

**Significance of assessing environmental risks:
The Nord Stream Project**



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To the future generations of the Baltic Sea Region

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Abbreviations

CCB	Coalition Clean Baltic
EC	European Commission
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EP	European Parliament
EU	European Union
HELCOM	The Baltic Marine Environment Protection Commission
ICJ	International Court of Justice
ILC	International Law Commission
NGO	Non-Governmental Organization
TEIA	Transboundary Environmental Impact Assessment
TEU	The Treaty on European Union
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
WWF	World Wide Fund for Nature
WWII	World War II

1 Introduction

This thesis is inspired by the long lasting media and politicians' discussions about building the Nord Stream Pipeline in the Baltic Sea. The idea of building a pipeline came early, in 1993.¹ There was not much information about the project for a long time, until in 2006, when Nord Stream AG, which is a private company, registered in Switzerland, gave information documents to the littoral states of the Baltic Sea. After the gas conflict between Russia and Ukraine (which started in 2006) and in 2009, when eighteen European Union (EU) states were left without gas for a certain period of time, the EU started to support the Nord Stream Project. This project is mainly between Russia and Germany in order to secure gas supplies in Europe. Nobody disagrees about the need of the pipeline between Russia and Europe, but there are many uncertainties about the route through one of the most polluted seas in the world and a route passing by Natura 2000 sites.²

1.1 Thesis Statement and Main Issues

This thesis will research the specific Environmental Impact Assessment (EIA) procedure in the international Nord Stream Project and analyzes whether the involved states acted with due diligence in this specific case.

This thesis will assess the following main issues:

¹ Bouzarovski (2008) p.6

² Natura 2000 is an EU established nature networks under 1992 Habitats Directive and 1979 Birds Directive, which aims to guarantee survival of the Europe's most valuable species and habitats. *Source:* <http://www.natura.org/about.html> [Visited 20 April 2011].

a) Is EIA as a legal environmental instrument important in a transboundary context and is well developed? What kind of advantages and disadvantages does it have? Does it play important role in huge transboundary projects such as a Nord Stream?

b) Is it important to inform the public about a transboundary projects and their right to participate?

c) Can the improper conduction of an EIA influence state responsibility in the Nord Stream case? Can state responsibility arise out of non-compliance with procedural obligations?

1.2 Justification and objectives

There is a huge lack of binding environmental regulations, which could prohibit the pollution of the Baltic Sea, and Baltics leading to extinction. The problematic of this thesis is that even though a state carries out an EIA, it does not mean that it has foreseen all possible negative impacts and that it will avoid or mitigate them. It might be possible to abuse an EIA instrument in order to show for the other states that the state in question acted with due diligence. It is not prohibited to build pipelines in the high seas. But it should be taken into consideration that the Baltic Sea is a very specific closed sea. As a result, its waters cannot renew fast, which means if a sea is polluted by pipeline rupture there might be no way to restore the previous conditions, leading to the complete destruction of the sea. That is why; there should be some way to find out how to prohibit building enormous projects, which have a huge risk to the environment.

1.3 Methodology

In order to answer the raised questions above, the following issues will be analyzed: EIA treaties and documents, EIA procedure, case law and customary rules of acting with due diligence and Aarhus Convention.

1.4 Scope and limitation of the study

Although this thesis topic deals deeply with political matters, our main interest will be analyzing legal aspects. However, in order to give a broader overview of a case, there will be a need to cite some media articles and politicians' statements. Moreover, there is not much information about this specific case, as a result, main information sources are official Nord Stream Project webpage, UNEP EIA Course Model and former students, from Sweden and Iceland Universities, works.

1.5 Thesis structure

First of all, the Nord Stream Project will be presented along with the environmental dangers to the sensitive Baltic Sea ecosystem (Part 2 of the Thesis "Problematic of the Nord Stream Project"). Then, the specific EIA instrument, which is supposed to assess and clarify all dangers of the planned activity, will be analyzed. Does the EIA suggest mitigation measures or even no-action alternative, if the project is too harmful for the environment (Part 3 "Environmental Impact Assessment")? Later, public participation issues will be discussed because, according to the Espoo and Aarhus conventions, the public has the right to participate

in the assessment of dangers in their living environment (Part 4 “Public participation”). Finally, the thesis will conclude with state responsibility issues concerned with the misconduct of the procedural obligations in this particular case (Part 5 “State’s Responsibility in the Nord Stream Case”).

2 Problematic of the Nord Stream Project

2.1 Background of the Nord Stream Project

The Nord Stream Project (formerly called: North Transgas and North European Gas Pipeline) is an offshore natural gas pipeline in the Baltic Sea, running from Vyborg in Russia to Greifswald in Germany planned by the Nord Stream AG company.³

Nord Stream AG is a joint venture company, established on 2nd of December, 2005 for the carrying out and building Nord Stream Pipeline in the Baltic Sea.⁴ This company is owned by five big stake holders (energy companies): Gazprom, which holds 51 percent shares, BASF SE/Wintershall Holding GmbH – 15.5 percent, E.ON Ruhrgas – 15.5 percent, Gasunie - 9 percent and GDF Suez also - 9 percent share.⁵ The headquarters of the Nord Stream AG are in Zug, Switzerland and branch office is located in Moscow, Russia. The Nord Stream Pipeline is supposed to link Russia with EU countries and energy sector via the Baltic Sea. The pipeline is planned to be 1,224 kilometers long, approximately 2 km wide and is supposed to consist of two parallel lines: the first one is already built⁶ and will have transmission capacity of around 27.5 billion cubic meters of gas a year. The second line should be completed in 2012 and have transmission capacity of 55 billion cubic meters. The total cost of the pipeline is projected at 7.4 billion Euros'. These facts help to conclude that this pipeline is expected to be the biggest and probably the most expensive in the World so far. Just the Baltic Sea, which supposed to link Russia with EU energy sector, is relatively small and shallow (average depth 55 m.). The pipeline covers an area of 2400 km², which is approximately the same size as the Grand Duchy of Luxembourg.⁷

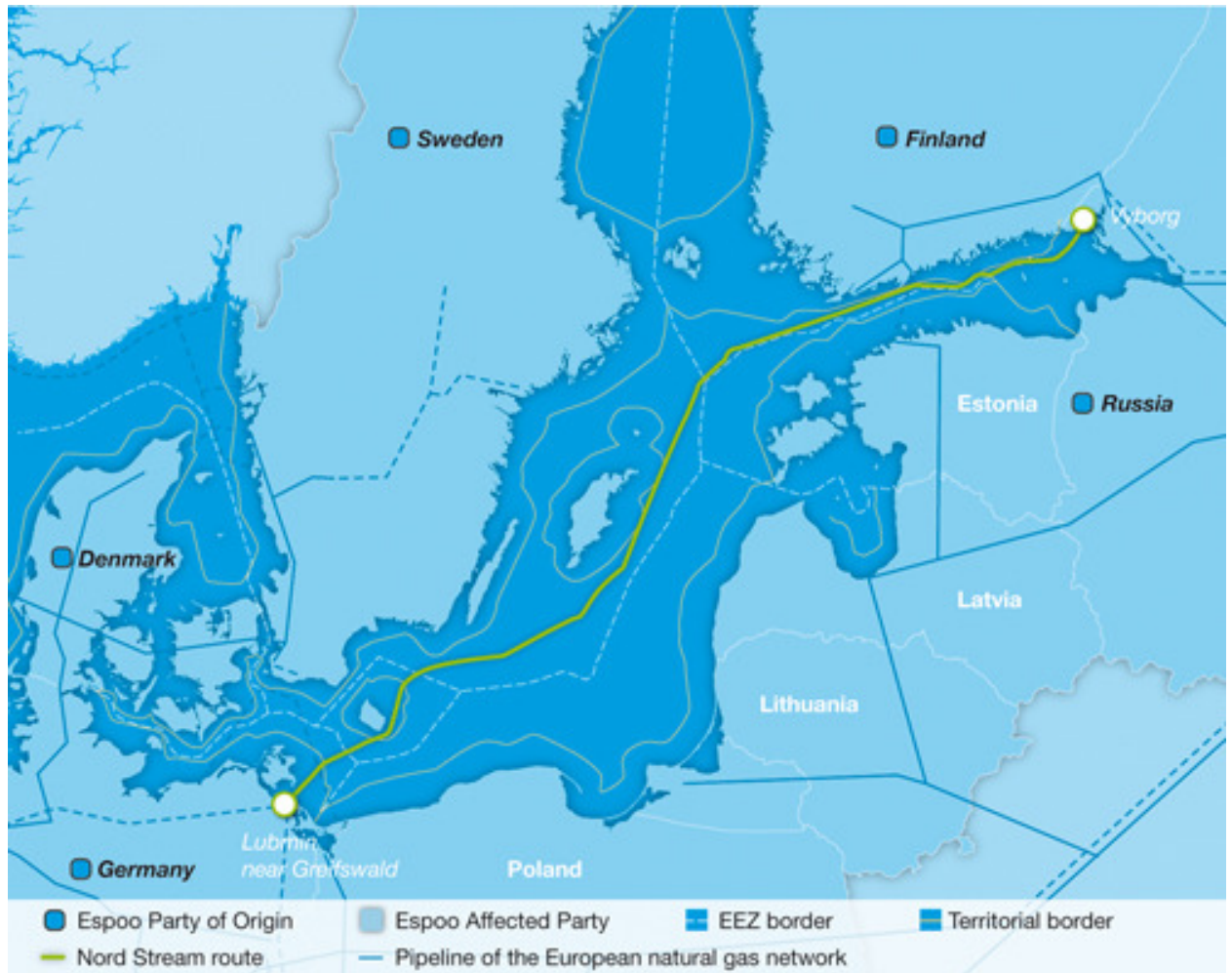
³ http://en.wikipedia.org/wiki/Nord_Stream and <http://www.nord-stream.com/index.php> [Visited 20 April 2011].

⁴ <http://www.nord-stream.com/en/our-company.html> [Visited 20 April 2011].

⁵ Ibid.

⁶ Ibid. [Visited 23 May 2011].

⁷ EP Report A6-0225/2008 p.6 and 13



Source: <http://www.nord-stream.com/en/press0/picture/details/ig/nord-stream-pipeline-in-a-transboundary-context.html>

2.2 Baltic Sea - a sensitive area, which needs protection

The Baltic Sea is the world's second largest brackish water sea and is located in the Northern Europe. The water of the Baltic Sea is a mixture of ocean and fresh rivers water.⁸ Nine States have access to the Baltic Sea: Denmark, Sweden, Finland, Russia, Estonia, Latvia,

⁸ The Baltic Sea Portal: http://www.itameriportaali.fi/en/tietoa/yleiskuvaus/en_GB/yleiskuvaus/ [Visited 20 April 2011].

Lithuania, Poland and Germany. The Baltic Sea has relatively few but unique species.⁹ Ecosystems in the Baltic Sea are sensitive and affected by many inorganic, biological, physical, chemical factors, which limit the range of organisms that can thrive there.¹⁰ Some stretches of the Baltic Sea bed are in a very bad ecological condition, because of the harmful substances deriving from human activities, such as oil spills, radioactive fallout, etc. Moreover, Second World War (WWII) munitions were buried in the bottom of the Sea. Species found in the Sea have had to adapt to the temperature differences and low salinity of the water, which is why many species are absent from the most northerly areas of the Baltic Sea.¹¹ To conclude, geographical and physical characteristics of the Baltic Sea are highly vulnerable and needs special national and international measures of protection.¹²

2.3 The Helsinki Convention

For these reasons the “Convention on the Protection of the Marine Environment of the Baltic Sea Area” (Helsinki Convention) was adopted in 1974 and entered into force in 1980. The convention was revised in 1992 and revised version entered into force in 2000. Latest amendments entered into force in 2008.¹³ According to the Helsinki Convention, the Baltic Marine Environment Protection Commission (HELCOM), coordinates and supervises the implementation of the Convention to protect the Baltic Sea area (Art. 2(1)(a)). Through HELCOM, the European Commission and coastal states work together to protect the Baltic Sea, because the Commission is supposed:

- e) to promote in close co-operation with appropriate governmental bodies, taking into consideration sub-paragraph f) of this Article, additional measures to protect the marine environment of the Baltic Sea Area and for this purpose:
 - i) to receive, process, summarize and disseminate relevant scientific, technological and statistical information from available sources; and

⁹ Ibid.

¹⁰ http://www.itameriportaali.fi/en/tietoa/elama/elioyhteisot/en_GB/elioyhteisot/ [Visited 20 April 2011].

¹¹ Ibid.

¹² http://www.itameriportaali.fi/en_GB/ [Visited 20 April 2011].

¹³ http://www.helcom.fi/Convention/en_GB/convention/ [Visited 20 April 2011].

ii) to promote scientific and technological research; and
f) to seek, when appropriate, the services of competent regional and other international organizations to collaborate in scientific and technological research as well as other relevant activities pertinent to the objectives of this Convention.¹⁴

All nine littoral states of the Baltic Sea have ratified the Convention (Germany, Latvia and Sweden in 1994, Estonia and Finland in 1995, Denmark in 1996, Lithuania in 1997, Poland and Russia in 1999).¹⁵ According to the Art. 3 of the said Convention, contracting parties must take all appropriate legislative, administrative and other measures in order to prevent and eliminate pollution and promote the ecological restoration of the Baltic Sea. All contracting parties shall apply precautionary and “polluter-pays” principles. They should also use and promote “Best Environmental Practice” and “Best Available Technology”.¹⁶ Moreover, Art. 7 is dedicated to environmental impact assessment and contracting parties’ co-operation. Art. 17 is about informing the Public on the condition of the Baltic Sea and measures taken or planned to be taken.¹⁷

Under Art. 37, parties can withdraw from the Convention at any time after the expiry of five years from the date of entry into force of the Convention.

