008).
- UN (1982). United Nations Convention on the Law of the Seas. Available at: www.un.org/Depts/los/convention_agreements/texts/unclos/clos indx.htm (accessed 15 June 2008).
- UN (1991). Convention on Environmental Impact Assessment in a Transboundary Context. Available at: www.unece.org/env/eia/ documents/legaltexts/conventiontextenglish.pdf (accessed 3 July 2008).
- Vesa, Unto J. (1989). 'Political Security in the Baltic Region.' In Arthur H. Westing (ed.), Comprehensive Security for the Baltic: An Environmental Approach. Oslo: PRIO, International Peace Research Institute.
- Wahlbäck, Krister (2006). 'Stoppa ryska gasledningen som hotar Östersjöns hälsa' [Stop the Russian gas pipeline that threatens the health of the Baltic Sea]. *Dagens Nyheter*. 31 July 2006. Available at: www.dn.se/DNet/road/Classic/article/0/jsp/print.jsp?&a=562155 (accessed 29 May 2008).
- Wahlbäck, Krister (forthcoming). 'The Baltic Sea Pipeline Project: An Analysis from a Swedish Point of View.' *Limes: Italian Journal of Geopolitics*.
- Welt (2007a). 'Ex-Kanzler Schröder kritisiert Polen' [Ex-Chancellor Schröder Criticises Poland]. *Die Welt*. 12 September 2007. Available at: www.welt.de/welt_print/article1177079/Ostsee-Pipeline_Ex-Kan zler_Schroeder_kritisiert_Polen.html (accessed 10 December 2007).

- Welt (2007b). 'Balten befürchten "ökologische Katastrophe" [The Balts fear ecological catastrophe], *Die Welt*. 5 May 2007. Available at: www.welt.de/welt_print/article852413/Balten_befuerchten_oekologi sche_Katastrophe.html (accessed 10 December 2007).
- Westing, Arthur H. (1989). 'Environmental Approaches to Regional Security.' In Arthur H. Westing (ed.), *Comprehensive Security for the Baltic: An Environmental Approach*. Oslo: PRIO, International Peace Research Institute.
- Wikström, Rune (2007). 'Rysk gas hotar fisket og miljön' [Russian gas threatens fisheries and the environment]. *Expressen.* 4 September 2007.
- World Bank (2006). 'A Note on Changes to Gas Prices in Ukraine.' Available at: http://siteresources.worldbank.org/INTUKRAINE/ Country%20Home/20790726/DealingwithGasPriceAgreement.pdf (accessed 28 June 2008).
- World Bank (2008). 'Gross domestic product 2007.' Available at: http://siteresources.worldbank.org/DATASTATISTICS/Resources/G DP.pdf (accessed 4 August 2008).
- WNN (2008a). 'Merkel: Nuclear phase-out is wrong.' World Nuclear News. 10 June 2008. Available at: www.world-nuclear-news.org/ print.aspx?id=18190 (accessed 23 June 2008).
- WNN (2008b). 'Visaginas recognised with nuclear site name.' World Nuclear News. 30 July 2008. Available at: www.world-nuclearnews.org/print.aspx?id=19138 (accessed 5 August 2008).
- Zmudzinski, Ludwik (1989). 'Environmental Quality in the Baltic Region.' In Arthur H. Westing (ed.), *Comprehensive Security for the Baltic: An Environmental Approach*. Oslo: PRIO, International Peace Research Institute.

The Fridtjof Nansen Institute is a non-profit, independent research institute focusing on international environmental, energy, and resource management. The institute has a multi-disciplinary approach, with main emphasis on political science, economics, and international law. It collaborates extensively with other research institutions in Norway and abroad.



FRIDTJOF NANSENS INSTITUTT FRIDTJOF NANSEN INSTITUTE

Fridtjof Nansens vei 17, P.O. Box 326, NO-1326 Lysaker, Norway Phone: (47) 67 11 19 00 - Fax: (47) 67 11 19 10 - E-mail: post@fni.no Website: www.fni.no