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#### Reference

Environmental impact assessment report, received on 3.4.2017

## **STATEMENT ON THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT ON NORD STREAM 2, A NATURAL GAS PIPELINE THROUGH THE BALTIC SEA, FINLAND**

### **1. PROJECT INFORMATION AND THE EIA PROCEDURE**

On March 25, 2013, Nord Stream AG initiated a procedure for the assessment of environmental impacts relating to the undersea natural gas pipeline project between Russia and Germany (Nord Stream 2) within the Finnish Exclusive Economic Zone (EEZ) by submitting to the Uusimaa Centre for Economic Development, Transport and the Environment (ELY Centre) an environmental impact assessment programme relating to the project. The Uusimaa ELY Centre has given a statement relating to the assessment programme on July 4, 2013.

On April 3, 2017, Nord Stream 2 AG provided the Uusimaa ELY Centre with an assessment report on the project within the Finnish EEZ, as well as assessment documentation relating to the whole project and its transboundary impacts (the so-called Espoo Report).

#### **Assessment Report**

The environmental impact assessment report is a document prepared by the project developer. The document presents information relating to the project and its alternatives as well as an assessment of their environmental impacts. Based on the assessment report and the statement provided by the coordinating authority, the project developer is granted an approval to apply for the necessary permits for the implementation of the project.

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The project developer will be invoiced for EUR 16 000. The fee criteria are provided in an appendix to this statement.

## **Project developer and the coordinating authority**

The project developer is Nord Stream 2 AG (main contact: Tore Granskog). The assessment report was prepared by Ramboll under a consultation assignment (main contact person: Antti Lepola). As set out in the Act on the Environmental Impact Assessment Procedure, the coordinating authority is the Uusimaa ELY Centre (main contact person: Leena Eerola).

The Uusimaa ELY Centre hereby provides a statement relating to the environmental impact assessment report of the project within the Finnish EEZ. On 30 June 2017, the Ministry of Environment made a national statement on the impacts of the entire project on other countries and of impacts on Finland that may arise from other countries.

## **Project background and project description**

The aim of the Nord Stream 2 pipeline is to improve the security of natural gas supply within the EU. The implementation of the Nord Stream 2 pipeline is based on experience obtained from the construction and operation of the Nord Stream pipeline, which is already in use.

The aim of the Nord Stream 2 project is to build twin natural gas transmission pipelines through the Baltic Sea from Russia to Germany. In the Finnish EEZ, the new pipeline route is mostly located north of the existing Nord Stream pipelines and following their route. The total length of the planned pipelines is about 1 200 km, and the length of the pipelines located in the Finnish EEZ is approximately 378 km. At its closest, the route is located 0.6 km from Finnish territorial waters. The Nord Stream 2 pipeline system is able to transport 55 billion cubic metres of natural gas annually. The pipelay is planned for 2018-2019 and the aim is to commission the pipelines at the beginning of 2020. The planned operational lifespan for the gas pipeline is 50 years.

The pipes will be transported to the pipelay vessel where they will be welded together and laid on the seabed. A dynamically positioned pipelay vessel will be used in the Finnish EEZ from the Russian border to the southern side of Hanko and, from there to the Swedish EEZ, either an anchor-positioned or dynamically positioned pipelay vessel will be used.

In addition to the pipelay, construction operations include munitions clearance, rock placement and installation of crossing structures.

Ancillary project activities in Finland and in the Finnish EEZ include the Kotka pipe coating plant, rock material extraction area in the Kotka

area, transportation and storage of pipes, rock material and other material to and at Kotka Mussalo harbour and Hanko Koverhar harbour.

## **Project alternatives**

### **Sub-alternatives of the route**

The pipeline route has two sections where the route is divided into two alternative routes.

The routing sub-alternatives ALT E1 (northern alternative) and ALT E2 (southern alternative) are located south of Porkkala in the Gulf of Finland. ALT E2 is approximately 700 m shorter than ALT E1. The ALT E2 seabed route profile is more irregular and, therefore, the rock density and the estimated amount of long free spans is greater than on the ALT E1 route. ALT E2 is closer to the existing pipelines and, therefore, its impact combined with that of the Nord Stream pipelines may be slightly smaller from the perspective of the use of the EEZ.

The routing sub-alternatives ALT W1 (northern alternative) and ALT W2 (southern alternative) are located in the northern part of the Baltic Sea proper in the western part of the Finnish EEZ. ALT W2 is approximately 2.8-3.1 kilometres shorter than ALT W1 and the resulting cover area is slightly smaller. ALT W2 is closer to the existing pipelines and therefore its combined impact with that of the Nord Stream pipelines may be slightly smaller, from the perspective of the use of the economic zone.

