

**The Swedish Environmental Protection
Agency**
106 48 STOCKHOLM

Date: 2017-05-11
Our reference: 2013/862/10.1
Your reference: NV-03441-13 Nord
Stream 2

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Statement regarding public consultation on transboundary environmental impact from the gas pipeline project Nord Stream 2 AG under the Espoo Convention

SMHI has reviewed the consultation documents and has the following viewpoints.

Oceanographic assessment

The application concerns the installation of a new pipeline for natural gas along the Baltic Sea floor, mainly running parallel with the existing Nord Stream pipeline (NS1). As the new pipeline Nord Stream 2 (NS2) is to follow the same route as NS1 in the Bornholm basin it runs the same risk of affecting the hydrographic conditions regarding seafloor currents as NS1.

A hydrographic study was carried out for NS1. The results from the study indicated that the effect on the natural environment, currents, and eutrophication of the existing pipeline are considered to be negligible. The combined effect of two parallel pipelines may however be greater, but if the new pipeline is in the same location and has the same profile above the seafloor as NS1, a complementary study of the effect of NS2 on seafloor currents in the Bornholm basin is not considered necessary.

SMHI would appreciate if data from other upcoming studies before installation and during operation of NS2 is made available in the same way as was done for NS1

Climate assessment

SMHI considers that a long-term investment in fossil free energy use in Europe is preferable to further investment in natural gas.

SMHI – Swedish Meteorological and Hydrological Institute

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This opinion has been translated on behalf of
the Swedish Environmental Protection Agency

Identical public comment responses have been submitted to the Ministry of Enterprise and Innovation (Ref: N2016/05812/FÖF). n.registrator@regeringskansliet.se (SMHI ref: 2016/2024/10.1).

Decisions in this case have been carried out by Department Head Bodil Aarhus Andrae and administered by Jörgen Öberg and Bernth Samuelsson.

Bodil Aarhus Andrae
Director Core Services

Naturvårdsverket
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Stockholm

Statement

Date 12 June 2017
Jnr 1.1.4-01652-2017

Your date: 2017-06-05
your Jnr: NV-03441-13

Department: The Department for
Cultural Environment
Unit: Unit for cultural
environmental
integration

Consultation on transboundary environmental impact from the Nord
Stream 2 gas pipeline project under the Espoo Convention

Facts of the case

As per the Espoo Convention, the Swedish National Heritage Board has been invited to submit its viewpoints regarding the company environmental impact assessment Nord Stream 2 AG for the Nord Stream gas pipeline project. The consultation concerns whether the planned measures within the exclusive economic zones and territorial waters of Russia, Finland, Denmark, and Germany may impact the natural environment in Swedish territory or its exclusive economic zone.

Viewpoints

The Swedish National Heritage Board considers the environmental impact assessment to provide satisfactory grounds for a decision to be made and notes that it contains an analysis of the planned project's effect on seafloor cultural environments. The planned construction in other countries' territorial waters or exclusive economic zone in the form of paving, trenching, pipe-laying, and dredging is not expected to have an adverse impact on cultural environments on the seafloor in Swedish territorial waters or its exclusive economic zone.

This decision has been made by unit head Mikael Jakobsson after consulting with antiquarian Alexander Gill.

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Mikael Jakobsson


Alexander Gill

Statement

Boverket

Date Journal number
2017-05-22 2021/2017

National Board for Housing, Building and Planning

Your journal number
NV-03441-13

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Consultation on transboundary environmental impact from the planned gas pipeline project of Nord Stream 2 AG under the Espoo Convention.

The Swedish National Board of Housing, Building and Planning (Boverket) states that the Nord Stream 2 infrastructure project may contravene the current EU infrastructure program for European natural gas supply. Moreover, the project involves exploitation of the Baltic Sea bringing negative environmental and other consequences and should therefore not be implemented.

The Boverket has detailed the background of this assessment in their public comment to the consultation submitted to the Swedish Ministry of Enterprise and Innovation in the examination of the Nord Stream 2 AG's under the Swedish Continental Shelf Act. The Boverket statement to the Ministry of Enterprise is attached.

Division head Anette Löfgren has decided this matter. Bengt Larsön examined the matter and was presenter.

Appendix: Statement of the Swedish National Board of Housing, Building and Planning to the Swedish Ministry of Enterprise and Innovation Jno. 989/2012017, dated 16 May 2017: Public statement regarding application for permit under section 15 a of the Swedish Continental Shelf Act (1966:314) for laying a pipeline system beyond territorial borders Nord Stream 2

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Boverket

Agency for Housing, Building and Planning

Statement

Date

2017-05-16

Journal number

3.1.2

1989/2017

Your journal number

N2016/05812/FÖF

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Public statement regarding application for permit under section 15a of the Swedish Continental Shelf Act (1966:314) for laying a pipeline system on the continental shelf beyond territorial borders Nord Stream 2

Summary

The Swedish National Board of Housing, Building and Planning (Boverket) finds that the Nord Stream 2 application does not comply with the objectives and policies adopted by the EU for development of infrastructure for the supply of natural gas. To the contrary, the proposed pipeline system may contravene the EU objectives of diversification and creating greater flexibility in natural gas supply.

