

DA:448/2006

§416 SUBMARINE NATURAL GAS PIPELINE FROM RUSSIA TO GERMANY IN
THE FINNISH EXCLUSIVE ECONOMIC ZONE – ENVIRONMENTAL IMPACT
ASSESSMENT PROGRAMME

Environmental Protection Committee
11 December 2006

Introduction: Nord Stream AG's environmental impact assessment programme concerning a submarine natural gas pipeline from Russia to Germany has been submitted for the review of the Uusimaa Regional Environment Centre. The Uusimaa Regional Environment Centre is requesting the Town of Kaarina's statement on the Submarine natural gas pipeline from Russia to Germany in the Finnish exclusive economic zone – environmental impact assessment programme by 26 January 2007. The Uusimaa Regional Environment Centre will collect opinions, statements received from citizens, municipalities and authorities and compose its own statement on the basis of them by the end of February 2007.

Project background

There are plans to construct an approximately 1,200 kilometres long submarine natural gas pipeline in the Baltic Sea. Nord Stream AG, a joint Russian-German venture, is responsible for the project. The pipeline route would travel in the Finnish exclusive economic zone outside Finnish territorial waters for 369 km. The gas pipeline is planned to run across the Baltic Sea from Portovaya Bay near Vyborg to Greifswalder Bodden on the coast of Germany. The project is located in Russian and German territorial waters and the Finnish, Swedish and Danish exclusive economic zones. A gas pipeline service platform is planned to be located in the Swedish EEZ.

The gas transfer system consists of two parallel natural gas pipeline legs (diameter of 1,220 mm) located some 50 metres apart. The planned gas pipeline will be installed by laying the pipes on the seafloor. In some places, the pipeline will be covered or laid in a pipeline trench under the sea bottom. The capacity of the natural gas pipeline will be some 55 bcm per year.

The natural gas pipeline is planned to be taken into use in 2010 with one of the legs at first. Laying the second pipeline leg is planned to take place in 2012. The estimated operational life of the gas pipeline is 50 years.

Environmental impact assessment

Environmental impact assessment (EIA) is divided into two phases: assessment programme and assessment report. The assessment programme is a plan on how to assess the environmental impacts. The second phase will involve the creation of an environmental impact assessment report presenting the results of the assessment.

Nord Stream AG has initiated the project's EIA process in Finland on 14 November 2006 by submitting the environmental impact assessment programme concerning Finland to the Uusimaa Regional Environment Centre. The objective of the EIA is to ensure that the environmental impacts of the planned project are explored with sufficient accuracy prior to decisions and to enhance citizens' access to information and influence. According to preliminary schedule, the assessment report will be complete at the end of July 2007.

In accordance with the EIA Act, the entities, or impact groups, to be examined in the assessment:

1. Impacts on people's health, living conditions and wellbeing
2. Impacts on soil, water, air, climate, vegetation, flora and fauna and diversity of the nature
3. Impacts on community structure, buildings, landscape, urban landscape and cultural heritage
4. Impacts on the utilisation of natural resources
5. Impacts on the interdependencies of the above-mentioned factors

Gas pipeline project's implementation alternatives and impacts to survey

The alternatives to be reviewed in the EIA of the gas pipeline project are:

VE 0: not realising the project. No gas transfer system will be built between Russia and Germany.

VE 1: a natural gas transfer system consisting of two pipeline legs in accordance with the Nord Stream project plan from Vyborg across the Baltic Sea to Greifswald, Germany. Gas transfer capacity 55 billion cubic metres per year.

The gas pipeline project's assessment programme estimates the most significant impact to be caused by the pipeline's installation work, such as dredging, blasting or filling. Operational-phase impacts are estimated to be rather minor.