### **Construction alternatives**

The construction alternatives include wet and dry pre-commissioning.

Two different pipelay vessels can be used for the laying of pipes. These are either an anchor-positioned laying vessel or a dynamically positioned pipelay vessel, which does not require anchors.

### **Alternative VE 0**

The project planned in alternative VE 0 will not be implemented in the Finnish EEZ.

## **The need for the project EIA procedure**

The need for the project EIA procedure is determined on the basis of Section 4a and Section 4, Subsection 1 of the EIA Act (468/1994 as amended). Based on Section 4a, the Act is applied in the Finnish EEZ. According to Section 4, Subsection 1, the need for the EIA procedure is determined by point 8b of the project list of Section 6 of the EIA Act, on

gas pipelines with a diameter over DN 800 millimetres and a length of over 40 kilometres.

### **Linking the project with other projects and operations**

Two existing Nord Stream pipelines and 24 existing cables will cross the Nord Stream 2 pipeline route. Other projects being planned, which cross the Nord Stream 2 pipeline route, include the Balticconnector gas pipeline between Finland and Estonia and two data communication cables. Other existing or planned offshore infrastructure is located at least 10 kilometres from the Nord Stream 2 pipeline route. The Nord Stream 2 pipeline will cross shipping lanes.

### **Linking of the project with other plans**

The strategies and plans relating to Finnish marine areas, territorial waters and the Exclusive Economic Zone may have an impact on the Nord Stream pipeline project. These include a marine management plan, a marine traffic strategy and marine spatial planning.

### **Linking of the assessment procedure to procedures governed by other legislation**

The Government consent is required for the implementation of the project and the undertaking of any related environmental research according to the Act on the Finnish EEZ.

Construction of the Nord Stream 2 natural gas pipelines in the Finnish EEZ requires a permit to be granted by the Regional Administrative Agency for Southern Finland, in accordance with the provisions of the Water Act, for the clearance of munitions, construction of the pipelines and the operation and maintenance of the pipelines.

Construction of the pipelines requires an appropriate Natura assessment of the areas belonging to the Natura 2000 network located within the impact area of the project.

According to the EIA Act, a permit for the implementation of the project cannot be granted until the coordinating authority has provided a statement relating to the assessment report and the EIA procedure has been completed. The permit decision must indicate how the assessment report and the statement by the coordinating authority have been taken into consideration.

The Kotka pipe coating plant, the rock material extraction area and loading areas and storage of the pipes at the harbours of Kotka Mussalo and Hanko Koverhar operate in accordance with their own permits.

In conjunction with the decision-making process relating to the project, consideration must be given to the Act on Water Resources and Marine Environment Management (272/2011) and the Council of State's Decree on the Organisation of the Development and Implementation of the Marine Strategy (980/2011). In addition, legislation concerning marine area planning and any plans based on Section 8a of the Land Use and Building Act must also be taken into consideration.

Once the plans are more defined, the project developer must contact the Finnish Transport Agency and follow the instructions provided by the Agency relating to shipping lanes, safety device for navigation and other maritime transport areas.

The Finnish Defence Forces must be contacted when planning the project. Particular attention must be paid to existing and potentially planned cables of the Finnish Defence Forces and, for example, possible restrictions associated with the use of the military zone, operations within the safety zone and clearing of old mines within the exclusive economic zone.

The National Board of Antiquities must be contacted as regards further procedures to be undertaken to safeguard the underwater cultural heritage.

In addition, the provisions of the UN General Agreement relating to the Assessment of Transboundary Environmental Impacts (Espoo Agreement, SopS 67/1997) applies to the project. In addition, Finland and Estonia have a bilateral agreement relating to the assessment of environmental impacts (SopS 51/2002), which specifies the principles relating to the application of the Espoo Agreement.

## **2. PUBLIC NOTIFICATION AND HEARING ON THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

Notifications relating to the EIA report and the so-called Espoo Report concerning the entire project, have been published in the following newspapers: Helsingin Sanomat, Hufvudstadsbladet, Kymen Sanomat, Turun Sanomat, Uusimaa, Länsi-Uusimaa, Västra Nyland, Abo Underrättelser, Ålandstidningen and Östnyland.