This doubling of capacity for transmission of natural gas through pipeline systems in the Baltic Sea will cause additional exploitation of a significant portion of the seafloor. Moreover, this application will cause the pipe system to be drawn through a proposed Natura 2000 area, that the laying of pipeline creates certain environmental problems during the installation period, leads to negative consequences for other piping systems and for any bottom trawling and may impact the ability of marine traffic to anchor.

The Boverket concludes that Nord Stream 2 is at risk of contravening planned development of the European natural gas supply and involves exploitation of the Baltic Sea bringing negative environmental and other consequences, and should therefore not be implemented.

Introduction

In this statement, the Boverket references the objectives and policies for natural gas supply and infrastructure expansion regarding EU Member States to highlight whether the natural gas pipeline covered in this application matches the anticipated development of the Baltic Sea region. This does not involve legal assessment of the appropriateness of any conditions nor of the possibilities Sweden has available to reject the application for the new pipeline system for environmental or security reasons.

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Applicable facts

Background

The Boverket finds that a natural gas pipeline is currently in production with two parallel pipelines (Nord Stream) that pass through the Swedish exclusive economic zone in the Baltic. These pipelines transmit natural gas from Russia to Germany. The current application (Nord Stream 2) relates to similar natural gas pipelines that double the transmission capacity. Nord Stream 2 is planned to have a course through the Swedish exclusive economic zone for approximately 510 km.

No national interest for natural gas pipeline

The Boverket notes that the Swedish Energy Agency has identified no national interest within the impacted portion of the Baltic Sea for natural gas pipelines as provided in Chap 3 § 8 of the Swedish Environmental Code. The national and other interests impacted by this project are reviewed by the Swedish Agency for Marine and Water Management in their ongoing maritime spatial planning activities.

Environmental impact and consequences

The environmental statement submitted with the application states that negative environmental impact arises primarily during the installation phase. This includes noise pollution for porpoises and seals, and impact on fish populations due to spreading sediment and sedimentation. The pipelines are planned to pass through a proposed Natura 2000 area that is designed to protect porpoises. The bottom trawling for commercial fishing is impacted during operation. The pipelines will cross telecommunications cables, power cables and the existing natural gas pipelines (Nord Stream). The assessment is that installation and operation of the proposed pipelines (Nord Stream 2) will cause no or only negligible impact on existing installations in the Swedish exclusive economic zone.

Objectives and policies for natural gas and related infrastructure

EU and the Baltic Sea Strategy

The publication *EU energy in figures – statistical pocketbook 2016* presents data that EU member states have increased their import dependency in regard to energy by 10 per cent from 1995 to 2014. In 2014, the imported share of consumed energy was approximately 53 per cent. Import dependency for natural gas showed the greatest increase by far among the various types of energy. Import dependence on natural gas increased by 24 per cent from 1995 to 2014.

Imports from other countries show that those from Russia have increased most, to represent 37 per cent of all EU Member States energy imports. However, the statistics show that the significance of Russia as source of the imports has declined somewhat since 1995.

The EU launched the energy security strategy in 2014 in response to the uncertainty related to the delivery of Russian gas through Ukraine. The strategy addresses greater energy efficiency as well as energy production within the EU and additions to infrastructure to enable redirecting energy to where it is needed during times of crisis. The document, *Communication from the Commission to the European Parliament and the Council European strategy for energy security, Brussels 28.5.2014, COM (2014) 330 final*, states the following:

“Energy security of supply concerns every Member State, even if some are more vulnerable than others. In particular, this is valid for less integrated and connected regions such as the Baltic and Eastern Europe. This means most pressing energy security of supply issue is the strong dependence from a single external supplier. This is particularly true for gas, but also applies to electricity. Six Member States depend from Russia as single external supplier for their entire gas imports and three of them use natural gas for more than a quarter of their total energy needs. In 2013 energy supplies from Russia accounted for 39% of EU natural gas imports or 27% of EU gas consumption; Russia exported 71 % of its gas to Europe with the largest volumes to Germany and Italy.” ”

Special EU initiatives have also been taken to reinforce security of energy supply around the Baltic Sea. This initiative is designated BEMIP (Baltic Energy Market and Interconnections Plan). BEMIP has now been incorporated into the EU strategy for countries on the Baltic. Several projects are planned to link together infrastructure for natural gas between EU Member States around the Baltic Sea. This includes a natural gas pipeline between Finland and Estonia, a natural gas pipeline between Poland and Lithuania, a facility for liquid natural gas in Estonia and Latvia, and natural gas storage in Latvia.

The EU Commission also launched an energy union in 2015 for the purpose of pressing high energy prices, securing energy supply and reducing climate impact. The objective is to inaugurate this union no later than 2018. The EU Commission also presented a regulation proposal on 16 February 2016 regarding measures for a secure natural gas supply to replace the current regulation ((EU) 994/2010 (Gas Security of Supply).