The key impacts reviewed in the Nord Stream gas pipeline project's environmental impact assessment are:

1. Impacts on seafloor and water quality
2. Impacts on natural conditions
3. Impacts on conservation areas
4. Impacts on shipping
5. Impacts on people's living conditions and safety
6. Impacts on cultural heritage
7. Impacts on tourism and recreational use
8. Impacts on the utilisation of natural resources

Supplementary material Summary of the Submarine natural gas pipeline from Russia to Germany in the Finnish exclusive economic zone – environmental impact assessment programme

Prepared by: acting environmental engineer Toni Mattila Tel. 588 4821

Proposal: Environmental Manager Jouni Saario

The Environmental Protection Committee proposes the following statement to the Town Board: According to the Committee, the environmental impact assessment programme is mainly appropriate and takes into account the key issues required from an environmental impact assessment programme in accordance with the EIA Act and Decree.

The schedule of the assessment report is tight: the Environment Centre will issue its statement on the assessment programme by the end of February, and according to the plan, the assessment report will be complete at the end of July. The tight schedule must not deteriorate the quality of work.

The assessment programme presents only two surveyed alternatives, of which VE 0, not implementing the project, is extremely difficult to assess and thus it is difficult to compare the

impacts of these two alternatives with one another. As the impact assessment involves a massive amount of work, comparing only two alternatives may be justified.

As there are things that are difficult to foresee with regard to the construction, operation and decommissioning phase and various implementation alternatives, it is necessary to ensure that all reports are composed with expertise and in sufficient scope and, if necessary, for instance when construction progresses, additional exploration is performed as necessary.

The major impacts are likely to be involved with the pipeline construction phase. Therefore, the EIA should pay special attention to the possible release of toxins and nutrients from the sea bottom as well as risks caused by ammunition and chemical weapons dumped in the sea.

The Baltic Sea is a fragile ecosystem due to its young age, small number of species, low turnover of water and small water volume. The flora and fauna present in the Baltic Sea comprise of sweet or saline water species which have adapted to brackish water. However, the organisms are stressed in brackish water, and many species live near their tolerance of salinity. Due to the low number of species in the Baltic Sea, some species are "key species", which are significant to the ecosystem as a whole. The Baltic Sea's key species, bladder wrack and common mussel, require special attention in the EIA.

Other issues to be taken into account in the EIA:

- impacts on migratory birds, especially in connection with possible accidents
- impacts on marine mammal species (porpoise, Baltic ringed seal and grey seal)
- discharge of pressure test water into the sea, especially if biocides are used in it
- possible premature end to the need for the pipeline. If the required amount of gas cannot be obtained from Russia or other energy sources become more tempting, the pipeline's operational life could be shorter than expected.

Decision § 93: The Committee approved the decision proposal.

Extract: Town Board

Town Board
19 December 2006

Presentation: Summary of the Submarine natural gas pipeline from Russia to Germany in the Finnish exclusive economic zone – environmental impact assessment programme enclosed.

Enclosure 367/2006.

Proposal: Acting Town Manager Päivi Mikkola:

According to the Town Board, the environmental impact assessment programme is appropriate and it takes into account the key issues required of an environmental impact assessment programme in accordance with the EIA Act and Decree.

Decision § 416: The proposal was approved.

Extract: Uusimaa Regional Environment Centre

Extract from the minutes attested by:

Kaarina, 27 December 2006 [Signature]

Archive Secretary Markku Lehtimäki

Town of Kaarina
Administrative Services
Town Office
Markku Lehtimäki / ML

Covering letter

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22 December 2006

Uusimaa Regional Environment Centre
Senior Inspector Jorma Jantunen
P.O. Box 36
00521 HELSINKI

Your statement request 17 November 2006, Reg.No. UUS-2006-R-32-53

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FINNISH EXCLUSIVE ECONOMIC ZONE - ENVIRONMENTAL IMPACT
ASSESSMENT PROGRAMME**

The Kaarina Town Board has processed the above-mentioned matter in its meeting on 19 December 2006, agenda item § 416, and decided to issue what is presented in the extract from the minutes as its statement.

Kaarina, 27 December 2006

[Signature]

Markku Lehtimäki
Archive Secretary