Notices of the assessment report relating to the Finnish EEZ including its appendices and the assessment report relating to the entire project (the so-called Espoo Report) have been posted on the notice boards of the following municipalities during the period April, 7 and June 5, 2017:

City of Espoo, Environment Centre, Kirkkojärventie 6 B, 02770  
Municipality of Föglö, Municipal Office, Tingsvägen 3, AX 22710 Föglö  
City of Hamina, Customer Services, Puistokatu 2, 49400 Hamina

Hanko City Library, Vuorikatu 3 - 5, 10900 Hanko  
City of Helsinki, City Hall, Registry, Pohjoisesplanadi 11 - 13, 00100 Helsinki  
Municipality of Inkoo, Municipal Office Building, Rantatie 2, 102100 Inkoo  
City of Kaarina, Citizens Services Centre, Lautakunnankatu 4, 20780 Kaarina  
Municipality of Kemiönsaari, Municipal Office Building, Vrelantle 19, 25700 Kemiö  
Municipality of Kirkkonummi, Service Desk, Ervastintie 2, 02400 Kirkkonummi  
City of Kotka, Environment Centre, Kotkantie 6, 48100 Kotka  
Municipality of Kökar, Municipal Office, Karlby, AX-22730 Kökar  
Municipality of Lemland, Municipal Office, Kommunrundan 7, 22610 Lemland  
City of Loviisa, Customer Service Office Lovinfo, Mariankatu 12 A, 07900 Loviisa  
City of Maarianhamina, City Hall, Torggatan 17, 22100 Mariehamn  
City of Naantali, City Hall Service Desk, Käsityöläiskatu 2, 21100 Naantali  
Town of Parainen, Customer Services, Town Hall, Rantatie 28, 21600 Parainen  
City of Porvoo, Service Centre Kompassi, Rihkamatori B, 06100 Porvoo  
Municipality of Pyhtää, Municipal Office Building, Siltakyläntie 175, 49220 Siltakylä  
Town of Raasepori, Town Office, Raatihuoneentori, 10611 Raasepori  
City of Salo, City Hall Info Desk, Tehdaskatu 2, 24100 Salo  
Municipality of Sauvo, Municipal Office Building, Vahtistentie 5, 21570 Sauvo  
Municipality of Sipoo, Kuntala , Iso Kylätie 18, 04130 Sipoo  
Municipality of Siuntio, Puistopolku 1, 02580 Siuntio  
City of Turku, City Administration Registry, Puolalankatu 5, 1st floor  
Municipality of Virolahti, Central Office, Opintie 4, 49900 Virolahti

Website: [www.ymparisto.fi/nordstream2WA](http://www.ymparisto.fi/nordstream2WA).

In addition, the project developer has its own website for the project: [www.nord-stream2.com/fi/permitting-finland/](http://www.nord-stream2.com/fi/permitting-finland/).

Feedback could also be provided via the map service operated by the consultant. In addition, resident and fishermen surveys were undertaken as part of the project.

Public consultations relating to the Assessment Report were held on Wednesday May 3, 2017 at 6-8 pm, in the Maritime Centre Vellamo, Tornatorintie 99, Kotka and on Tuesday May 9, 2017 at 6-8 pm, in Wanha Satama, Kanavakatu 5, Helsinki and on Wednesday May 10,

2017 at 6-8 pm, at the Hanko City Hall (Hangon kaupungintalo), Vuorikatu 1, Hanko.

An EIA Expert Group was established to enhance cooperation with the authorities. In addition, meetings with other authorities, research organisations, NGOs and stakeholders have been arranged.

The UN European Agreement of the Economic Commission for Europe is applicable to the project as it relates to the assessment of transboundary environmental impacts (The Espoo Agreement, SopS 67/1997). According to the Agreement, Finnish authorities, residents and communities are also able to present their opinions on the environmental impacts on Finland of the project as a whole. The Uusimaa ELY Centre has communicated these views to the Ministry of Environment which will coordinate the response of Finland to other States.

Similarly, citizens of other States within the Baltic region, communities and authorities have had the opportunity to present their views on the EIA Report in so far as it relates to transboundary impacts. In addition, Finland and Estonia have a bilateral agreement relating to environmental impact assessments (SopS 51/2002), which is also applicable to the project. The Environment Ministry has reserved an opportunity for the states of Russia, Estonia, Sweden, Denmark, Lithuania, Latvia, Poland and Germany to make a statement concerning the Environmental Impact Assessment Report by June 30, 2017 at the latest. The Environment Ministry has forwarded the views received to the Uusimaa ELY Centre, which acts as the coordinating authority.