In March 2007, during the VIIth International Forum “Baltic Sea Day” Round table session¹⁸ with 92 participants, chaired by Nord Stream’s Technical Director, HELCOM recommended to inform the international public about the Nord Stream’s EIA. The motion was to publish the results of the EIA and to take into account the responses from the official bodies and stakeholders, including the public. Also, it was recommended that EIA should include: reasonable alternatives, the consequences of the dumped WWII chemical and other weapons, affects upon commercial fishery, conditions for gas pipeline intersections with the costs and risks. As a result, HELCOM adopted recommendation 17/3, where it was advised

¹⁴ Helsinki Convention, Art. 20

¹⁵ http://www.helcom.fi/Convention/en_GB/convention/ [Visited 20 April 2011].

¹⁶ Helsinki Convention, Art. 20

¹⁷ Helsinki Convention, Art. 3

¹⁸ Helsinki Convention, Art.17

¹⁸ http://www.helcom.fi/press_office/news_baltic/en_GB/BS2007_Resolution_NordStream/ [Visited 20 April 2011].

what kinds of steps should be taken before constructing new installations in the Baltic Sea.¹⁹ These steps are information and consultation about installations with the contracting parties and stakeholders. Finally, on the 9th of March 2009, Nord Stream AG released the Espoo Report with its EIA results. After this Report was released, HELCOM gave no official comment on the Espoo Report.²⁰

2.4 Coalition Clean Baltic criticism

During the 29th Meeting in December 2009, HELCOM was invited to take note of the information submitted by the non-governmental environmental organization Coalition Clean Baltic (CCB). CCB gave a statement on the Nord Stream Gas Pipeline's Espoo Report and the proposals to mitigate environmental impact of the pipeline. CCB strongly criticized the Nord Stream Espoo Report, especially on its "precautionary approach":

Some results on the environmental impact assessment of the project are not justified, which allows for taking into account unjustified speculations as the basis for possible impact of the project. This is especially true for the claimed "precautionary approach" of the EIA, which crucially require the utilization of worst case assumptions in cases of uncertainty. Instead, Nord Stream tries to predict impacts in these uncertain cases on the basis of being likely to occur in the eyes of Nord Stream's consultants who, as it is implicit in those cases, simply do not know what is going to happen. This clearly does not meet the requirements of an EIA and is especially poor performance in the context of Nord Stream's own stipulation of an aspired precautionary approach.²¹

CCB also asked Nord Stream AG to present a convincing security concept about how the marine environment will be protected against the harmful effects of possible explosions and the establishment of a "liability fund" for the prevention and compensation of environmental damages, which may occur. One "damage" already occurred. According to the CCB, sensitive bottom areas have already been impacted by new sediments (from exploding chemical mines).

¹⁹ HELCOM recommendation 17/3

²⁰ Stankiewicz (2011)

²¹ CCB statement 2009/05/22

According to CCB, Nord Stream AG should pay for that.²² In addition, according to CCB, the Espoo Report should be revised and fundamental missing information should be included. So far, neither HELCOM nor Nord Stream AG took CCB's comments into consideration.

Moreover, there were more doubts about the quality of information, provided by the Nord Stream Company:

<...> 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 <...>.²³

In order to understand why CCB, the media and some individuals are criticizing the Nord Stream Project's Espoo Report and why they are worried, this thesis will look into the environmental dangers of the pipeline project and specific EIA instrument used.

2.5 Environmental dangers of the Nord Stream pipeline

There are many groupings of the Nord Stream Project environmental dangers. But now this thesis will place them into two phases:

1) during the pipeline construction phase: contamination of the seabed while exploding WWII chemical mines (around 80 000 tonnes of munitions dumped on the seabed, which contain toxic substances and represent a great hazard to the Baltic marine environment, human life and health)²⁴, disturbance of nesting species in Natura 2000 sites and many more. However, Nord Stream AG mentions only shipping collisions with passing vessels and oil spills during refueling as dangers in its Espoo Report.²⁵

²² Ibid.

²³ FNI Report 15/2008 p.52

²⁴ EP Report A6-0225/2008

²⁵ Espoo Report Non-Technical Summary

2) during the operational phase: gas leakages, disturbance of fisheries, ship collisions, disturbance of Natura 2000 areas.

All these environmental dangers might lead to the complete pollution of the Baltic Sea and extinction of its species. If so happens, none of the coastal states could use it for the tourism, recreation or fishing. Chairman Endel Lippmaa of the Council for Energy at the Estonian Academy of Science even made the following dramatic statement: “If the entire gas that is inside the pipe detonated, the total explosive force would equal that of about 50 Hiroshima bombs.”²⁶ There will be more about that in “Transboundary impacts in the Nord Stream Project” paragraph.

²⁶ The Baltic Times (2007)

3 Environmental Impact Assessment

The Convention on Environmental Impact Assessment in a Transboundary Context (the Espoo Convention) gives this definition of EIA:

Environmental impact assessment means a national procedure for evaluating the likely impact of a proposed activity on the environment.²⁷

In other words, EIA is a process where the developer of the special project submits a written document to the decision-making body, describing “possible”, “probable”, or “most likely to occur” future environmental impact of the intended project.²⁸ Why is there a need to foresee environmental consequences of a project? According to the professors K. Bastmeijer and T. Koivurova, EIA is an important environmental policy tool, which gives the environment a proper place in the business decision-making process, guaranteeing that environmentally sensitive decisions will be made by paying careful attention to minimize negative impacts and, most importantly, protecting the environment.²⁹

Moreover, EIA regulation assists by controlling projects such as the construction of nuclear power plants or pipelines. These projects might cause serious injury to the nature (not only in the project area but also in other countries) and have negative impacts regionally or globally. Due to this fact, EIA is especially necessary in a transboundary context:

Transboundary Environmental Impact Assessment (TEIA) is an EIA where the potential impacts being assessed have the potential to affect two or more states.³⁰

The difference between TEIA and EIA is that TEIA is an international and EIA works on a national level. TEIA functions as a harmonization instrument of various domestic EIAs.

²⁷ Espoo Convention, Art. 1

²⁸ Kiss (2004) p.237

²⁹ Bastmeijer (2008) p.1

³⁰ CASSAR(2004) p.

To sum up, the purpose of EIA is: to provide information for decision-making on the environmental consequences of proposed actions and to promote environmentally sound and sustainable development through the identification of appropriate enhancement and mitigation measures.³¹

UNEP also outlines the benefits of the EIA instrument:

- Better environmental planning and design of a proposal, because carrying out an EIA entails an analysis of alternatives, which might result in selection of better technologies, environmentally better conditions and so on.
- Ensuring compliance with environmental standards, which helps to avoid likelihood of penalties and fines.
- Savings in capital and operating costs, because EIA can avoid the undue costs of unanticipated impacts.
- Reduced time and costs of approvals of development applications, because of taking into account all environmental concerns and public consultations before submission of project approval.³²

It might seem that EIA is a legal instrument. However this thesis will look deeper at it in order to find out if EIA is really functioning as a legal instrument to foresee possible negative environmental impacts and avoid them, or if it is more designed for business purposes in order to count possible monetary losses in case of damage to the environment.

3.1 Espoo Convention

As mentioned earlier, in order to guarantee valuable natural resources for future generations, states are bound by international law instruments to assess the environmental consequences of their activities. The Nord Stream pipeline is not an exception. According to the Espoo Convention, Art. 2 and 3, Appendix I point 8, EIA should be carried out in the Nord

³¹ EIA Course Module: http://eia.unu.edu/course/?page_id=93 [Visited 20 April 2011].

³² Ibid: http://eia.unu.edu/course/?page_id=102 [Visited 20 April 2011].

Stream case. The Espoo Convention was adopted in 1991 in Espoo, Finland. The Convention entered into force in 1997. So far it has more than 40 parties including the EU. The Convention provides parties information how the EIA should be conducted, as well as when and what kinds of procedures should be carried out. As a result, the Espoo Convention is a cornerstone multilateral treaty for the projects, which might have transboundary environmental impacts. Now the thesis will outline the main features of the Convention, which are important for the further analysis.

Art. 1 contains the following definitions: the most important thing is to understand who is a “Party of Origin” and who is an “Affected Party”, also the meaning of the “Proposed activity” and “Impact”.

“Party of Origin” is a party under whose jurisdiction a “Proposed activity” is planned to take place. In the present case these are Russia, Finland, Sweden, Denmark and Germany, because, the Nord Stream pipeline will pass through these countries’ territorial waters, and the pipeline is coming from Vyborg, Russia to Greifswald, Germany.

An “Affected Party” is a party, which is likely to be affected by the transboundary impact of the proposed activity. In the present case these are Estonia, Latvia, Lithuania and Poland as well as the states of origin (Russia, Finland, Sweden, Denmark and Germany), which also falls under this definition. The latter may be affected in the project building phase, when an act takes place in another neighboring state.

“Proposed activity” comprises any activity and/or change of that activity subject to the decisions of a competent authority. Change of the activity is not further explained, but examples can be found in the Appendix I of the Convention, which are: the construction of additional production capacities, large-scale employment of new technology in an existing production infrastructure and rerouting.³³

“Impact” means any effect caused by a proposed activity on the environment, including human health, safety, flora, fauna, climate, water, historical monuments or other

³³ Bastmeijer (2008) p.32

physical structures or the interaction among these factors, it also includes effects on cultural heritage or socioeconomic conditions resulting from alterations of those factors.³⁴

When we know the meaning of the main definitions, we can look further into requirements and procedures of the EIA.

Countries that have ratified Espoo Convention are obliged to apply its provisions. They have to take all necessary measures to implement the Convention and prepare the EIA documentation, in conformity with Appendix II of the same Convention. In the Nord Stream case Finland, Sweden, Denmark and Germany have ratified the Espoo Convention. Russia has signed the Espoo Convention, but has not ratified it. Therefore Russia is not legally bound by the Convention. In this special case, Russia agreed upon applying Espoo Convention regulations to the extent permitted by its own national legislations, because it was asked to do so by HELCOM and EU institutions.³⁵

Documentation should be made for the proposed activities listed in Appendix I of the Convention and for the activities which are likely to cause a significant transboundary impact (Art. 2(2)(3)(4) Espoo Convention). The “Party of Origin”, while planning to conduct an activity that might cause a significant transboundary effect, shall notify any party, which it considers as an “Affected Party” as soon as possible before deciding about implementation of the project (Art. 3(1)). Then “Affected Party” shall respond and indicate whether it intends to participate in the EIA procedure (Art. 3(3)). The purpose of indication is to help the “Party of Origin” to conduct an EIA. If the “Affected Party” intends to participate, it should provide the “Party of Origin” with reasonably obtainable information, relating to the potentially affected environment under the jurisdiction of the “Affected Party”, where such information is necessary for the preparation of the EIA documentation (Art. 3(6)). Later on, concerned parties should inform the public of “Affected Parties”, especially people, who might suffer directly due to the planned activity (Art. 3(8)). The public of the “Affected Parties” should be provided with an opportunity for voicing of comments, objections, etc. After previously

³⁴ Kiss (2004) p.238

³⁵ Bellona (2010) and Espoo Report

mentioned steps are conducted, the “Party of Origin” shall start the preparation of the EIA documentation and submit them to the “Affected Parties” (Art. 4). After parties have studied the documents, they can start consultations and discuss potential transboundary impact and try to find ways how to minimize or eliminate it. This procedure is designed for finding possible alternatives and assistance or other appropriate matters relating to the proposed activity (Art. 5). Alternatives generally include different solutions for the proposed project and also might include the alternative of no-action. Moreover, taking alternatives to the proposed project into consideration is a requirement in some EIA systems (i.e. Espoo Convention, Art. 5(a)).

Only after the parties have studied and discussed all possible methods and impacts of the project, final decision can be taken (Espoo Convention, Art. 6).

A final decision can be revised, if some additional information appears which was not available when the final decision was taken, but the work of the project should not already have begun. The last step in the project is a post-project analysis. According to the Art. 7(1) of the Espoo Convention if one of the parties asks for that, it must be carried out.³⁶

When the parties do not agree upon whether a particular activity is likely to have a significant transboundary effect, they should go through the inquiry procedure (Art. 3(7)). An inquiry commission shall be established for the specific project. This commission shall consist of three members both from requesting party and the other party in the inquiry procedure. This commission adopts its own rules for the inquiry procedure. The parties should provide the commission with all relevant documents and information regarding the inquiry. Any party, which also has an interest in the subject matter and which may be affected by the decision, may intervene into the procedure. Its decision should be based on scientific principles and voted by a majority of its members. In the Nord Stream case, the inquiry procedure was not initiated, even though some “Parties of Origin“ (Sweden and Finland) at the permission issuing stage were not sure about the necessity of the proposed Project. It might be presumed that other Baltic States did not consider this possibility officially, because there is no publicly available information on that subject.

³⁶ Espoo Convention, Art. 7(1)

As a result, EIA is still a developing instrument. There are many EIA systems in the world, which differs a lot from each other in type of EIA authority: some countries have separate authority for conducting the EIA procedure, others channel it to the state environmental department, and third ones leave it to the developer of the project. Legal provisions, requirements for public participation, procedural checks and balances, etc. can also vary from state-to-state. This thesis examines a model of EIA, which is based on Espoo Convention provisions and EU Directives (85/337 EEC, 97/11 EEC, 2003/35/EC and 2009/31/EC).

Look at the ANNEX I to this thesis for the general procedure steps of EIA in analyzed model.

3.2 Steps of Environmental Impact Assessment (based on the UNEP EIA Course Module)

1) Screening

After a project proposal has been prepared, screening takes place. Screening is a process that helps to determine whether further EIA procedure is required. During this step, key information such as location, magnitude, measures of the proposed project is required by the governmental organizations, NGO's and general public. Screening might end up with four possible results:

- 1) no further level of EIA is required;
- 2) a full and comprehensive EIA is required;
- 3) a more limited EIA is required (often called preliminary or initial assessment); or
- 4) further study is necessary to determine the level of EIA required (often called an initial environmental evaluation or examination [IEE]).³⁷

Screening can be taken in two possible ways: the first way is prescriptive: proposals for the EIA are listed in special legal regulations. For example Espoo Convention, Appendix I

³⁷ EIA Course Module: http://eia.unu.edu/course/?page_id=136 [Visited 20 April 2011].

states in which cases it is obligatory to implement EIA procedure. The Nord Stream AG activity falls under Espoo Convention Annex I, point 8 “Large-diameter oil and gas pipelines”, which means that conducting EIA is mandatory for the project. The second case where the EIA procedure should be implemented is discretionary: it is for the activities which are not listed under obligatory legal regulations. It depends on a case-by-case basis, using indicative guidance.³⁸

Screening paves the way for a further scoping procedure, which looks at the impacts of the proposed activity in greater detail.