The EU Commission presented its *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committed of the Regions on an EU Strategy for liquefied natural gas and gas storage 16.2.2016 COM (2016) 49 final*. The European Parliament adopted their initiative report for this strategy (2016/2059(INI) - 25/10/2016). The communication identified continued diversification of EU natural gas supply as a key objective. The communication states the following: *“The present strategy aims to exploit the potential of liquefied natural gas (LNG) and gas storage to make the EU gas system more diverse and flexible, thus contributing to the key Energy Union objective of a secure, resilient and competitive gas supply.”*

The communication is intended to promote natural gas markets within the EU and infrastructure for storage of LNG (liquid natural gas). As well, the document identifies opportunities for its greater use in the transport sector to gain positive environmental effects.

Sweden

Swedish energy policy includes addressing reduced emissions of GHGs, increasing both energy efficiency and the proportion of renewables. The government bill 2008/09:163 states (page 30) regarding natural gas: *“Natural gas, which is a fossil fuel and a limited resource, may have importance during a transitional period, primarily in industrial facilities and for high efficiency district heating.”* and *“The development within infrastructure can be carried out in a way that supports the gradual introduction of biogas. However, Sweden has no current plans for expansion of natural gas supply to household and business.”*

Marine spatial planning and infrastructure for natural gas

The Boverket can state that every EU Member State is working to prepare marine spatial planning or they have adopted such plans. Natural gas pipelines, existing or planned, in the Baltic Sea have not, to the knowledge of the Boverket, been brought to a common discussion or position between the affected countries.

Assessment of Nord Stream 2 based on overall policy.

The Boverket can state that the supply of natural gas to Sweden is minimally impacted by Nord Stream 2. However, the Baltic states and the continent will remain dependent on natural gas as a source of energy, of which a large portion will be imported. The EU has found it desirable that this natural gas supply and related infrastructure be diverse and flexible for the purpose of increasing energy security and supply. Nord Stream 2 contributes to increasing the dependence on Russia – already the largest natural gas supplier to the EU – for these supplies. Moreover, Russia is still the only supplier of natural gas to several Member States. The EU and certain Member States have active programs to obtain renewable energy sources and to expand related infrastructure in order to reduce vulnerability and dependence on any single natural gas supplier.

The infrastructure that Nord Stream 2 has applied for a permit for does not match the infrastructure sought by the EU and its Member States. Supplies of alternative energy sources are currently available or being established to address the needs for natural gas in EU Member States including developing capacity to receive and handle LNG and the system of natural gas pipelines present between Member States. It is conceivable that this large piping system for natural gas transmission will contravene the EU’s intention to create a more diversified and flexible natural gas supply.

Two natural gas pipelines are already online (Nord Stream) across the floor of the Baltic Sea. Two additional pipelines (Nord Stream 2) would exploit additional significant portions of the Baltic seafloor and pass through the proposed Natura 2000 area, create specific environmental problems during installation, create negative consequences for other cable and pipelines already in place, and for bottom trawling, as well as the ability of marine traffic to anchor.

The Boverket concludes that it is not desirable to implement such a large-scale exploitation project, as it is not supported by EU objectives for a desirable development of natural gas infrastructure. Sweden contributed to enabling installation of Nord Stream, however, further expansion of the same type of infrastructure may risk increasing EU vulnerability (by increasing dependence on a single supplier) in regard to natural gas supply.

This opinion has been translated on behalf of the Swedish Environmental Protection Agency

Director General Susann Bard has issued this decision. Bengt Larsön examined the matter and was presenter. Department head Göran Persson, Senior Legal Advisor Yvonne Svensson and acting unit manager Carl Magnus Oredsson also participated.

Susann Bard
Acting Director General

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This opinion has been translated on behalf of the
Swedish Environmental Protection Agency



KUSTBEVAKNINGEN

Swedish Ministry of Enterprise and Innovation
Department for Enterprise and Industry
Division for Business
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Organisational unit Case manager
Legal Unit Sara Thörngren

Date Diary no
01/06/2017 2017-958

Information security classification
Open

Your date Your reference
07 April 2017 N2016/05812/FÖF

Public comment for consultation regarding application for permit under section 15 a of the Swedish Continental Shelf Act (1966:314) for laying a pipeline system beyond territorial borders.

The Swedish Coast Guard submits this public comment with their viewpoints regarding the agency's assignment under the Ordinance with Directions for the Swedish Coast Guard (SFS 2005:742) to engage in maritime surveillance and maritime environmental assistance services. Maritime surveillance includes certain monitoring tasks as provided in the Swedish Continental Shelf Act (1966:314).

The installation and operational phases will be monitored within the scope of the ordinary monitoring operations of the Coast Guard and further demand special activities primarily to the extent necessary due to special requirements or conditions issued by the Swedish government.

The Coast Guard has no objection to the conditions and precautionary measures, and the limitations as proposed by Nord Stream 2 AG. However, the Coast guard requests the following amendment and additions.