### **3. SUMMARY OF THE PROVIDED STATEMENTS AND OPINIONS**

The Uusimaa ELY Centre has requested statements relating to the Assessment Report from the following parties:

City of Espoo, Municipality of Föglö, City of Hamina, City of Hanko, City of Helsinki, Municipality of Inkoo, Municipality of Kaarina, Municipality of Kemiönsaari, Municipality of Kirkkonummi, City of Kotka, Municipality of Kökar, Municipality of Lemland, City of Loviisa, City of Maarianhamina, City of Naantali, Town of Parainen, City of Porvoo, Municipality of Pyhtää, City of Raasepori, City of Salo, Municipality of Sauvo, Municipality of Sipoo, Municipality of Siuntio, City of Turku, Municipality of Virolahti, Åland Provincial Government, Finnish Food Safety Authority, Regional State Administrative Agency for Southern Finland, Geological Survey of Finland, Greenpeace, The Finnish Meteorological Institute, ELY Centre for South-East Finland, Regional Council of Kymenlaakso, Ministry of Transport and Communications, Finnish Transport Agency, Traffic Safety Authority, Natural Resources Institute

Finland, Ministry of Agriculture and Forestry, Metsähallitus (state-owned enterprise that administers Finnish forestry, parks and wildlife), National Board of Antiquities, Finnish Society for Nature and Environment (Natur och Miljö), Ministry of Defence, Defence Command, Finnish Border Guard, Ministry of Social Affairs and Health, Finnish Association of Professional Fishermen SAKL, Finnish Association for Nature Conservation, Maritime Museum of Finland, Finnish Environment Institute, Finnish Safety and Chemicals Agency (Tukes), Tvärminne Zoological Station, Ministry of Economic Affairs and Employment, Ministry for Foreign Affairs of Finland, Helsinki-Uusimaa Regional Council, ELY Centre for Southwest Finland, Regional Council of Southwest Finland and WWF Finland.

The coordinating authority was provided with 32 statements and five opinions relating to the Assessment Report. The statements and opinions can be found in their entirety online at: <http://www.ymparisto.fi/nordstream2YVA> .The following summarises the main content of the statements and opinions.

## **Summary of the statements**

### General

The quality of the Assessment Report is good and it is comprehensive. Assessment methods have been described clearly. The monitoring data gained from the earlier Nord Stream project has been utilised in the Report. Further assessments relating, for example, to underwater noise have been included in the Report and have been focused on factors deemed significant based on previously assessed impacts.

The results of the assessment show that, at the construction stage, the Nord Stream 2 project will cause mainly local and short-term effects within the Finnish EEZ. It was considered that the construction of the gas pipeline should be undertaken using technology that will impose the least burden on the environment and will also follow stringent environmental and safety standards in the future.

However, the construction stage of the project includes a number of uncertainties, such as the final construction time schedule, extent of the munitions clearance and time schedule, and the required quantity of rock material and the rock placement locations. It was considered that the information currently missing from the Report must be presented at the permitting stage at the latest.

It was stated that the project will cause increased use of fossil fuels at the expense of renewable energy sources. The project does not support sustainable development of society, but will result in greater



dependency on energy from Russia and, therefore, greater political influence to be exerted by Russia. The European states were urged to favour climate-friendly, renewable energy.

It was emphasised that the responsibility for the removal or covering of the pipeline at the end of its service must be placed on the project developer.

It was stated that the inhabitants of the coast have been invited to participate in the process to a good degree.

#### Project alternatives

When choosing the route, any adverse impacts on fish, fisheries and marine mammals must be taken into consideration. The alternatives located further from the Natura 2000 areas were considered to be better. No significant differences between the route alternatives and construction alternatives have been observed but one of the statements did consider that, due to deficiencies in the report material, the various route alternatives cannot be compared.

#### Ancillary projects

It was considered positive that ancillary projects were presented in more detail than before. The ancillary operations are targeted to occur in the Kotka region and it is estimated that during the construction stage, these will impact the residents in terms of comfort and traffic safety, particularly as an impact arising from the extraction of rock material and road transport. It was considered important to implement the interaction planned with the target communities as it will provide an opportunity to receive direct and prompt information relating to possible harmful impacts. Additionally, any response to harmful impacts must be ensured to be sufficiently rapid.

The operations of the pipe coating plant and rock extraction are guided by the environmental permits for these operations. From the perspective of reduction and prevention of harmful impacts, it is essential that sufficient auditing will be targeted at contractor activities.

#### Impacts on the Gulf of Finland

The project may have both direct and indirect harmful impacts over a wide area of the Baltic Sea, which is unique with respect to its natural conditions. The Baltic Sea is a particularly sensitive ecosystem and already excessively affected by heavy anthropogenic activity. Special attention should be given to the impact of the project on the Gulf of Finland which is one of the most overloaded areas of the Baltic Sea.

It is considered positive that the Report included the potential increased negative impact of non-indigenous species. At the construction stage, special attention must also be paid to waste disposal and to minimising risks caused by maritime transport such as the risk of an oil spill accident. It was also considered necessary to conduct more extensive assessment of the spread and impact of harmful substances.