2) Scoping

Scoping is an opinion from competent bodies, which must consult environmental authorities while they are preparing documents. Prepared documents shall identify and cover all environmental information about the proposed activity. Scoping determines the most important issues and eliminates what is not supposed to be covered later on in the EIA. Usually scoping ends up with writing down “Terms of Reference” for the preparation of an EIA. The scoping process ensures that the EIA is focused only on the significant effects in order to avoid spending time and money on unnecessary investigations.³⁹ Scoping determines major issues, which will be important in decision-making. The scoping process might be different depending on the country and its legal system. In some systems, the public must be involved as well as competent environmental authorities in this step. Scoping helps to avoid inconsistent, incomplete and excessive reports also to keep up with terms.

Scoping can be very different in itself. In some cases there is a need of a large-scale report in other cases not. Scoping can be conducted in several ways and in combination of them, i.e. by notification for public participation, consultation, meetings, discussions, workshops, etc. Public involvement in the EIA procedure is a cornerstone. There are a lot of methods and tools to make EIA process transparent and accessible to the public. For example:

³⁸ Ibid. and CASSAR (2004) p.222

³⁹ EIA Course Module: http://eia.unu.edu/course/?page_id=140 [Visited 20 April 2011].

registering consultants and firms that are experts at developing and interpreting the concrete EIA, publishing all details of the EIA process, making all EIA procedure documents available to the public, publishing decisions together with terms and conditions for mitigation or environmental management and etc. (More about public involvement and participation can be found in the section about the Aarhus Convention.)

In the Nord Stream Case the Project Information Document (PID), which was submitted in 2006 to the “Parties of Origin” and later on to the “Affected Parties” could be called scoping document⁴⁰, because it identified the main issues which should be investigated in the EIA of the whole Project:

The purpose of the description of the existing situation (baseline) is to identify key issues that are particularly sensitive to disturbance and/or may be subject to economic or protective value. The identification of key issues of this report will be used as background information and will serve as guidelines for further investigations that need to be made in order to conduct the final Environmental Impact Assessment (EIA) regarding the proposed Nord Stream project.⁴¹

The scope of the Nord Stream Espoo Report:

- Description of the Project and the route
- Physical environment
 - Physical processes
 - Water column
 - Seabed
 - Atmosphere
- Biological environment
 - Plankton
 - Marine benthos
 - Fish
 - Sea birds
 - Marine mammals
 - Nature conservation areas
- Social and socioeconomic environment
 - Fisheries
 - Shipping and navigation
 - Tourism and recreation
 - Cultural heritage
 - Offshore industry

⁴⁰ Koivurova (2010)

⁴¹ Available at: http://www.nord-stream.com/fileadmin/Dokumente/1_PDF/2_PIDs/PID_ENGLISH.pdf
[Visited 20 April 2011].

- Military operations⁴²

As a result, it does not look like the scoping procedure was properly conducted. It is more like a plan of what will be investigated in the Espoo Report.

3) Impact analysis

When the potential risks and factors are identified in the scoping, all those risks have to be explored during the impact analysis by forecasting possible scenarios. Specialists of a project field should implement impact analysis. Usually impact is determined by using checklists, matrices, networks, expert systems, professional judgments, and so on.⁴³ In the Nord Stream case environmental impacts, were analyzed in every littoral state through whose territorial waters the pipeline is passing. The final report was initiated by Nord Stream AG and made by Danish company Rambøll. This thesis is mainly looking to the impact analysis of the Espoo procedure, the Espoo Report document.

4) Mitigation

After impact analysis, mitigation takes place. Mitigation helps to prevent adverse impacts and if some environmental impacts occur, to keep them within an acceptable level. These objectives of mitigation can be underlined:

- find better alternatives and ways of doing things;
- enhance the environmental and social benefits of a proposal;
- avoid, minimise or remedy adverse impacts; and
- ensure that residual adverse impacts are kept within acceptable levels.⁴⁴

Mitigation possibilities should be discovered and incorporated into alternatives. Usually, mitigation is accented in the EIA process when the extent of the potential impact is understood. According to the EIA Course Module it takes place after impact identification

⁴² <http://www.nord-stream.com/en/environmental-impact-assessment-permitting/overview-legal-framework.html> [Visited 20 April 2011].

⁴³ EIA Course Module: http://eia.unu.edu/course/?page_id=122 [Visited 20 April 2011].

⁴⁴ Ibid: http://eia.unu.edu/course/?page_id=117 [Visited 20 April 2011].

and prediction and these measures for the mitigation are implemented during the impact management stage of the EIA procedure.

5) Reporting

When the mitigation is closed, the EIA reporting stage takes place. The report is usually made by the sponsor of the project.⁴⁵ But in some cases, as i.e. Nord Stream, I think, it should be done by independent authorities, because information in the report must be objective, impartial and detailed. The reporting should also meet objectives set for the scoping process. I do not think that objective EIA can be conducted by company, which is interested in gaining profit out of activity. The report should reveal all potential impacts and measures, which could be taken in order to reduce those foreseen impacts. An EIA report should contain this information for:

- the proponent to implement the proposal in an environmentally and socially responsible way;
- the responsible authority to make an informed decision on the proposal, including the terms and conditions that must be attached to an approval or authorisation; and
- the public to understand the proposal and its likely impacts on people and the environment.⁴⁶

A report will be called successful if it is:

- actionable: a document that can be applied by the proponent to achieve environmentally sound planning and design;
- decision-relevant: a document that organises and presents the information necessary for project authorisation and, if applicable, permitting and licensing; and
- user-friendly: a document that communicates the technical issues to all parties in a clear and comprehensible way.⁴⁷

6) Review

After EIA Report is issued, a review of its quality follows. Review can be conducted by the responsible authority of a project with or without formal guidelines of the review procedure (internal review) or by the independent body with an open procedure for the public

⁴⁵ Ibid.

⁴⁶ Ibid: http://eia.unu.edu/course/?page_id=113 [Visited 20 April 2011].

⁴⁷ Ibid.

(external review).⁴⁸ It leads to the conclusion that even a company, which is making EIA documentation, can make a review of its work. A review should be essential for guaranteeing coherence with the information explored in the report and completeness of it, but if the same authority, which is carrying out an EIA is reviewing its job, it is difficult to call it an objective review.

Just after all these stages are passed, proponents can start the decision-making procedure and later on, if they decide to proceed, the implementation of the project.

7) Decision-making

Rambøll Company, which was hired by the Nord Stream AG in order to advice about EIA and permitting processes, gave such a conclusion:

The permitting of Nord Stream shall take place in 5 countries and the project is furthermore subject to environmental impact assessment in a transboundary context. As part of the permitting procedure, the following EIA documentation shall be developed:

- National EIA for the Russian Section offshore (the part that is Nord Stream)
- National EIA for the Nord Stream section in Finland
- National EIA for the platform located in the Swedish section of the pipelines
- National EIA for the German section of the pipelines
- National EIA for the Danish section of the pipelines
- Transboundary EIA according to the Espoo Convention

<...>

International consultations takes place according to national legislation and international consultations follows the procedures in the Espoo Convention.⁴⁹

As a result, the EIA in the Nord Stream Project was conducted on two levels⁵⁰: 1) Nord Stream AG Company prepared the Espoo Report on the Nord Stream Pipeline Project, with the assessments supervised by the international coordination meetings with the “Parties of Origin”; 2) Five “Parties of Origin” (Russia, Denmark, Sweden, Finland, and Germany) conducted national EIA procedures. These reports can be found on the official Nord Stream Project website. The national EIA documents are, however, not published in full, but a

⁴⁸ Ibid: http://eia.unu.edu/course/?page_id=106 [Visited 20 April 2011].

⁴⁹ EIA studies for the Nord Stream pipelines in the Baltic Sea (2008)

⁵⁰ Koivurova (2010) p.165

summary version.⁵¹ The two levels of the EIA were coordinated in Espoo meetings, held by Nord Stream AG. Due to the limited capacity of this thesis, separate national EIAs will not be analyzed, just the final transboundary Espoo Report.

8) Costs and time requirement of an EIA

It might seem that carrying out EIA costs a lot. But according to the World Bank, the cost of an EIA rarely exceeds one per cent of the whole project costs.⁵² Another problem is time. How long does it take to carry out a relevant EIA? The answer is that timeframes of EIAs can vary a lot, from few days to few years. It always depends on the project, its magnitude and significance.⁵³

Nord Stream AG says that they invested more than 100 million Euros in the EIA: “More than 100 million Euros were invested in environmental impact studies and planning to that ensure the design and the routing of the pipeline through the Baltic Sea will minimize any environmental impact.”⁵⁴ Moreover, it took more than two years to prepare the final Espoo Report document.

3.3 Espoo Procedure in the Nord Stream Project

Now that we know, how the EIA instrument functions, and how the Espoo procedure in the Nord Stream Project was carried out, let’s take a deeper look. Here are the EIA steps, which are defined in the Espoo Convention⁵⁵:

⁵¹ <http://www.nord-stream.com/en/project/permitting-process/international-consultation-process/national-eia-summaries.html> [Visited 20 April 2011].

⁵² EIA Course Module

⁵³ Ibid.

⁵⁴ "The Project & The environment" brochure 2009/06/21

⁵⁵ <http://www.unece.org/env/eia/about/procstep.htm> [Visited 20 April 2011].

A. Mandatory steps:

1. Application of the Convention (Art. 2(2), 2(5)/App. I+III)

Germany, Denmark, Sweden and Finland, which are “Parties of Origin” and parties to the Espoo Convention, have to apply Espoo Convention regulations and conduct an EIA. Russia, which is also a “Party of Origin”, but not a party to the Espoo Convention agreed upon Convention regulations. As a result, the Espoo Convention has been applied to this particular case.

2. Notification (Art. 3(1))

Nord Stream AG submitted the Project Information Document (PID) to the “Parties of Origin” on 14th November 2006.⁵⁶ Latter on the “Parties of Origin” send out notifications to all parties, which were called “Affected Parties” in the PID.

3. Confirmation of participation (Art. 3(3))

All “Affected Parties” confirmed their will to participate in the EIA procedure.

4. Transmittal of information (Art. 3(6))

According to Art. 3(6) the “Affected Party” should provide reasonably obtainable information relating to the potentially affected environment under its jurisdiction. In the Nord Stream case, Lithuania and Poland gave comments about chemical munitions and Natura 2000 sites.

5. Public participation (Art. 3(8))

The public in the “Parties of Origin” was informed about the Project in 2006. Public hearings took place in 2006 and 2007. In contrast, public hearings in the “Affected Parties” only started and took place in 2009, when almost all building permits had been received and EIAs conducted. So obviously the public in the “Affected Parties” had no

⁵⁶ <http://www.nord-stream.com/en/environmental-impact-assessment-permitting/international-consultation-process/notification.html> [Visited 20 April 2011].

real influence.⁵⁷ Nord Stream AG on its webpage informs only how it participated in 20 public hearings and numerous meetings in various places, and how after comments several additional route alternatives were investigated and, later on, the original route was adjusted by the “Status of the Nord Stream Pipeline Route in the Baltic Sea (October 2007)” document.⁵⁸ In 2008, the route was adjusted one more time and the so-called S-Route was accepted by issuing the document entitled “Status of the Nord Stream Route in Denmark and Germany”.⁵⁹ Nord Stream AG is silent about the negative public reaction in Lithuania and Poland and the peoples’ petitions to the EP. There will be more about that in “Public participation” section.

6. Preparation of EIA documentation (Art. 4/App. II)⁶⁰:

- (a) A description of the proposed activity and its purpose;
- (b) A description, where appropriate, of reasonable alternatives (for example, locational or technological) to the proposed activity and also the no-action alternative;
- (c) A description of the environment likely to be significantly affected by the proposed activity and its alternatives;
- (d) A description of the potential environmental impact of the proposed activity and its alternatives and an estimation of its significance;
- (e) A description of mitigation measures to keep adverse environmental impact to a minimum;
- (f) An explicit indication of predictive methods and underlying assumptions as well as the relevant environmental data used;
- (g) An identification of gaps in knowledge and uncertainties encountered in compiling the required information;

⁵⁷ http://www.nord-stream.com/fileadmin/Dokumente/Other_Publications/Nord_Stream_Public_hearings.pdf [Visited 20 April 2011].

⁵⁸ <http://www.nord-stream.com/en/environmental-impact-assessment-permitting/international-consultation-process.html> [Visited 20 April 2011].

⁵⁹ Ibid.

⁶⁰ Espoo Convention, Art. 4

- (h) Where appropriate, an outline for monitoring and management programmes and any plans for post-project analysis; and
- (i) A non-technical summary including a visual presentation as appropriate (maps, graphs, etc.).

All these issues were analyzed in the Espoo Report. The question is: just how relevantly and how detailed? Even though the Espoo Report consists of more than 1500 pages, it looks very superficial, because the same phrases are repeated all the time “<...> all have been assessed to be of minor or moderate significance; no impacts of major significance have been identified”.⁶¹ Chapter 9 of the Espoo Report, called “Impact Assessment and Mitigation measures“, illustrates this point further. It is interesting that i.e. “mitigation measures” are not explained separately. All impacts in the end are called “minor” or of “low significance” and “easy to moderate”. Similarly, how the company will moderate environmental impacts is not clear, because there are no concrete explanations. Ofcourse, in some places, small mitigation measures can be found, i.e. that construction work will not take place during the birds nesting period. However, the completed pipeline will work all the time and then there is no explanation what kind of impact it will have to the nesting birds and how it will be moderated. It is also interesting that the impact of building pipeline parts on land are not clearly investigated in the Espoo Report.