The Coast Guard requests information regarding work activities not less than one calendar month in advance of initiating installation activities, and of planned maintenance activities, and similar during the operational phase, and thereafter to be kept informed regarding the progress of such activities and when they are completed.

The Coast Guard notes that the company has additionally stated that they shall prepare an emergency preparation plan for oil spillage, describe preparations for emergency situations during the installation phase (accidents and unplanned events) to prevent or alleviate potential impact, a crisis preparation plan for the operational phase and described contacts with appropriate authorities in regard hereto. The Coast Guard sees these measures in a positive light, but emphasize the importance of these emergency preparation plans also including management of chemical weapons. The Coast Guard would prefer to have the Nord Stream 2 AG emergency preparation plan coordinated with that of Nord Stream AG to facilitate for and shorten alarm pathways in case of an emergency.

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This opinion has been translated on behalf of the Swedish Environmental Protection Agency

The Coast Guard otherwise has no objection to the Nord Stream 2 AG application, and we make the assessment that the activities will not have any significant impact on the agency's maritime surveillance and maritime assistance services.

Decision regarding this consultation statement was made by Director General Lena Jönsson. Case manager Anders Litzén participated and Head of the legal unit Sara Thörngren presented.

Lena Jönsson

Sara Thörngren

External digital copy to:

Department of Justice, Division for Emergency Preparedness
Department of Justice, Division for Legislation on Public Order and Safety and Crisis
Preparedness (L4)

Internal digital copy to:

Senior management members
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TULL KUST
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This opinion has been translated on behalf of the
Swedish Environmental Protection Agency



KUSTBEVAKNINGEN

The Swedish Environmental Protection Agency

Organisational unit Case manager
Legal Unit Sara Thörngren

Date Diary no
05 June 2017 2017-992

Information security classification
Open

Your date Your reference
07 April 2017 NV-03441-13

Public comment in consultation on transboundary environmental impact from the Nord Stream 2 gas pipeline project under the Espoo Convention

On 1 June 2017, the Swedish Coast Guard submitted their response to the consultation request from the Swedish Ministry of Enterprise and Innovation regarding the Nord Stream 2 AG application for permit under section 15 a of the Swedish Continental Shelf Act (1966:314) for laying a pipeline system beyond territorial borders. (Attached).

The Swedish Coast Guard submitted in this public comment that the agency assessment is that the activities will not have any significant impact on the agency's maritime surveillance and maritime assistance services. The Swedish Coast Guard has no other assessment regarding the transboundary environmental impact and has no other view regarding this consultation.

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This opinion has been translated on behalf of the Swedish Environmental Protection Agency

Date
29 June 2017

Designation
101 -15846 -



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Consultation on transboundary environmental impact from the gas pipeline project Nord Stream 2 under the Espoo Convention

Your dnr NV-03441-13

Statement

Facts of the case

Within the scope of consultation under the Esboo Convention, the Swedish Environmental Protection Agency has referred the environmental impact assessment for the Nord Stream 2 gas pipeline project to the County Administrative Board. The project involves laying pipeline on the Baltic Sea floor from Russia to Germany. The consultation concerns whether the planned measures within the exclusive economic zones and territorial waters of Russia, Finland, Denmark, and Germany may impact the natural environment in Swedish territory or its exclusive economic zone.

Viewpoints of the County Administrative Board

The County Administrative Board notes that three alternative routes for the two Nord Stream 2 pipelines that runs through Swedish waters have been evaluated. For two alternatives, the environmental impact has been deemed greater as they, among other things, were drawn closer to Natura 2000 areas and/or passed through dumping sites for chemical weapons and required more work preparing the seafloor for the pipelines. The alternative that was selected runs parallel with the existing Nord Stream pipelines. This route lies more than ten kilometres from the Natura 2000 area and the island of Bornholm. It also minimises the limitations for other uses of marine areas. The County Administrative Board considers the assessment to have shown sufficiently that this alternative results in achieving the objective for least intrusion and inconvenience to human health and the environment.

In the consultation process, the County Administrative Board has previously noted the importance of ensuring that the Bornholm Deep, which is the only remaining area of the Baltic Sea still functioning as spawning ground for cod, is not negatively affected by the planned pipelines. The County Administrative Board also considers that even a slight impact on the already strained cod population may have serious consequences for the Baltic Sea's ecosystem. The County Administrative Board assumes that measures will be taken to, limit negative impact on the spawning grounds – to the extent possible. Otherwise the County Administrative Board does not see the pipelines carrying with them any risk of affecting the natural environment of Stockholm county.

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This opinion has been translated on behalf of the Swedish Environmental Protection Agency

Date
29 June 2017

Designation
101 -15846 -

As regards the pipeline's impact on marine spatial planning and obligations under the Marine Strategy Framework Directive, the County Administrative Board considers the Swedish Agency for Marine and Water Management best suited to evaluate this aspect of the project as the pipeline is routed far from any coastlines.

According to the report, extensive controls will be carried out concerning environmental impact during the installation and operating phases. The County Administrative Board considers that results from the controls of installation and operation of the existing Nord Stream will make up an important base for the creation of a comprehensive monitoring program for Nord Stream 2. Furthermore, it is positive that the results from the control will be made available to the public.

Recipients of this decision

Decisions regarding this statement were made by Head of the Environmental Department Göran Åström with Environmental Administrator Anette Broman as rapporteur. The final consultation also included Legal Secretary Åke Drevenius.



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Consultation on transboundary environmental impact from the gas pipeline project Nord Stream 2 under the Espoo Convention, Swedish Environmental Protection Agency

Description of the case, NV-03441-13

The Swedish Environmental Protection Agency invites the submission of public comments regarding the company Nord Stream 2 AG's environmental impact assessment for the Nord Stream 2 gas pipeline project.

The gas pipelines will be laid along the Baltic Sea floor, running from Russia to Germany. This consultation concerns whether the planned measures within the exclusive economic zones and territorial waters of Russia, Finland, Denmark, and Germany may impact the natural environment in Swedish territory or its exclusive economic zone.

The municipality has been asked by the Swedish Environmental Protection Agency to submit viewpoints regarding the company's application no later than June 5th 2017.

The Department's viewpoints

The department of environment and building submits the following proposed statement.

Mörbylånga municipality's (herein 'the municipality') statement

The environmental impact assessment

In the environmental impact assessment the company describes the consequences of the assessed parameters, as they pertain to Sweden, as small, insignificant, or negligible during regular operations.

Risks

The company further describes various risk scenarios that may lead to additional consequences. The company has however described action plans for crisis management and undertaken to comply with several international safety standards for this project. This also includes preventative and rectifying measures. The municipality considers the company to have described this in a satisfactory manner. These undertakings are thereby

regulated by the general conditions, hence the municipality will not propose conditions in this regard.

The municipality considers that the reporting requirement to Swedish authorities regarding consequences from incidents and accidents, as well as the rectifying measures the company takes in both short and long-term perspective, should be regulated.

Self-monitoring

The company has described how self-monitoring is to be carried out. The municipality considers that the company should describe intervals at which the self-monitoring shall be reported to Swedish authorities. This issue can also be resolved by issuing conditions for regulation.

Staffan Åsén
Department Head

Regional Board

The Swedish Environmental Protection Agency
106 48 Stockholm

Consultation on transboundary environmental impact from the Nord Stream 2 gas pipeline project under the Espoo Convention

Case no: NV-03441-13

Region Gotland has been provided the opportunity to submit a statement as part of the consultation process regarding the Nord Stream 2 AG environmental impact assessment concerning installation of a second 1,200-kilometre-long, double gas pipeline along the Baltic Sea floor from the Gulf of Finland to the coast of Germany.

The installation as such will not pass inside Swedish territorial waters and therefore also not inside the municipal/county border of Gotland or the municipal marine spatial planning area. Nor does the company's environmental impact assessment list any of the protected areas in Gotland waters, such as Gotska Sandön–Salvorev or Hoburgs bank, as being affected or negligibly affected.

Considering the ambitious climate goals Region Gotland and Sweden have adopted alongside the global Paris agreement, Region Goltand wants to highlight that instead of fossil gases, we would prefer to see investment in more long-term sustainable energy sources. If we are to overcome the global challenge of climate change the goal must be to replace fossil fuels with long-term sustainable energy sources.

Region Gotland would also like to emphasize that the Baltic Sea is an inland sea with a particularly fragile ecosystem, where impact or risk of impact, presents a threat to the marine environment. There is therefore strong rationale to carry out continuous reviews in order to measure potential changes to the marine environment, during both the installation and operational phase, and thereby facilitate assessment of suitable measures aimed at minimising negative impact caused by pipeline operations.

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Regional Board
Region Gotland

Region Gotland would also prefer to see that Nord Stream 2 AG commit to take greater consideration of the environment by financing an international fund or equivalent that can be used to finance compensatory measures for the gas pipeline in the Baltic Sea.

Region Gotland

Björn Jansson
Regional Board Chair

Peter Lindvall
Regional General Director

STATENS MARITIMA MUSEER

Marinmuseum Sjöhistoriska museet Vasamuseet

National Maritime Museums

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REMISSVAR

Datum/Date 2017-05-11
Vår beteckning/our reg No.5.3.1- 2017 - 593
Vår ref/Our ref Mikael Fredholm
Ert datum/Your date 2017 - 04 - 07
Er beteckning/Your reg No. NV-03551-13
Er ref/Your ref Egon Enocksson

The Swedish Environmental Protection Agency
106 48 STOCKHOLM

Consultation on transboundary environmental impact from the gas pipeline project Nord Stream 2 under the Espoo Convention

Summary

The National Maritime Museums in Sweden (NMMS) have no viewpoints to bring regarding the environmental impact assessment (EIA) prepared by Nord Stream 2 AG (NSA), given that two indications of vessel or other cultural artefacts that have emerged are surveyed and assessed by marine archaeological personnel before being dismissed.