7. Distribution of the EIA documentation for the purpose of participation of authorities and public of the affected country (Art. 4(2))

⁶¹ Espoo Report, Chapter 9

All this information was officially distributed to Germany, Denmark, Sweden, Finland and Russia in 2008/2009. Estonia, Latvia, Lithuania and Poland received it in March of 2009.⁶²

8. Consultation between Parties (Art. 5)

Consultation between “Parties of Origin” was held since April 2006.⁶³ In total it was held 15 meetings with “Parties of Origin” and “Affected Parties”. Nord Stream AG does not give concrete details in its webpage about each of 15 meetings.

9. Final decision (Art. 6(1))

The project timeline does not say anything about the final decision after Espoo Report was published. Perhaps it can be concluded that the decision to build the pipeline was made before the TEIA was carried out, in 2007, when the contract of pipe supplies was signed⁶⁴ and building of inland installations started in Russia.⁶⁵

Nord Stream AG says that all permissions were received by February 2010.⁶⁶

10. Transmittal of final decision documentation (Art. 6(2))

According to the available project material, the final decision documentation should be considered the so-called Espoo Report, which was submitted in March 2009 to all 9 littoral states.⁶⁷

B. Voluntary step:

1. Post-project analysis (Art. 7(1)/App. V)

⁶² http://www.nord-stream.com/fileadmin/Dokumente/1_PDF/3_Background_Infos/General_Background/Nord_Stream_White_Paper_General_Background_eng.pdf [Visited 20 April 2011].

⁶³ <http://www.nord-stream.com/en/environmental-impact-assessment-permitting/international-consultation-process.html> [Visited 20 April 2011].

⁶⁴ http://www.nord-stream.com/fileadmin/Dokumente/1_PDF/8_Factsheets/Nord_Stream_3_Fact_Sheet_Project_Timeline_ENG.pdf [Visited 20 April 2011].

⁶⁵ Žalimas (2007) and The Baltic Course (2010)

⁶⁶ "The Project & The environment" brochure 2009/06/21

⁶⁷ Ibid.

Nord Stream AG promised to take this voluntary step. The Espoo Report states that Nord Stream AG already has measures to minimize environmental impacts and that the Company will set up a fully integrated environmental monitoring program in close cooperation with the national authorities. It is said that Nord Stream AG has organized a Health, Safety, and Environmental Management System. The company promises that monitoring will be directed to the areas where significant impacts might occur and where there is uncertainty of significance. Nord Stream AG commits itself to share data with the interested parties, as well as monitoring results. It also promises to develop the “Third Party Communication Procedure” for comments and suggestions from the public, NGO’s, contractors and so on. Also the “Operations Department” is being established for the control of the operation of pipeline.

To conclude, it formally looks like Nord Stream AG followed all Espoo Convention regulations and implemented it well. However, the content of a very long report looks incomplete and unclear because of the aforementioned issues. Officially, only environmental scientists can assess the incompleteness of the report, as these specialists can judge the assessment’s conclusions (as it was mentioned, CCB already criticized Espoo Report in scientific way).

Moreover, for everybody to be fully involved and state their opinion about this project would be difficult, because information is not presented in a reader friendly way. In fact, it should be presented more clearly according to the previously mentioned criteria of the successful report.

3.4 Transboundary impacts in the Nord Stream Project

Now we will look to Chapter 11 of the Espoo Report on “Transboundary Impacts”. The Report groups transboundary impacts into two categories⁶⁸:

⁶⁸ Espoo Report, Chapter 11

1. Back-to-back impacts: these are impacts, which occur where the pipeline crosses the EEZ boundary between two “Parties of Origin”. These impacts result from planned activities, such as anchor handling and pipe-laying.
2. Other impacts, which do not fall under the first category. These occur elsewhere along the pipeline’s route due to their respective “scale” and proximity to EEZ boundaries.

Impacts in the Project are divided into the following categories⁶⁹:

- a) Local – within 500 m. from the source venue
- b) Regional – from 500 m. to 10 km.
- c) National – more than 10 km

Munitions clearance

Before starting to build the pipeline, 31 munitions from the Finish EEZ should have been cleared.⁷⁰ According to the report, munitions clearance was assigned on a regional scale because modeled increase in turbidity was expected up to a distance of 1-2 km, and a maximum of 5 km at one location. Munitions clearances were supposed to take place in the Russian, Finnish and Swedish EEZs. Release of contaminants due to the munitions clearance has been assessed to be of minor significance. However, fish within at least 1.5 km. of the clearance area would have instantly been killed because of noise and vibration.⁷¹ Moreover, report said that there was low possibility of disturbance from unidentified munitions. CCB criticized that Nord Stream has not properly analyzed measurements in order to minimize the impact on the marine environment. CCB further claimed that a significant increase of poisonous substances could have occurred if the condition of the seabed in the Russian EEZ was not properly analyzed and understood.⁷²

⁶⁹ Ibid.

⁷⁰ Espoo Report, p.1586

⁷¹ Ibid.

⁷² CCB statement 2009/05/22

Transboundary impacts occurring during the Pre-commissioning and Commissioning Phase

In this phase, impacts are associated with the intake of seawater and the discharge of pressure-test water. The report promises that these impacts will not extend beyond Portovaya Bay (Russian EEZ) and will not impose significant transboundary impacts in the neighboring EEZs. These impacts are called significant and of regional scale.

Transboundary impacts occurring during the Operational Phase

These impacts are concerned only with fisheries, such as disruption of fishing patterns or damage to fishing equipment. Interestingly, this part of the report says nothing about poisoning fish because of the gas leakage, for example, and the human health consequences of eating fish from affected areas. Navigational impacts on fishing fleets are characterized as transboundary and may affect any country of the Baltic Sea Region.

Transboundary impacts as a result of unplanned events

These events would include oil spills, disturbance of the chemical munitions and pipeline failure. According to the report, the probability of these events is low. However, later on report mentions the exception of munitions, which has a medium probability and small oil spills, which are highly probable.

Unplanned events resulting in transboundary impacts:

Oil spills, might result from shipping collisions. Spills from refueling operations are expected to be small and will not have transboundary impact. That is why the report states that the probability of a major spill occurring is low. However oil spills could occur anywhere along the pipeline.

Pipeline failure. In the worst case this means that the pipeline ruptures. This would result in a release of natural gasses. The report also considers the probability of this event as low with no significant transboundary effect:

<...>the probability of a full pipeline rupture is very low and considered unlikely to occur during the lifetime of the pipeline. In fact, a full-bore pipeline rupture is estimated to occur once every 24,400 years. The dominant potential cause of pipeline failure is a large ship's anchor catching it and causing a rupture. This risk is significantly minimised through the construction methods and route selection. Pipes are made from high tensile steel and coated with concrete to give them extra weight and to ensure their stability. As extremely unlikely as a rupture is, procedures are designed into the project to deal with its effects in order to prevent any harm and further risk to vessels in the area.⁷³

However, it does not give explanation about how the Company would act in such a case, because it simply does not consider it as a possible scenario.

As a result, such assessments may be considered as a vague and formal answer to the raised scoping questions rather than an outcome of precise and professional analysis of hypothetical but possible events which may result in transboundary impacts. This may be stated even without being an expert of environmental science.

3.5 Alternatives of the Nord Stream Project and gaps of the Espoo Report

In the Nord Stream Case, there was a suggestion about building the pipeline on the land. However, Nord Stream AG has responded that the route through the Baltic Sea would be the only one for its projected pipeline and it will not consider an overland alternative.⁷⁴ As a result, Espoo Report Chapter 6 entitled "Alternatives" evaluated five route alternatives in Russian, Finnish, Swedish, Danish and German waters. No inland alternative was evaluated.

⁷³ "The Project & The environment" brochure 2009/06/21

⁷⁴ REUTERS (2008)

Moreover, Nord Stream AG stated that it evaluated all respective alternatives and chose the most environmentally, socioeconomically and technically safe route.⁷⁵ It states: “Route planning aimed to avoid crossing areas designated as “protected” or “environmentally sensitive” – areas hosting ecologically sensitive species of animal or plant life”.⁷⁶ Surprisingly, “the most environmental, socioeconomic and technical safe route” goes through several Natura 2000 sites (the pipeline will cross 5 sites). But Nord Stream AG argued that:

The sites are not strictly nature reserves, and therefore human activities are not prohibited. <...> Although Nord Stream will cause temporary disruption to a small number of these sites, once the pipeline is in place the sites will rapidly recover, with no loss to biodiversity.⁷⁷

Later on, this thesis will claim that it is not clear how Natura 2000 sites should be saved and what kind of activities can be carried out. It is left up to the EU Member States’ discretion how to cope with this issue. This leads to the problem: there is no clear regime with these territories. Sometimes activities might be allowed there and sometimes not.

It is interesting that Nord Stream AG admits that the pipeline will have some environmental impacts: “<...> the environment in the area of the proposed project, in general, will be less affected when a project is not realized, as the environmental impairment would not occur”.⁷⁸

However, it states that even if there were no pipeline, environmental impact would occur:

In conclusion, significant changes are occurring to the environment which will have long term effects on the Baltic Sea. These changes will have much greater consequences for the environment than impacts from the Nord Stream Project and are currently being addressed by the EU and individual member states.⁷⁹

This statement seems to suggest the conclusion that Nord Stream is not doing anything bad. It seems strange that Nord Stream AG is not considering the cumulative effects to the environment from climate change and the pipeline. The previously cited statement looks

⁷⁵ Espoo Report, Chapter 6

⁷⁶ Ibid.

⁷⁷ "The Project & The environment" brochure 2009/06/21, p.50

⁷⁸ Ibid. p.316

⁷⁹ Ibid. p.318

neither professional nor convincing. Nord Stream AG is only outlining the idea that natural gas has the lowest greenhouse emissions of all the fossil energies, claiming that is why the pipeline project is environmentally friendly.⁸⁰ At the same time, concerned parties do worry that the new pipeline will add detrimental impacts to other ecologically problematic constructions already laid in the Baltic Sea:

<...> the construction of the pipeline in the area cannot be legally realized, unless -decisive negative impacts from aforementioned other projects are eliminated to such an extent that the cumulative effects will no longer go beyond the frame set by Natura 2000 coherence requirements and conservation objectives <...>.⁸¹

The Espoo Report concludes that it is better to implement the assessed project because it will not have any serious effects that would exacerbate climate change. In contrast non-implementation of the project would lead to financial losses for the EU states. So it is better to build the pipeline: “But positive socioeconomic consequences e.g. increase of employment, will not occur, if the project is not realized”.⁸²

That is why, the Company rejected the no-action alternative while, according to the Espoo Convention, the States should have decided whether to take an action or not. In fact, the States who gave permissions to build the pipeline through their EEZs “decided” as well.

3.6 Natura 2000

Natura 2000 is an EU established network designed to save nature and biodiversity. This nature network is established under 1992 Habitats Directive and 1979 (replaced by 2009) Birds Directive. The aim of Natura 2000 sites is to guarantee survival of the Europe’s most valuable species and habitats, also to fulfill obligations under the UN Convention on Biological Diversity.⁸³ The network comprises Special Areas of Conservation which are

⁸⁰ "The Project & The environment" brochure 2009/06/21

⁸¹ WWF Statement 07/05/2009

⁸² Espoo Report, p.319

⁸³ EC MEMO about NATURA 2000

selected by the Member States independently, according to scientific criteria such as target species, ecological quality, present habitat types, etc.⁸⁴ The Directive does not give guidelines for selecting territories. The Member States are responsible for the management of these areas.

An important issue about Natura 2000 network is that European Commission (EC) states that: “Natura 2000 is not a system of strict nature reserves where all human activities are excluded”.⁸⁵ This means that some activities can take place in these sites. Moreover, in answering the question whether development on Natura sites is restricted, the Commission states: “There is not any a priori prohibition of new activities or developments within Natura 2000 sites. These need to be judged on a case-by-case basis”.⁸⁶ Procedure requirements are explained in the Habitats Directive. Member States are responsible for the compliance with legal requirements of Natura program. Further EC explains that most of the Natura 2000 protected territories are privately owned and that the emphasis should be on ensuring sustainable, ecological, economic and social future management.

Interestingly, once EC gave this statement about allowed activities in Natura sites:

<...>Biebrza will be identified as a Natura 2000 site on Polish accession. This implies that strict conservation rules apply. Article 6 of the Habitats Directive requires all Member States to carry out a full assessment of all alternatives to a proposed investment that risks having a negative environmental impact on a possible Natura 2000 site. If no alternative exists, the investment can only be allowed if it demonstrates overriding public interest and all compensatory and mitigation measures have been applied.⁸⁷

In 2006, environmental NGOs (the Polish Society for the Protection of Birds, BirdLife International, WWF, CEE Bankwatch Network) submitted a Background note called “Via Baltica – not this way!” protesting against expressway S-8 of the Pan-European transport Corridor from Helsinki to Warsaw, called “Via Baltica”, along the current road no. 8.⁸⁸ NGOs stated that the road no. 8 may cause irreversible damage to five sites under the Natura 2000 network, because these sites hold species listed in the Annexes of the Birds and Habitats Directives. NGOs stated that the states building the road do not fulfill requirements of Habitats

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ 2003/C 268E/128

⁸⁸ BACKGROUND NOTE. Via Baltica – not this way!

Directive Art. 6(3)(4), moreover environmental organizations emphasized that there is at least one possible alternative route from Warsaw to the Polish-Lithuanian border crossing in Budzisko. In the end NGOs reached their goal - the “Via Baltica” project was suspended. It is interesting that these organizations are “silent” in the Nord Stream case, even though the pipeline will cross Natura 2000 sites as well. What kind of double standards it has, that for one project Natura 2000 sites should be saved and for another not? According to the Nord Stream Espoo Report, five protected network areas will be crossed by the pipeline. More than 30 different species live in these sites (Look ANNEX II of this thesis). In the Report is written: “Dredging and backfilling of the pipelines route will cause a temporary loss to limited areas of marine Natura 2000 habitats inside Greifswalder Bodden and across the Boddenrandschwelle”.⁸⁹ While there is that kind of rule:

The golden rule for all activities in Natura 2000 sites is that:

- Damaging activities are avoided that could significantly disturb the species or deteriorate the habitats for which the site is designated.⁹⁰

The Espo Report states that, in order to minimize environmental impact, pipe-laying will be performed in steps: dredging and backfilling will be restricted to one season.