The case

NS2 has submitted an EIA for a gas pipeline project. The gas pipeline is planned to lie more or less parallel, mostly to the east of, the existing Nord Stream gas pipeline in the Baltic Sea. The Swedish Environmental Protection Agency has invited NMMS to submit its viewpoints on the EIA in writing.


Viewpoints

In addition to the information in the EIA, NMMS has, together with the Swedish National Heritage Board, participated in meetings with representatives from NS2. NS2 has explained that they intend to document all indications of possible vessel or cultural artefacts that may be affected by the installation activities. According to NMMS's assessment, the EIA and previous archaeological investigations have provided sufficient documentation in that regard. NMMS notes that no additional vessel or other cultural artefacts have emerged that may be affected by the installation work, but with the condition that the documentation for two remaining indications to be surveyed by marine archaeological personnel before they can be dismissed as potential vessels or other cultural artefacts.

Decision in this case were made by Superintendent Leif Grundberg. Custodian Mikael Fredholm acted as presenter. The final consultation also included unit head Fredrik Svanberg and acting department head Odd Johansen.



Leif Grundberg



Mikael Fredholm
custodian



Stockholms
universitet

2 June, 2017

Our Dnr: SU-484-6.3-0027-17

Stockholm University's Baltic Sea Centre's public comment to the Swedish Environmental Protection Agency's invitation to submit viewpoints regarding the company Nord Stream 2 AG's environmental impact assessment for the Nord Stream 2 gas pipeline project. (Case no. NV-03441-13 Nord Stream 2): "Consultation on transboundary environmental impact from the gas pipeline project Nord Stream 2 under the Espoo Convention"

Viewpoints

The consultation documentation is very thorough and technically complicated, and the viewpoints submitted here do not claim to be evaluated as the particularly most urgent assessment of potential environmental risks that may be made regarding the project. The changes to the number of mussel-eating sea ducks in the Baltic Sea is, however, one such drastic change to Baltic Sea fauna whereby operations that may affect these populations have an extremely high ecological concern.

A critical issue in relation to routing the pipeline is that installation will be conducted near the shallow areas of Hoburg's Bank and northern Midsjö, which are important wintering locations for Long-tailed ducks (*Clangula hyemalis*) and other bird species. The Swedish Agency for Marine and Water Management's report 2016:24 highlights that: "Hoburg's bank and the northern and southern Midsjö banks are globally vital wintering locations for the northern European and western Siberian Long-tailed duck populations". For reasons that are still unclear, the wintering population of Long-tailed ducks has decreased significantly in recent years.

Inventories show a decrease from approximately 4.3 million individuals in 1992-1993 to approximately 1.5 million in 2007-2008 and later inventories point to continued declines. In winter 2016, approximately 260,000 individuals were estimated to be staying in the three shallow areas mentioned above (HaV 2016).

During the winter season, these Long-tailed duck seat primarily large amounts of blue mussels but also other smaller demersal crustaceans and molluscs living on the seafloor down to a depth of 10-25 meters and sometimes deeper still. The birds are easily disturbed by shipping traffic and it is not clear from the documentation when the installation work will be carried out and if there will be an assessment of the risk of disturbing the Long-tailed ducks during their wintering. This period is a bottleneck for the birds' survival as temperatures and weather conditions can be harsh during winter in the Baltic Sea.

In the documentation (Espoo report p.383) the disturbance is deemed as negligible in relation to the nearby intensely trafficked shipping lane. It is not clear based on the documentation how this conclusion was reached, but a reference is made to surveillance during

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www.su.se/ostersjocentrum



the installation of NSP. The long-term presence of ships is likely a different type of disturbance than ships passing through the area. It would be desirable if the consequences to Long-tailed ducks, as well as other bird species, was studied closer and that installation activities are carried out during other seasons than the wintering period. If installation activities are unavoidable during the winter, avoiding oil spills from ships or equipment is crucial as the Long-tailed duck is especially sensitive to even small amounts of oil on the water's surface.

The reasons for the drastic decrease in bird population are not entirely clear. It is therefore important to examine and monitor whether the trenching process or other muddying operations, such as the relocation of the heavy anchors (Espoo report p.98), can cause increases in environmentally hazardous substances. The trenching process reaches all the way to the sediment level, which is likelier than current sediment to have higher levels of older hazardous substances such as PCB, DDT, dioxin, heavy metals, and similar (so called "legacy contaminants") as well as potential chemical weapons. Sediments contaminated with such material risks being re-suspended into the water and transported to the nearby area. The birds themselves are likely less sensitive to brief exposure as they breath air, but the mussels that are their main food source effectively absorb hazardous substances from filtered material. This risk should be assessed beforehand and monitored afterwards through testing for hazardous substances in mussels directly before and after the installation work when it takes place in shallow areas near the birds' wintering areas.

References

Larsson, K. (2016) Sjöfart och naturvärden vid utsjöbankar i centrala Östersjön - Havsplanering kan reducera konflikter, Havs- och vattenmyndigheten, Rapport 2016:24.

Espoo report, Nord Stream 2, April 2017; Ramböll

Tina Elfving

On behalf of Stockholm
University's Baltic Sea
Centre

Carl Rolff

Date	Dnr/Designation
2017-05-30	TSS 2017-929
Your date	Your designation
2017-04-07	NV-03441-13

Swedish Environmental

Protection Agency

registrator@naturvardsverket.se

Statement on referral regarding transboundary environmental impact from Nord Stream 2 under the Espoo Convention

Summary

The Swedish Environmental Protection Agency has, for their public comment given relevant entities the opportunity to provide a statement regarding the transboundary environmental impact assessment under the Espoo convention for the Nord Stream 2 gas pipeline project.

From the point of view of shipping traffic, the Swedish Transportation Agency has no considerations to present regarding the environmental impact assessment.

Viewpoints of the Swedish Transportation Agency

The Swedish Transportation Agency's statement concerns shipping traffic.

The Swedish Transportation Agency has no considerations to present in regard to the environmental impact assessment. We consider that the routing parallel with existing gas pipelines is the best alternative.

We support the risk assessments that have been made and the risk reducing measures for shipping traffic that have been presented.

Nord Stream 2 will be designed, constructed, and installed nearly identically to the existing Nord Stream gas pipelines. The Swedish Transportation Agency's experience of that project was very positive.

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This case was processed by chief of staff Jacob Gramenius. The final consultation included the director general of the Civil Aviation and Maritime Department Ingrid Cherfils, section head Andreas Holmgren, and maritime administrator Sebastian Irons, also acting as rapporteur.

Jacob Gramenius
chief of staff, GD-
staff

From: Anders Alm [mailto:Anders.Alm@wwf.se]

Sent: 01 June 2017 15:21

To: Registrator

Subject Reference number NV-03441-13

Priority: High

WWF would like to submit the following concerning consultation on the transboundary environmental impact of the gas pipeline project Nord Stream 2 under the Espoo Convention, and asks that Sweden forward the following viewpoints as to what should be included in the upcoming environmental impact statements to the concerned countries:

- The WWF considers the planned natural gas pipeline Nord Stream 2 from Russia to Germany as unfortunate in that it locks Europe into dependency on natural gas for the foreseeable future. This dependency on fossil fuels should be carefully considered in relation to its impact on reaching set climate goals.
- WWF considers the documentation to be faulty. The proposed route for Nord Stream 2 in Russia is a cause for significant concern as the decision seems to have been taken before the required documentation (in compliance with Russian law) was made available for public consultation, and for the Espoo convention. This includes a complete description of possible alternatives, the environments that may be impacted, the environmental impact each alternative proposal has, and the measures planned for minimising environmental impact.
- The proposed route in Russia will affect natural environments that require protection. And prior to any decision being made, all required information must be made available. The information presented so far is insufficient, does not meet national regulatory requirements, and does not contain adequate proposals for measures to reduce environmental impact.
- The proposed gas pipeline will, to a significant measure, be routed through the Swedish exclusive economic zone, including through the recently planned Natura 2000 area south of Gotland. The impact on the planned Natura 2000 area during construction and operation of the pipeline, and after it has been decommissioned should be included in the EIA for bordering countries.
- WWF considers that the planning of the gas pipeline from a marine spatial planning perspective should be reviewed in all countries' EIA. Routing the pipeline through Natura 2000 areas (as in Sweden) and through wildlife sanctuaries (as in Russia) must be critically assessed for both the construction phase and when the pipeline goes into operation.
- Economic guarantees for rehabilitation measures once the gas pipelines are decommissioned and that can guarantee the gas pipeline is removed or disassembled in the most environmentally friendly way possible should be a requirement.

Yours sincerely,

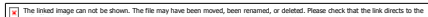
Peter Westman
Naturvårdschef

Anders Alm
Seniorrådgivare Östersjön

This opinion has been translated on behalf of the Swedish Environmental Protection Agency

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SWEDISH ENVIRONMENTAL PROTECTION AGENCY

STATEMENT

2017-06-21 Case No.:
NV-03441-1

The Swedish Environmental
Protection Agency

skickas till
registrator@naturvardsverket.se

Referral statement regarding the consultation on transboundary environmental impact from the gas pipeline project Nord Stream 2 AG under the Espoo Convention, NV- **03441-13 Nord Stream 2**

Background

Nord Stream 2 AG (the company) intends to install two pipelines for natural gas in the Baltic Sea (the operations). The pipeline runs from Viborg in Russia to Griefswald in Germany and passes through the exclusive economic zones of both Sweden and Finland and through Danish territory. The pipelines will be used for the transmission of natural gas. The Swedish Environmental Protection Agency has received opportunity to submit a statement regarding the applications with appendices.