As a result, previously mentioned examples suggest a conclusion that Natura 2000 sites does not have a strict regime and it is not clear, how the nature should be protected under Natura network.

3.7 Potential problems, when carrying out TEIA

The Espoo Convention states that the EIA shall be conducted by the “parties”. It is obvious that the parties to the Convention are states, but what about synchronizing the TEIA? Can the private company, which is building the pipeline, supervise the TEIA? In the standard case, a sponsor from the source state prepares the TEIA in accordance with a state’s relevant

⁸⁹ Espoo Report, p.1529

⁹⁰ <http://www.natura2000tourism.eu/business/tourismnatura2000.html> [Visited 24 May 2011].

legal and other EIA procedure documents. The TEIA can be prepared by governments, NGO's, intergovernmental technical committees and so on.⁹¹ Interestingly, according to Art. 5(1) of the said Directive, Member States shall adopt necessary measures to ensure that the developer supplies appropriate information, which is specified in Annex IV (EIA Report). As a result, the overall environmental assessment information should be provided by the developer (the European Court of Justice case-law approves this system).⁹² While the Espoo Convention talks about the parties to the Convention.

The TEIA gives rise to many difficulties because of differences in national EIA procedures, language barriers etc. Therefore, a lot of confusion and problems might arise in the transboundary projects. Moreover, the TEIA might not be assessed properly as a whole. In order to avoid that, many consultations between neighboring countries should be carried out.

In May 2009, the Espoo Convention Secretariat issued a document called "Exchanging of good practices/ Large-scale Transboundary projects/ Application of the Convention to complex activities".⁹³ This document discussed and gave some advice regarding how the transboundary EIA of the large-scale projects should be carried out. The Secretariat highlighted these challenges to the application of the EIA instrument:

- (a) Fitting one set of EIA documentation into different EIA systems and to agree on its content among several competent authorities (if it is decided to prepare one set of EIA documentation);
- (b) Integrating several national sets of EIA documentation (if it is decided to prepare one set for each concerned Party);
- (c) Providing a combination of the above two options, e.g. detailed national documentation plus an overall non-technical summary with a special focus on transboundary impacts.⁹⁴

Different EIAs may be contradictory because of the differences between EIAs, including variation in scopes, documentation, etc. In order to avoid these difficulties, the Secretariat outlines a plan for coordination of the different national sets of EIA documentation. This plan includes recognition of different EIA requirements and standards, also agreement upon

⁹¹ CASSAR (2004) p.221

⁹² Environmental Impact Assessment of Projects – Rulings of the Court of Justice.

⁹³ ECE/MP.EIA/WG.1/2009/4

⁹⁴ Ibid.

homogeneous methodologies to determine environmental impacts and their significance.⁹⁵ Correspondingly, the Secretariat encourages parties of the Espoo Convention to enter into bilateral and multilateral agreements in order to harmonize methodologies of their respective EIAs. Coordination becomes more difficult as more states participate in a transboundary activity. For example if four countries are building the pipeline in the sea, pipe-laying methods in each section of the territorial waters might vary a lot. All four states might also present completely different EIAs, which would lead to troubles for the decision-making body. To further the example, one party of the project might be satisfied with the pipeline construction progress in its territory and another party might be unsatisfied because of dangerous sediments in the bottom of the sea in its EEZ. In the end, if an environmentally destructive event happens, water mingles. As a result, the states might experience effects, which they have not foreseen. So in this case, if all four EIAs are not integrated into one transboundary EIA, the decision-making body would not be able to make a relevant decision.⁹⁶ It is very interesting that the Espoo Secretariat gave this statement:

According to the Convention, the final decision should take due account of the findings in the EIA documentation and the comments of stakeholders. However, scientific information and the public's comments may receive less attention due to political issues, especially in complex activities. This is a broad and recognized problem in EIA practice⁷; the more politics and other interests are at stake, the more likely they are to influence decision-making.⁹⁷

To overcome the aforementioned challenges, the UNECE recommended reviewing the guidance on practical application of the Espoo Convention and preparing further guidance on specific issues to the complex, large-scale activities.⁹⁸ So far, this guidance has not been issued.

As a result, it is understandable why the EU, which is an Economical Union, decided upon energetically important Nord Stream Project and closed their eyes to the environmental issues that might arise.

⁹⁵ Ibid.

⁹⁶ Ibid.

⁹⁷ Ibid.

⁹⁸ Ibid.

3.8 European Union Directives on Environmental Impact Assessment

Article 174 (2) of the European Community Treaty states:

Community policy <...>shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.⁹⁹

The rules for EIAs in the EU are summarized in the Directive 85/337 EEC, which was amended for the three times: in 1997, 2003 and 2009. Directives on EIA are fundamental tools of European Union environment strategy. This strategy is based on the precautionary and “polluter-pays” principles. Directive 85/337 EEC was a good implementation of the Espoo Convention into the EU legal system. The first time it was revised in 1997 was due to the need for clarification and improvement of the environmental assessment procedure. Directive 97/11 increased the number and types of projects requiring mandatory EIAs (Annex I). It also provided new screening criteria for Annex II projects. However, the newly amended Directive was criticized again, and needed to be improved twice more in 2003 and 2009. Directive 2003/35/EC made significant amendments to the primary Directive that complies with the Aarhus Convention on public participation in the decision-making process. Directive 2009/31/EC on the geological storage of carbon dioxide harmonized principles from the EIA by introducing minimum requirements, in particular with regard to the type of projects that should be subject to assessment, the main obligations of the developers, the content of the assessment and the participation of the competent authorities and the public.¹⁰⁰

The EU Directive has integrated the Espoo Convention into its laws and went even deeper into it by guaranteeing the public’s right to participate in consultations with planners. The Directive also takes into greater consideration the comments of “Affected Parties”.¹⁰¹ In general the Espoo and Aarhus Conventions are separate and Espoo Convention does not guarantee such broad rights to public participation as the Aarhus Convention does. As a result,

⁹⁹ TEU, Art. 174

¹⁰⁰ <http://ec.europa.eu/environment/eia/eia-legalcontext.htm> [Visited 20 April 2011].

¹⁰¹ Fahleryd (2009) p.8

EU Directive does that and EU legal system is supposed to have a strong public participation mechanism.

In the Nord Stream case, all “Parties of Origin” and all “Affected Parties”, except Russia, are EU members. So the EU Directives apply to this case as well, as the Espoo and Aarhus Conventions. Russia, as earlier mentioned, is not a party to any of these Conventions.

4 Public participation

Now this thesis will try to assess why the public participation should be important in a huge transboundary projects.

4.1 Aarhus Convention

The Aarhus Convention (official title: “Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters”) was adopted in 1998, in Aarhus, Denmark by the UNECE. It came into force on 30th of October, 2001. Now the Convention has 44 signatory states (only Russia is not a party to the Convention in the Nord Stream case). This document is the first binding international Convention which regulates obligations of nations for the public. According to the UNECE, the Aarhus Convention is a document, which links environmental rights with human rights. It reminds that all nations have an obligation to save nature for future generations, and states that sustainable development can be reached only if all (the public, NGOs, governments, private companies, etc.) would work toward this goal. It also incorporates environmental protection into governmental accountability. Finally, it looks for the interaction between the public and state authorities in a democratic way.¹⁰² The Convention also forms a new process for public participation in the negotiation and implementation of an international agreements process.

The Aarhus Convention consists of three main pillars¹⁰³:

- 1) Access to Information (Art. 4 and 5);
- 2) Public participation in decision-making process (Art. 6,7,8);
- 3) Access to justice in Environmental matters (Art. 9).

These pillars are very interrelated. However, before going into detail, one may want to know who “the public” under the Aarhus Convention is. Article 2(4) gives this definition:

¹⁰² <http://www.unece.org/env/pp/welcome.html> [Visited 20 April 2011].

¹⁰³ Johansson (2009)

“The public” means one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organizations or groups.¹⁰⁴

So all people who hold legal capacity and registered NGOs fall under this definition. People need access to information because of the painful experience with Chernobyl and Bhopal accidents, when many people, got serious diseases due to the lack of information. One example occurred on April 26, 1986 when, during testing, one of the Chernobyl reactors exploded. The Soviet Union tried to hide this accident until the 28th of April when the World found out itself.¹⁰⁵ When the clouds of radiation were the strongest and people should have been told to stay at home, they were outside. Nobody told the public what was happening and about the health risks. Many people died immediately and many continue to perish because of the diseases caused from radiation.

After this introduction to the necessity of public information, we will look at each of the Convention pillars in greater detail. Latter on we will look how public participation was experienced in the Nord Stream case.

4.1.1 Access to Information

According to the Convention, all persons have the right to access to information. Under the Convention the contracting parties are required to establish a system where a member of the public can request environmental information from a public authority and receive it within a reasonable period of time. The only exceptions to the general rule are outlined in paragraphs 3 and 4 of Article 4. These exceptions, for example, contain: public requests when the authority does not hold the information, which is requested (Art. 4(3)(a)), requests are unreasonable or/and too general (Art. 4(3)(b)) or when authorities cannot provide

¹⁰⁴ Aarhus Convention, Art. 2(4)

¹⁰⁵ Rosenberg, J.

information, because of an exemption provided in a national law or customary practice (Art. 4(3)(c)).¹⁰⁶

Other parts of the Article 4 also ensure that the appropriate public authority receives information requests. If a part of an information request falls under an exemption, the remaining part should be made available to the public. Further Article 4 gives detailed descriptions of how the refusal to give certain information should be done. The last paragraph allows the public authority to charge costs of supplying information material to the public, if it is really needed and reasonable.

Article 5 defines the obligations of the Parties to collect and spread the different types of environmental information to the public. The provision covers emergency, product, pollutant release and transfer information, also information about laws, policies, strategies and information about how to get all these kinds of information.¹⁰⁷ In collecting some of this information, the Convention outlines special steps, which should be taken, for the other types of information; no special requirements are set out. Parties are free to choose the process and implementation methods. To sum up, Art. 5 mainly focus on specific information collection and ways to disseminate information to the public.

4.1.2 Public participation in decision-making process

Articles in this pillar remind Parties, how important is to give the public the possibility to participate in the decision-making process. According to the Implementation Guide, successful decision-making process is implemented when the public really and actively participates in the process. When the public participation is just formal, there will not be successful implementation of a decision and the legitimacy of the decision will be questioned. Real public participation means that public authorities listen to the public opinion and might be influenced by it. When this possibility is noticeable in the final decision, we can say that

¹⁰⁶ Aarhus Convention, Art. 4

¹⁰⁷ The Aarhus Convention: an Implementation Guide

public had a right to participation and participated or used their right. There is no definition of “public participation” in the Art. 2 (Definitions), so it is not clearly defined. However, the Preamble suggests that the most important issue about public participation is the role of the public to use the possibility of implementing its right to clean and healthy environment, and to protect environment for the future generations.¹⁰⁸ (The earlier mentioned Espoo Convention, in particular Art. 2(2)(4) is another Convention, which sets legal principles for public participation. Art. 4(2) states that the public should be given information about the EIA with a potential transboundary environmental effect procedure and should be informed about the right of participation. The link between Aarhus and Espoo Conventions is that Art. 6(2) of the Aarhus Convention mentions EIA in a way that authorities must provide public with documentation, which is included in EIAs and that public participation, should strengthen implementation of the Espoo Convention.¹⁰⁹)

Article 6 of the Aarhus Convention explains public participation in the context of permitting or licensing specific activities. This article should be enforced by Art. 9(2)(3) (Through Art. 9(2) the public has access to justice to defend its rights and interests with respect to the procedures of Art. 6. Under Convention rights of the parties to administrative proceedings of the domestic law are independent from Convention rights. Parties might have additional, specific rights, i.e. the right to become a party of the proceeding).¹¹⁰ Article 6 also sets up requirements for participation during decision-making process on specific activities. Paragraph 2(e) of the Article mentions EIA. In theory, the EIA should determine whether or not a proposed project should proceed, but in itself the EIA instrument is not a permitting or forbidding instrument, it is just an instrument for decision-making. The Aarhus Convention does not establish an EIA regime, its purpose is to ensure that the public opinion is taken into consideration when reviewing the impacts of specific activities.

Regional authorities have a right to approve projects, because in some cases approval is essential. For example, in the Nord Stream case, all countries through whose territorial

¹⁰⁸ Ibid. p.89

¹⁰⁹ Fahleryd (2009) p.16

¹¹⁰ The Aarhus Convention: an Implementation Guide

waters the pipeline will go needed to give permission for the project. Without permissions the project could not start. All these permissions might have environmental consequences later on and link with state responsibility issues. That is why Guidelines states:

As a result, in implementation, Parties may be obliged to establish mechanisms to guarantee the participation of the public at several steps along the way in the conception, initiation, development, operation, and even closing-down of projects, facilities, and other activities with potential significant effects on the environment.¹¹¹

Planning process of decision-making, programs and policies in general are regulated by Art. 7. Article 6 is applicable only when such planning is concerned with a special activity.

Article 7 covers public participation concerning plans, programs and policies relating to the environment. Obligations and rights are much less clearly defined than in Art. 6 and it gives more flexibility in finding solutions for public participation in decision-making. It separates plans and programs from policies and tries to ensure that public participation is taken into consideration. But there are no definitions of the previously mentioned terms (“plans”, “programs”, and “policies”).