The Swedish Environmental Protection Agency's position on the matter

In the immediate vicinity of, or near to the planned pipeline are several important bird habitats and areas of biological diversity (IBA areas). These areas are home to a large share of Europe's Long-tailed duck, Common eider, Velvet scoter, and Common scoter, species that have all significantly declined in numbers in recent years due to intense human use of the Baltic Sea. The situation is especially serious for birds that use the area as wintering grounds, such as the Long-tailed duck.

The Swedish Environmental Protection Agency determines that the sensitivity of the sea birds in the area is significant.

The Swedish Environmental Protection Agency's opinion is that special consideration and care should be taken in conjunction with work taking place on the seafloor during the installation of pipelines near the birds' wintering area. This also in light of the special responsibility Sweden bears towards the Long-tailed duck species as per the EU's Birds Directive

and the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (EAEWA).

Impact on birds

For seabirds, the Swedish Environmental Protection Agency determines that the main disruption is caused by the planned operations in the areas near where the pipeline reaches land in Germany and Russia, and in conjunction with work being carried out on the seafloor (trenching and paving), including in Sweden's exclusive economic zone, during installation of the pipeline. The effect is mostly due to clouding of the water column and noise and disruptive activities. For sea birds, which the Swedish Environmental Protection Agency is especially responsible for, this has a number of effects that can have a negative impact on the birds' ability to build up nutritional and energy reserves before their mating season.

Both in terms of time and space, the company's operations entail a number of activities that affect the birds' ability to dive for food, rest, and find food of sufficient quality. Both on their own and in combination, these factors may have a significant impact on the bird population's ability to store nourishment before the mating season, which can result in reduced reproductive success. Work activities on the seafloor in conjunction with laying the pipeline results in clouding the water, which can reduce the sea bird's ability to feed. The presence of ships during installation activities results in disturbance, both visually and in terms of noise pollution. The company's environmental impact assessment estimates the disruption zone at 400 meters from the pipeline for Long-tailed duck. Environmental monitoring carried out during the installation of NS1 in Germany noted higher deviating behaviour for Long-tailed duck, including fleeing behaviour, at approximately 3.5 kilometres from the construction site¹. However, the disruption from NS1 operations could not be separated from other commercial traffic, but the conclusion was that this contributed an additional source of disruption.

In order to assess how different types of activities in the area affects the Baltic Sea's threatened sea bird populations it is important to consider the quality of its wintering areas. This is to protect the ability of Long-tailed ducks and other mussel eating birds to build up their nutritional and fat reserves during winter and spring ahead of the egg-laying and brooding season. It is important to prevent the occurrence of factors that can lead to increased energy consumption among the birds or to contribute to the reduced quality of their food and thereby further worsen the birds' condition. Examples of such factors include otherwise unnecessary movement, increased effort required to find food, clouding activities, and the release of environmentally hazardous substances and nutrients that can affect their staple food (mussels).

The Swedish Environmental Protection Agency notes that the construction work planned in Swedish, Danish, and German waters may have a negative impact on resting and wintering birds and their habitats, which thereby may affect the population development throughout the entire Baltic Sea. This is especially

¹ Nord Stream: Results of Environmental and social monitoring 2010. Document-No. G-PE-PEII-MON- 100-08010000.

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important for the Baltic Sea species with a declining development trend and which are dependent on a specific habitat for their survival and their feeding areas.

Limitations of disruptions and terms for limiting pollution

Based on the company's submitted documentation and conclusions, previous monitoring programs, and conditions in the Baltic Sea, the Swedish Environmental Protection Agency determines that it is important to combine permits for operations with conditions regarding self-monitoring and oversight, as well as precautionary and preventative measures to ensure the company checks for potential environmental impact and limits any such impact should it occur.

Since within the area there is a significant (but declining) sea bird population the Swedish Environmental Protection Agency considers it necessary to add conditions to those proposed and existing as part of the company's own commitments.

Special consideration should be taken for Long-tailed duck and other bird species that winter in the Baltic Sea. Operations should therefore be avoided during winter to the extent possible. The company's self-monitoring should include ambient disturbances in the vicinity of the planned operations and the installation work should be followed up and monitored by the company using stated specifications for how the monitoring should be conducted. The measuring method and mode of procedure should be regulated in a control program.

The Swedish Environmental Protection Agency determines that additional conditions should be included during the national permit applications for the various parts of the gas pipeline for the following:

- Limiting operating hours for installation activities to limit the impact on sensitive species requiring extra consideration.
- That ambient disturbances in the vicinity of the planned installation activities should be followed up and monitored by the company, using stated specifications for how this monitoring should be conducted.
- There should be coordination in regard to follow-up and self-monitoring of the ambient disturbances in the vicinity of installation activities conducted within each country's marine areas where the gas pipeline is routed, and that consultations regarding the forms for this monitoring should take place between the relevant environmental agencies of these neighbouring countries.

Decision regarding this statement was made by unit head Patrik Havermann
The final consultation included rapporteur, environmental lawyer Emma Sjöberg and administrator Elin Sahlgren