The last article from this pillar, Article 8, promotes public participation in the preparation of laws. It also sets rules of public participation procedures and states that parties must ensure that public participation is taken into account.¹¹²

4.1.3 Access to justice in Environmental matters

Article 9 entitles the public to have a review before an independent body with regard to possible violations of rights under the Convention, such as access to information and public participation. The Aarhus Convention creates rights and obligations in favor of the public, which should be guaranteed. It is possible to state that the Aarhus Convention has a much stronger implementation mechanism than Espoo Convention. Separate individuals and NGOs

¹¹¹ Ibid.

¹¹² Ibid.

can bring claims to the Court. First of all, according to the Convention “access to justice” encompasses access to information. The public can initiate a review of environmental decisions under national environmental laws or/and under Aarhus Convention. The Convention sets these requirements for the access to justice: fairness, equitability, timely, affordable, establishment of appropriate assistance mechanisms if needed, etc. In addition, the public can choose alternative institutions to the courts for their complaint: i.e. ombudsmen institution, reconsideration and administrative review. In the Nord Stream case, i.e. people of two littoral states (Lithuania and Poland) wrote a petition, which was submitted to the EP.

4.2 Public Participation in the Nord Stream Case

In the Nord Stream case the public tried to influence decision-making procedure, but it did not succeed. Nord Stream AG held public hearings with the people from all affected states, but did not pay any real attention to their opinion and requests (the main request was to conduct an independent and impartial EIA). Under the Espoo Convention “Concerned Parties” shall ensure public participation, and as earlier mentioned only States are Parties to the Convention. In two affected states (Lithuania and Poland) people were unsatisfied with the formal public opinion hearings. Therefore they initiated Petitions (0614/2007 and 0952/2007) in order to get attention. Almost 30 000 people signed the petitions, which were submitted to the EP. In the 2008, the EP released Report A6-0225/2008, which presented two parliamentary committees’ (the Committee on Foreign Affairs and the Committee on Industry, Research and Energy) opinions. The Committee on Foreign Affairs underlined that energy security must be understood as security of the whole EU. They also stated that there is a need for a dialogue between producer, transit and consumer countries, called Member States to respect all foreign policy issues of common interest in energy infrastructure projects. The Committee also underlined:

<...> the ability of small littoral states to act as security providers in the Baltic Sea region cannot be seen in isolation from the EU's ability to act as a unified entity and speak with one

voice on energy issues and recalls its resolution of 26 September 2007 on a common European foreign policy on energy⁽¹⁾; underlines that the project has been labeled a project of European interest in the latest guidelines on Trans-European Energy Networks (TENE-E), adopted in September 2006, and that it should be planned in the spirit of the common European foreign policy on energy¹¹³

In view of all these politically important economical energy infrastructure issues, the Committee highlighted the importance of an independent and objective EIA of the Project and called on Nord Stream AG: “<...> to assume the financial responsibility to pay compensation for any damage arising”.¹¹⁴ For that reason, the Committee asked the European Commission and the Member States to assess various transparent aspects of the Nord Stream Project, to analyze alternatives, engage Nord Stream AG in an open and transparent dialogue with all concerned parties and ensure that concerns of all littoral states are taken into account in the independent EIA. Moreover the Committee called Russia to ratify the Espoo Convention.

The Committee on Industry, Research and Energy paid less attention to important economical and energy issues than the Committee on Foreign Affairs. The Committee on Industry, Research and Energy mostly concentrated on the qualitative EIA issues. Specifically, they suggested that the cumulative adverse effects of both pipe-laying and the operational phases should be taken into consideration in EIA. The Committee also suggested that the potential effects on the Natura 2000 sites should be analyzed and that the required studies of earthquakes should be conducted. The Committee reminded that Art. 79 of the UNCLOS provide that:

the delineation of the course for the laying of such pipelines on the continental shelf is subject to the consent of the coastal State.¹¹⁵

This might lead to the conclusion that only coastal States can veto the Project and “Affected Parties” have no real influence.

⁽¹⁾ Texts adopted, P6_TA(2007)0413.

¹¹³ EP Report A6-0225/2008

¹¹⁴ Ibid.

¹¹⁵ Ibid.

After this EU Report was published, Russia agreed upon full implementation of the Espoo Convention, but still has not ratified it. Nord Stream AG finally released documents of the EIA process in 2009 and held public hearings in all “Affected Parties”, but all these steps were held as a formality. The final and unchangeable decision to build the pipeline was made a long time ago. Public participation is not noticeable at all in the final decision. All formal steps were taken just to calm down worried societies of the two littoral states, but not to improve EIA procedure or really hear scientists’ and public opinion. It is questionable, whether such late EIA can be deemed independent and objective. Moreover, it is questionable, whether public participation is important at all in the Nord Stream project.

5 State's Responsibility in the Nord Stream Case

Now we will address state responsibility, because common sources such as environment (seas) should be protected and state, which damages or might damage environmental commons, should be held responsible for that. In this particular case, we will discuss how the proper or improper compliance with environmental obligations can influence the state's responsibility and liability. This thesis will not analyze the UNCLOS Convention, for that review Seita Romppanen's thesis "Reflections on environmental responsibility – with an emphasis on the Nord Stream pipeline in the Baltic Sea area".¹¹⁶ I will shortly remind that under the UNCLOS Convention Art. 79, states are allowed to build the pipelines, but all precautionary measures should be taken out. To conclude, in this Chapter of the thesis I will look for the responsibility issues (breach of procedural obligations) and define, whether in the Nord Stream case there was implemented wrongful act and if yes, who should be held responsible.

5.1 General remarks

For the state to be held responsible the following is necessary: a wrongful act, which must be attributed to the state, because only states are bound under public international law.

For the wrongful act to occur, these I subjective and II objective elements are necessary:

- I (i) the imputability to a State of conduct (action or omission) of an individual contrary to an international obligation;
- (ii) in some limited instances, the fault (culpa) of the State official performing the wrongful act.
- II (i) the inconsistency of particular conduct with an international obligation;
- (ii) a material or moral damage to another international subject;
- (iii) the absence of any of the various circumstances precluding wrongfulness.¹¹⁷

¹¹⁶ Available at: <http://skemman.is/en/item/view/1946/4384> [Visited 20 April 2011].

¹¹⁷ Cassese (2005) p.246

5.2 “General” state responsibility and “Environmental” state responsibility

Under “general” state responsibility, states are responsible when they perform unlawful activities, which bring damage to other states.¹¹⁸ The problem with environmental responsibility is whether states are responsible for the activities that are not prohibited, but still cause damage to other states. The answer is not clear (look paragraph 5.8). According to Professor Cassese, in the environmental law field, state responsibility might arise without a fault or negligence: “<...> a State may be held accountable, hence liable to pay compensation, for serious damage to the environment even if it acted with due diligence”.¹¹⁹ That is why, if a state performs lawful activity, but it results as a serious harm to the environment, i.e. Trail Smelter Case, state will be held liable. In the Trail Smelter Case was stated:

<...> no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.¹²⁰

Trail Smelter Case confirmed what is said in state responsibility theory that responsibility only arises after damage has occurred. So in our case, if no “hazardous” damage occurs during pipeline building and operation stages, responsibility issues will not arise: “<...> state responsibility could only be utilized after the damage had occurred”.¹²¹ So, under international environmental law, states can request for reparation only if its rights have been breached and a material or moral damage was caused.¹²² In other words, the affected State must prove actual damage and its causation.¹²³ Otherwise state practice shows that no state responsibility issues arise, unless “aggravated responsibility” may be triggered.¹²⁴ “Aggravated responsibility” is responsibility, which: “<...>arises when a state violates a rule laying down a “community obligation”, that is either a customary obligation *erga omnes* protecting such fundamental

¹¹⁸ Ibid. p.497

¹¹⁹ Ibid. p.498

¹²⁰ US v. Canada (Trail Smelter Case)

¹²¹ International law. Nutcases (2008) p.176

¹²² Cassese (2005) p.251

¹²³ International law. Nutcases (2008) p.178

¹²⁴ Cassese (2005) p.253

values as peace, human rights, or self-determination of peoples or an obligation *erga omnes contractantes* laid down in a multilateral treaty safeguarding those fundamental values”.¹²⁵

As mentioned earlier, liability without fault might arise in environmental field and it can be seen as an application of the “polluter-pays” principle. This principle requires that the actor who benefits from a lawful activity would cover all risks of losses, if harm is done to others.¹²⁶

Interesting that in the Nord Stream case the operator does not want to talk about covering losses or harm to the others, even though, as stated earlier, EU, CCB and public of “Affected Parties” asked about that. Instead Nord Stream Company by its Espoo Report tries to prove that there will be no significant harm, so they do not need to plan about covering possible harm, because simply it will not occur. But according to the “Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities”, Principle 4(5): “In the event that the measures under the preceding paragraphs are insufficient to provide adequate compensation, the State of origin should also ensure that additional financial resources are made available”. That leads to the conclusion, that States, to which Nord Stream activity can be attributed, should have established financial liability funds. But the question arises, whether building and operation of the Nord Stream pipeline falls under ultra-hazardous activity definition. Ultra-hazardous activity is:

An activity which gives rise to strict liability, because it "necessarily involves a risk of serious harm to the person, land or chattels of others, which cannot be eliminated by the exercise of utmost care" and it "is not a matter of common usage."¹²⁷

The Espoo Convention applies to the activities, which might cause significant harm, moreover Annex I lists activities for which EIA is obligatory, it means that those activities are of a high level of a risk and might cause a “significant harm”. As a result, it might be possible to call these events as ultra-hazardous.

¹²⁵ Ibid. p.262

¹²⁶ Kiss (2007) p.19

¹²⁷ Barron's Law Dictionary: <http://www.answers.com/topic/ultrahazardous-activity> [Visited 20 April 2011].

Question, whether non compliance with procedural obligations might cause state responsibility arises.

5.3 Breach of the Procedural obligations

In the Pulp Mills on the River Uruguay (Argentina v. Uruguay) Case, ICJ decided that procedural obligations breach do not impose any other remedy as a declaration of a breach.¹²⁸ The Court told both parties to co-operate and to work towards protection of the aquatic environment:

<...> the Court has concluded that Uruguay's conduct to date has violated its procedural obligations under the Statute but has not violated its substantive obligations and that the declaration of a procedural breach is the only remedy which it is appropriate for the Court to grant. <...> In several respects it was ahead of its time and is a tribute to the determination of the two States to protect an aquatic environment of great importance to them both. As the Court has remarked, in paragraph 281 of the Judgment, until the present case the machinery created by the Statute had worked well without any need to refer matters to the Court. The Parties have a duty to co-operate to ensure that that machinery continues to work well in the future.¹²⁹

So this might lead to the conclusion that the breach of the procedural obligation does not lead to the direct remedy. A number of conventions give rise to the legal claims, only when "substantial" or "significant" harm occurs.¹³⁰ "Significant" harm is the harm, which refers to: "*something more than "detectable" but need not be at the level of "serious" or "substantial"*".¹³¹ It might seem like precautionary principle does not play its vital role, if the state responsibility arises only if "significant" harm already occurred, in other words, substantial obligations were breached. Should precautionary principle be understood only as a co-operation and notification implementation then?

¹²⁸ Argentina v. Uruguay (Pulp Mills on the river Uruguay Case)

¹²⁹ Separate Opinion of ICJ Judge Greenwood

¹³⁰ Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries

¹³¹ Knox, p.294

Treaty law of procedural obligations evolved so that notification, consultation and co-operation are essential, where the harm might occur.¹³² Corfu Channel Case evolved a principle, which latter on became a treaty rule to notify states, which might be affected by an imminent danger.¹³³ According to the Lake Lanoux Arbitration, state, which potentially might cause harm by implementing dangerous activity, must initiate negotiations with possibly affected states before a final decision about the activity has been taken.¹³⁴ But: “The principle of cooperation imposes only procedural requirements. The consulting State is not required to share decision-making powers on the project; cooperation does not result in a veto right for the neighboring State”.¹³⁵ Maybe, that is why, Professor T. Koivurova states that Nord Stream AG conducted transboundary EIA as good as it was possible in this particular case:

From the legal perspective, there is no doubt that the parties to the Espoo Convention and the Russian Federation performed their duties better than the minimum requirements of the Espoo Convention stipulate. The Espoo Convention leaves it for each state to determine whether a proposed activity is likely to cause significant adverse transboundary impacts and, if so, on which countries.¹³⁶

The UN General Assembly in its Resolution 2995 (XXVII) noted that other states can not delay the projects in the states within their territory, because of the principle of state sovereignty, but reminded that states are required to exchange all possible information, because of the spirit of good neighborliness.¹³⁷ As a result notification and co-operation has been included in the treaty law, i.e. Espoo Convention Art. 2, UNCLOS Art. 206.

And in the Nord Stream Case, “Parties of Origin” co-operated (gave permissions for building the pipeline). Just the public of “Affected Parties” was left outside the ‘co-operation’.

¹³² Morrison (2003) p.185

¹³³ UK v. Albania (Corfu Channel Case) and Ibid.

¹³⁴ France v. Spain (Lake Lanoux Arbitration) and Morrison (2003) p.186

¹³⁵ Ibid.

¹³⁶ Koivurova (2010) p.174

¹³⁷ UN General Assembly Resolution 2995 (XXVII)

5.4 United Nations International Law Commission and its “Draft Articles on Responsibility of States for Internationally Wrongful Acts”

UN International Law Commission (ILC) is an institution, which was established by UN General Assembly in order to promote the development of international law and its codification.¹³⁸ Commission holds annual sessions in Geneva since 1949.

ILC adopted “Draft Articles on Responsibility of States for Internationally Wrongful Acts” in 2001. It is governing principles on state responsibility. ILC Draft Articles are secondary law, which addresses basic issues of state responsibility for breach of primary law (obligation).¹³⁹ Even though UN General Assembly in its Resolution 56/83 has annexed ILC Draft Articles, they are not binding.¹⁴⁰ But they still play a vital role in attributing state responsibility issues.

5.5 Nord Stream Project’s attribution to the State(s)

In order to establish state responsibility, as it was mentioned earlier, there is a need to attribute private companies (Nord Stream AG) activity to the State or States, because in general private companies are not bound by public international law and its instruments (conventions, customary rules, etc.).

Now, it will be attempted to answer whether it is possible to attribute Nord Stream’s actions to any of the littoral states, which participated in the Espoo process.

During the former Russian President V. Putin visit to Germany, The Russian Company OAO Gazprom (in which the Russian State owns a 50.002 per cent controlling stake)¹⁴¹ on one side and German companies BASF and E.ON on the other side, signed an agreement to build the Pipeline through the Baltic Sea. Moreover, G. Schröder, who was a Chancellor of

¹³⁸ http://en.wikipedia.org/wiki/International_Law_Commission [Visited 20 April 2011].

¹³⁹ http://en.wikipedia.org/wiki/State_responsibility [Visited 20 April].

¹⁴⁰ UN General Assembly Resolution 56/83

¹⁴¹ <http://www.gazprom.com/investors/stock/> [Visited 20 April 2011].

Germany in 2005, now is the Chairman of the Shareholder Committee in the Nord Stream AG.¹⁴²

The EU Commission says that Nord Stream Project is a private agreement, where some EU states and Russia are participating. Yes, it is private agreement, but made with a great intention and support from the Russian and the German government. In addition, it is interesting that EU Commissioner for Energy Günther Oettinger (who is German) said: “Nord Stream is an EU priority energy project and important in complementing the European energy grid”.¹⁴³

According to the ILC Draft Articles on State Responsibility, Art. 4, which states:

1. The conduct of any State organ shall be considered an act of that State under international law, whether the organ exercises legislative, executive, judicial or any other functions, whatever position it holds in the organization of the State, and whatever its character as an organ of the central government or of a territorial unit of the State.
2. An organ includes any person or entity which has that status in accordance with the internal law of the State.¹⁴⁴

and Art. 8:

The conduct of a person or group of persons shall be considered an act of a State under international law if the person or group of persons is in fact acting on the instructions of, or under the direction or control of that State in carrying out the conduct.¹⁴⁵

Nord Stream AG activity could be linked to Russia and Germany, because of the previously explained political circumstances. Moreover, according to the EIA instrument, states, which are giving permissions to build environmentally dangerous project through their own territory, would be held liable for damage if it would appear within their borders, because:

The necessary element of an act or omission by a state agent is generally present, because the large majority of domestic activities capable of causing serious environmental harm outside the country require prior approval or licensing under domestic legislation. Such approval normally will suffice to engage the responsibility of the competent territorial authority.¹⁴⁶

¹⁴² <http://www.nord-stream.com/en/our-company.html> [Visited 20 April 2011].

¹⁴³ http://www.nord-stream.com/en/press0/press-releases/press-release/browse/3/article/opening-ceremony.html?tx_ttnews%5BbackPid%5D=24&cHash=dd5ad30059 [Visited 20 April 2011].

¹⁴⁴ ILC Draft Articles on State Responsibility

¹⁴⁵ Ibid.

¹⁴⁶ Knox (2002) p.313

While the Nord Stream activity needed permissions of the countries, whose territorial waters the pipeline will cross, those countries (Russia, Germany, Sweden, Finland and Denmark), which have issued them, also approved the activity of Nord Stream AG with all possible consequences within their jurisdiction or parts of control.¹⁴⁷ That is why, these countries would be held liable for the damage in their jurisdiction, even though they would not cause it itself.¹⁴⁸ Under the treaty and customary law rules, states are responsible for the damage in their territory, because they hold duty of control there. And according to the precautionary principle and theory of acting with due diligence, states must take all necessary measures in order not to cause environmental damage to other states.

To conclude, it is possible to attribute Nord Stream AG activity to the State. But the problem arise, that not all states, to which we can attribute Nord Stream activity are parties to the important conventions in this particular case, i.e. Russia is not a party to the Espoo and Aarhus Conventions. In this case, customary law comes to help us (look 5.7 paragraph).

5.6 Determination of the Wrongful Act

If a private company's act can be attributed to a State or States, we should look for the Wrongful Act, which according to the scholarly opinion and ILC Draft Articles means breach of an international obligation of the State (treaty or customary rule).

A breach of an international obligation means an action or/and omission, which are stated in Art. 2 of the 2001 ILC Draft Articles. It is necessary to remember that only obligations, which are in force and by which State is bound, may be breached.¹⁴⁹ As a result, if States have not implemented properly its obligations under Helsinki, Espoo, Aarhus Conventions and EU Directives, it leads to a Wrongful Act. A final analysis of a breach lies under the Court's jurisdiction and interpretation of the treaties, customary rules, and acts

¹⁴⁷ Romppanen (2010) p.56 and 57

¹⁴⁸ Ibid.

¹⁴⁹ Cassese (2005) p.251

conducted of the States. It is difficult to judge, whether a Wrongful Act was conducted. But from the previous chapters' analyses, it would be possible to presume a Wrongful Act, because of the questionable EIA quality, conducting it too late and no real reflection of public participation.

5.7 Carrying out EIA –Customary Law rule?

Precautionary principle is stated in Rio Declaration, Principle 15:

In order to protect the environment, the precautionary principle shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.¹⁵⁰

According to the professors Kiss and Shelton, precautionary principle can be considered as the most developed form of prevention that remains the general basis for environmental law, because precaution is consideration and examination of the most likely or hypothetical threats, when there is no stringent proof that damage will occur.¹⁵¹

<...> the aim of the precautionary principle, as a general principle of international environmental law, is to minimise, and, if possible, eliminate, unnecessary human interference with a legitimate environmental interest.¹⁵²

It means that where the law rules ask to prevent environmental harm, a precautionary approach must be taken into consideration. It also means that a decision-making body must to be aware of the all potential effects of what they are sanctioning and have all available information for the basis of its decision.¹⁵³ In order to have “all available” information and show due care attention for the environmental consequences is to have:

<...> appropriate procedures and mechanisms that incorporate a precautionary approach. It is contended that the precautionary principle has indeed crystallised into a norm of customary international law.¹⁵⁴

¹⁵⁰ Rio Declaration

¹⁵¹ Kiss (2007)

¹⁵² McIntyre (1997) p.240

¹⁵³ Ibid.

¹⁵⁴ Ibid. p.241

The link between precautionary principle and EIA was emphasised in the Nuclear Weapons Case by Judge Weeramantry.¹⁵⁵ It was argued that if a state is intending to carry out environmentally dangerous activity, it should present a proof (i.e. thorough EIA) that its activity would not cause an unacceptable environmental damage.¹⁵⁶ Weeramantry argued that serious environmental damage, which is likely to arise from a given activity, is very difficult for a claimant to prove, because most of the information is in the possession of those seeking to carry out that activity.¹⁵⁷ Therefore he concluded that there is a prima facie requirement for an EIA, which is ancillary to the precautionary principle.¹⁵⁸ Judge Weeramantry stated that the 1992 Helsinki Convention and the 1992 TEU accepted the precautionary principle, also Principle 1 of the 1987 UNEP Guidelines and Rio Declaration, which suggests a conclusion that precautionary principle is already a part of customary law, because it is declared in several treaties. As a result, if precautionary principle is a principle of customary law, EIA should be a part of customary law as well. And if it is so, states are bound to implement EIA in projects, such as Nord Stream even though they would not be parties to the Espoo Convention.

5.8 Failing to act with the Due Diligence

It is important to conduct EIA not only because of sustainable development or saving nature. When the issue comes to state responsibility, a state which wants to avoid responsibility, for example, of transboundary pollution, should prove that it acted with due diligence.¹⁵⁹ It is impossible to prove that particular act is in accordance with due diligence, if the state has not conducted a TEIA, has not analyzed dangers for the nature or discovered possible impacts, and did nothing in order to avoid them.¹⁶⁰ There are three key instruments,

¹⁵⁵ Dissenting opinion of Judge Weeramantry

¹⁵⁶ McIntyre (1997) p.239

¹⁵⁷ Ibid. p.233

¹⁵⁸ Ibid.

¹⁵⁹ In Knox p.296 citation of Phoebe Okowa

¹⁶⁰ Bastmeijer (2008) p.7

which influence content of the due diligence: the precautionary principle, duty to carry out an EIA and a concept of “sustainable development”.¹⁶¹

The concept of “sustainable development” is stated in the Rio Declaration Principle 4:

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.¹⁶²

The EIA Course Module states that: “EIA cannot be regarded as a means of introducing an environmental “veto” power into administrative decision-making processes. Decisions that are unsatisfactory from an environmental point of view can still be made, but with full knowledge of the environmental consequences”.¹⁶³ In other words, the EIA procedure cannot be an instrument which might stop a proposed project even though some negative impacts are expected. The important issue here is that failure to act in accordance with an EIA procedure might lead to the difficulties for a state to prove that it has acted with due diligence, because as it was mentioned previously, carrying out an EIA is one of the conditions for state to show acting with due diligence. According to the professors, Birnie and Boyle, due diligence is the first rule of transboundary environmental risk management and co-operation is the second.¹⁶⁴

Important issue in public international law is that, when the activity causing environmental damage is conducted by private party, the issue remains as state responsibility for prevention, co-operation and notification, which can not be avoided.¹⁶⁵

First of all, as mentioned earlier in order to establish state responsibility, there is a need to attribute private companies (Nord Stream AG) activity to the State(s), because State(s) are bound to prevent environmental harm from its private sector, here comes the concept of due diligence (standard of care), because States holds duty of control. There are no clear rules,

¹⁶¹ Rosenblom (2010) p.53 and Okowa

¹⁶² Rio Declaration

¹⁶³ EIA Course Module: http://eia.unu.edu/course/?page_id=93 [Visited 20 April 2011].

¹⁶⁴ Birnie (2009) p.175

¹⁶⁵ Ibid. p.214

how to define due diligence, it depends on a case-by-case base.¹⁶⁶ Art. 3 of the 2001 Draft Articles on Prevention of Transboundary Harm from Hazardous activities states:

The State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof. The International Law Commission (ILC) at its 53 session submitted a Report with commentaries on previously mentioned “Draft article on Prevention of Transboundary Harm from Hazardous activities”.¹⁶⁷

And the commentary says:

Thus, States are under an obligation to take unilateral measures to prevent significant transboundary harm or at any event to minimize the risk thereof arising out of activities within the scope of article 1. Such measures include, first, formulating policies designed to prevent significant transboundary harm or to minimize the risk thereof and, secondly, implementing those policies. Such policies are expressed in legislation and administrative regulations and implemented through various enforcement mechanisms.¹⁶⁸

First and foremost for the application of the due diligence is responsible state government, because it exercises management and control of activities carried out in its state territory: “In other words, the obligation of due diligence sets forth the threshold for States’ lawful activities. When an activity bears a significant risk of transboundary damage the government must take all necessary measures to prevent such damage.”¹⁶⁹

Due diligence means obligation of conduct, but not of a result.¹⁷⁰ That is why, when it is possible that transboundary harm will result from industrial or technical activities, the magnitude of the effect should be measured by procedural rules.¹⁷¹ And these procedural rules are implemented by carrying out EIA: “The acting State is required to make an environmental

¹⁶⁶ Ibid.

¹⁶⁷ Draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries

¹⁶⁸ Ibid.

¹⁶⁹ Xue Hanqin (2003) p.163

¹⁷⁰ Ibid.

¹⁷¹ Ibid. p.165

impact assessment in order to prevent, reduce, and control significant adverse transboundary effects.”¹⁷²

If it is an international project and there is a treaty obligation to carry out an EIA, then it is clear, if not, parties to the project might face problems. In the absence of binding international treaty obligation, customary law rules might come to help. But according to some researchers opinion, if there are no treaty regulations to carry out EIA, it is questionable, whether it can be claimed on the basis of customary rules: “If an environmental impact assessment is not required at a national level, it will be difficult to argue that the obligation of due diligence, or any other rule of customary international law, demands that the source State fulfill such a duty.”¹⁷³ As thesis presented, there is opposite opinion from ICJ Judge Weeramantry.

Principle not to cause transboundary damage is established in many international documents. For the first time it was declared in the Stockholm Declaration Principle 21:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.¹⁷⁴

Latter, this rule was repeated in Principle 2 of the 1992 Rio Declaration and was again confirmed at the 2002 World Summit on Sustainable Development.¹⁷⁵ But neither Stockholm nor Rio Declarations are binding.

Generally, states are not hold responsible for harm, if it has taken necessary and practicable measures, i.e., exercised due diligence.¹⁷⁶ As a result, if the state is found to comply with the

¹⁷² Ibid.

¹⁷³ Ibid. p.167

¹⁷⁴ Stockholm Declaration

¹⁷⁵ Knox (2002) p.311

obligations (in our case Espoo, Aarhus, Helsinki Conventions, EU Directives and customary rules), the state will not be held responsible for the damage, no matter how serious it would be.¹⁷⁷ But there is different opinion as well, as stated earlier, that in “environmental” responsibility, states will be held responsible, even though they would act with due diligence. As due diligence is decided on a case-by-case, it is difficult to give a direct answer, how the Court would interpret it in the Nord Stream case. First of all, the Court would need to check, if the States acted with due diligence: have done everything they could from what is expected under state’s control over all activities, taking place on its territory, and obligation in question (to carry out an EIA). In the Nord Stream case, complying with binding Espoo, Aarhus, Helsinki Conventions and EU Directives; properly conducting an EIA and public participation (analyzed procedural requirements, which are necessary measures to prevent transboundary damage). This thesis assessment suggests a conclusion that “Parties of Origin” have not acted with due diligence and that is why “environmental” responsibility should occur in the Nord Stream Project.

¹⁷⁶ Ibid.

¹⁷⁷ Rompanen (2010) p.65

6 Conclusions

As we can see there is no direct link between EIA as a procedural tool and the substance of decision-making, as it should be (Espoo Convention, Art. 2). Moreover EIA should be a tool how to find out the balance between business and environmental concerns. Decisions should be based on the EIA results; otherwise there is no point to carry it out and waste money and time. Somebody might argue that the point is to show acting with due diligence and calm down NGOs, worried public and other concerned stakeholders. But in this case, it is likely that the lack of due diligence (breach of the procedural obligations) would be found.

Moreover, the weak part of the EIA instrument is that it leaves discretion to the “State of Origin”, whether to cause a transboundary harm or not. So this instrument does not work as a full prevention of transboundary harm, which could stop harmful projects. It can help to reduce or monitor transboundary harm, by making modifications in the project, but not to prevent it at all, since it would mean complete refusal of a planned activity. Of course if the state still proceeds to implement a risky project, it will be held responsible for the damage. And this leads to the conclusion, that EIA instrument does not guarantee full implementation of acting with due diligence.

Nord Stream project raises some doubts, because HELCOM did not give any answer to the CCB critical statement, EU Commission did not take petitions into greater consideration. Just two EU Parliament Committees gave its suggestions and that was it. Nord Stream AG does not declare itself to have a “liability fund” and pay for the environmental losses, which might occur. Russia is not ratifying Espoo Convention, which leads to great doubts of the project’s transparency. Moreover in order to regulate this issue legal acts show its inadequacies and gaps, because EU Directive clearly gives duty to implement EIA for the project developer, while the Espoo Convention gives duty to the Party of a Convention, which

is apparently a state and not a private company. So this means that according to the EU Directive Nord Stream AG could have commissioned Espoo Report and according to the Espoo Convention, they could not.

Public participation and Aarhus Convention are analyzed as well, because it is directly concerned with EIA instrument. People who consider themselves harmed by the project should be informed about their rights to participate in a decision-making process and latter on to claim if their rights were breached.

To conclude, the main idea was to show that current environmental instruments and legislation are not strong enough to guarantee environment protection and rights of future generations, especially, where business and politics are involved. The future will show whether the Nord Stream Project was an ultra-hazardous activity, and if so, it will be too late to recover the Baltic Sea. But for now, economic benefits, in this case, outweigh environmental good and rights of future generations to a clean environment and access to the Baltic Sea. It would be ideal for a strong mechanism, controlling activities, to be created, which could prohibit excessively dangerous projects in global commons like the seas.

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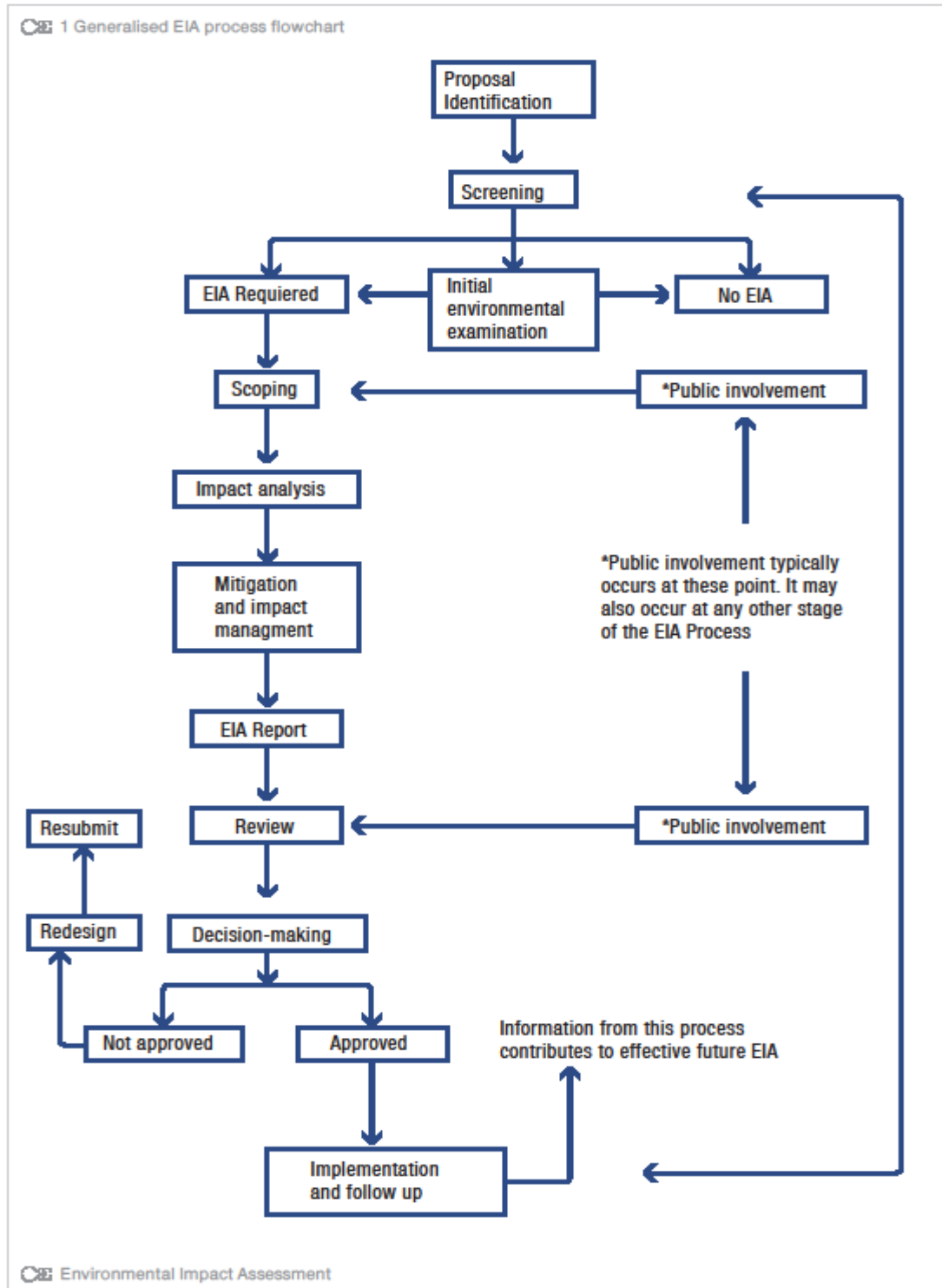
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ANNEX I

Source: http://eia.unu.edu/course/images/Generalised_EIA.pdf



ANNEX II

Source: http://www.nord-stream.com/fileadmin/Dokumente/eia_permitting/Chapter_10/Nord_Stream_Espoo_Report_English_Chapter_10.pdf

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Table 10.8 Natura 2000 sites closer than 20 kilometres to the pipeline

Name	Official number	Type of conservation areas (SPA, SAC, SCI)	Conservation objectives	Distance to pipelines
Territorial Waters				
Greifswalder Bodden and Parts of Stralsund and Nordspitze Usedom	DE 1747-301	SCI	<p><u>Habitats</u> Marine habitat types: Sandbanks (1110), Mudflats and sandflats (1140), Coastal lagoons (1150*), large shallow inlets and bays (1160), Reefs (1170).</p> <p><u>Habitats Directive Annex II.</u> Terrestrial habitat types (in the vicinity of the dry section): 1210, 1230, 1310, 1330, 2110, 2120, 2130*, 6230*</p> <p>Plus another 15 habitat types outside the potential impact area</p> <p><u>Species:</u> <i>Halichoerus grypus</i> <i>Phoca vitulina</i> <i>Lutra lutra</i> <i>Myotis myotis</i> <i>Myotis dasycneme</i> <i>Rhodeus amarus</i> <i>Petromyzon marinus</i> <i>Lampetra fluviatilis</i> <i>Aspius aspius</i> <i>Alosa fallax</i> <i>Lycaena dispar</i> <i>Leucorhina pectoralis</i> <i>Vertigo angustior</i> <i>Vertigo moulinsiana</i> <i>Liparis loeselii</i></p>	Crossed

Name	Official number	Type of conservation areas (SPA, SAC, SCI)	Conservation objectives	Distance to pipelines
Greifswalder Boddenrandschwelle and Parts of the Pomeranian Bight.	DE 1749-302	SCI	<p><u>Habitats</u> Marine habitat types: Sandbanks (1110), large shallow inlets and bays (1160), Reefs (1170)</p> <p><u>Species:</u> <i>Phocoena phocoena</i> <i>Halichoerus grypus</i> <i>Phoca vitulina</i> <i>Petromyzon marinus</i> <i>Lampetra fluviatilis</i> <i>Acipenser oxyrinchus</i> <i>Alosa fallax</i></p>	Crossed
Jasmund	DE 1447-302	SCI	<p><u>Habitats</u> Marine habitat types: Reefs (1170)</p> <p>Terrestrial habitat types: 16</p> <p><u>Species:</u> <i>Halichoerus grypus</i> <i>Lampetra planeri</i> <i>Triturus cristatus</i> <i>Bombina bombina</i> <i>Vertigo moulinsiana</i> <i>Cypripedium calceolus</i></p>	20.4 km
Granitz	DE 1647-303	SCI	<p><u>Habitats</u> Marine habitat types: Reefs (1170).</p> <p>Terrestrial habitat types: 9</p> <p><u>Species:</u></p>	10.5 km

Name	Official number	Type of conservation areas (SPA, SAC, SCI)	Conservation objectives	Distance to pipelines
			<i>Halichoerus grypus</i> <i>Triturus cristatus</i> <i>Vertigo angustior</i>	
Coastal Area Southeast Rügen	DE 1648-302	SCI	<u>Habitats</u> Marine habitat types: Sandbanks (1110), Mudflats and sandflats (1140), Coastal lagoons (1150*), large shallow inlets and bays (1160), Reefs (1170). Terrestrial habitat types: 14 <u>Species:</u> <i>Halichoerus grypus</i> <i>Lutra lutra</i> <i>Vertigo angustior</i>	1.8 km
Peeneunterlauf, Peenestrom, Achterwasser und Kleines Haff	DE 2049-302	SCI	<u>Habitats</u> Marine habitat types: Estuaries (1130) Terrestrial habitat types: 17 <u>Species:</u> <i>Castor fiber</i> <i>Lutra lutra</i> <i>Rhodeus amarus</i> <i>Petromyzon marinus</i> <i>Lampetra fluviatilis</i> <i>Lampetra planeri</i> <i>Aspius aspius</i> <i>Alosa fallax</i> <i>Misgurnus fossilis</i> <i>Cobitis taenia</i> <i>Salmo salar</i>	6.3 km

Name	Official number	Type of conservation areas (SPA, SAC, SCI)	Conservation objectives	Distance to pipelines
			<i>Lycaena dispar</i> <i>Carabus menetriesi</i> <i>Osmoderma eremita</i> <i>Vertigo moulinsiana</i> <i>Liparis loeselii</i>	
Greifswalder Oie	DE 1749-301	SCI	<u>Habitats</u> Marine habitat types: Reefs (1170). <u>Species:</u> <i>Halichoerus grypus</i> <i>Phoca vitulina</i>	9.5 km
Greifswalder Bodden	DE 1747-401/ DE 1747-402 (later expansion of site)	SPA	Breeding species 20 (Annex I) Waterfowl, raptors, waders, woodpeckers, songbirds Migrating species: 30+ (Annex I) 30+ (Art. 4.2) Ducks, geese, swans, waders, terns, gulls	Crossed
Western Pomeranian Bight	DE 1649-401	SPA	Migrating species: 5 (Annex I) 6 (Art. 4.2) seaducks, divers, grebes, auks, gulls	Crossed
EEZ				
Pomeranian Bight and Oderbank	DE 1652-301	SCI	<u>Habitats</u> Marine habitat types: Sandbanks (1110) <u>Species:</u> <i>Phocoena phocoena</i>	0.6 km

Name	Official number	Type of conservation areas (SPA, SAC, SCI)	Conservation objectives	Distance to pipelines
			<i>Alosa fallax</i>	
Adlergrund	DE 1251-301	SCI	<u>Habitats</u> Marine habitat types: Sandbanks (1110), Reefs (1170). <u>Species:</u> <i>Phocoena phocoena</i> <i>Halichoerus grypus</i>	7.2 km
Western Rönnebank	DE 1249-301	SCI	<u>Habitats</u> Marine habitat types: Reefs (1170). <u>Species:</u> <i>Phocoena phocoena</i>	15.9 km
Pomeranian Bight	DE 1552-401	SPA	Migrating species: 4 (Annex I) 15 (Art. 4.2) seaducks, divers, grebes, auks, gulls	Crossed

Table 10.9 Habitats Directive Areas in the German Section and their Conservation Criteria

Habitat	Habitats Directive Areas in the German Section									
	HD site "Adelgrund" (DE 1251-301)	HD site "Western Rönnebank" (DE 1249-301)	HD site "Pommernian Bight with Ockerbank" (DE 1652-301)	HD site "Jasrund" (DE 1447-302)	HD site "Gantitz" (DE 1647-303)	HD site "Grafsvalder Boddenlandschwelle and part of Pommernian Bight" (DE 1749-302)	HD site "Grafsvalder Bodden, part of Nordspitze Usedom" (DE 1747-301)	HD site "Köstenlandschaft Südostjüger" (DE 1648-302)	HD site "Grafsvalder Oie" (DE 1749-301)	HD site "Peenestrom, Achterwasser and Köhne Hart" (DE 2049-302)
Shore at distance to the pipeline route	7.2 km	15.9 km	0.6 km	20.4 km	10.5 km	Crossing	Crossing	1.8 km	9.5 km	6.3 km
Marine and Coastal Habitats from Appendix I of the Habitats Directive										
1110 Sandbanks which are slightly covered by sea water at the time	X		X				X	X		
1130 Estuaries										X
1140 Mudflats and sandflats not covered by seawater at low tide								X		
1150* Coastal lagoons										
1160 Large shallow inlets and bays						X		X		
1170 Reefs	X	X		X	X	X		X	X	
1210 Annual vegetation of drift lines					X			X	X	X
1220 Perennial vegetation of stony banks				X				X	X	
1230 Vegetated sea cliffs of the Atlantic and Baltic coasts				X	X			X	X	X
1310 <i>Salicornia</i> and other annuals colonizing mud and sand									X	
1330 Atlantic salt meadows									X	X
2110 Embryonic shifting dunes								X		