#### Impacts on nature

The greatest negative impact on living organisms is caused by the clearance of munitions where the underwater noise created has harmful effects on marine mammals, fish and diving birds. More detailed assessments must be done on the risk areas relating to procedures that can be used to minimise the harmful underwater effects of noise on living organisms. Attention must be paid to the timing of work stages causing underwater noise so that the number of marine mammals, birds and fish within the underwater area affected by noise is as small as possible. These assessment reports relating to protected areas must be presented at the permitting stage at the latest.

From the nature conservation perspective, the pipeline must be as far as possible from the Natura 2000 areas. The proximity of the pipeline to the seal protection areas and ringed seal habitats in the Gulf of Finland and the southern sea area of Sandkallan is alarming. Any alterations of the sea bed should be minimised, clearance of munitions close to the seal sanctuaries must be avoided and the construction works should be limited to outside the ice-bound season. However, if any clearance is undertaken, it is particularly important that all the animals are driven from the area before any clearance of munitions takes place. However, it is impossible to ascertain with certainty that all the animals have left the area.

It was considered that the EIA Report and the Espoo Report did not sufficiently assess the impacts to the Natura 2000 areas as required by the Habitats Directive. A decision approving construction cannot be made before it has been indicated that the project will not have any significant harmful impacts on the Natura 2000 areas. The insufficient Natura assessment renders the EIA hearing process inadequate. It was stated that the project is contrary to the Marine Strategy Directive.

#### Noise impacts

It was considered positive that the underwater noise impact was strongly emphasised in the Report. Underwater noise research has developed rapidly during the last few years. Stratification of the sea creates sound corridors where noise can be carried over very long distances.

### Impacts on air quality and climate

It was stated that the assessment of impacts on air quality and climate was insufficient. Indirect impacts of the project on air quality and climate were not analysed in the Report.

### Impacts on land use

From the perspective of land use planning, there are no conflicts in the project. The Regional Councils of Uusimaa and Kymenlaakso are in the process of compiling a marine area plan as set out in the Act on Land-Use and Building covering the Gulf of Finland water areas and the economic zone. Environmental information gathered in the planning of the Nord Stream 2 project will be utilised in the drafting of the plan. Different forms of marine use and interests, such as fishing, shipping, nature protection and energy production are considered in the marine area plan.

### Impacts on onshore traffic

Only the impact on the growth of traffic resulting from rock material transportation has been assessed. Cement for use in the coating of the pipes is also transported to Mussalo harbour, which should have been taken into consideration in the calculations. However, the scale of cement transport is quite small and so the traffic impact assessment is considered adequate.

### Impacts on offshore traffic

The impacts of the project on marine traffic have been covered sufficiently and information obtained from previous installation work relating to the pipes has been utilised in the assessment of the early impact of the new natural gas pipeline. It is also important to pay attention to the cumulative impacts arising from the construction of the project and the risks to shipping.

Negotiations should take place between the Finnish Transport Agency and the project developer relating to the required traffic arrangements and necessary notifications. The Finnish Transport Agency must provide detailed instructions relating to information and notifications required at the water permit stage of the project at the latest.

The vessels participating in the pipelay should participate in their vessel traffic service in accordance with the governing legislation. In addition, international rules related to shipping lanes must be followed during the project.

### Impacts on cultural heritage

Underwater cultural heritage has been considered in a sufficient and appropriate manner in the EIA Report.

The EIA Report presents information based on recent mapping relating to sites of underwater cultural heritage. In conjunction with the Report, 82 possible cultural objects were identified and 23 of them were located approximately 250 m from the pipelines. These objects and, in addition, six objects found later on, were photographed and mapped in more detail at the second stage of the Report. Based on the inventory, the project must take into consideration two historic ship wrecks and two objects which represent cultural heritage remaining from the Second World War.

In conjunction with the project, targets will be defined with a 50-metre safety zone and, if the pipeline cannot be bypassed by such a distance, a target-specific management plan must be prepared.

Before an application for a permit is made in accordance with the Water Act, information should be made available on whether munitions detonations will be required to be undertaken close to cultural heritage sites. A procedural instruction should be prepared in case of any chance finds.

### Impacts on fishing

A complete prohibition on fishing during working hours causes detriment to commercial fishing. The planning for fishing becomes difficult and requires various deviations from the established routines. More free spans than in the previous project are envisaged in the NS2 pipeline, which presents increased hazardous situations for fishing. The operator must provide compensation for the reduction in fishing gains.

It was considered that the impact of the project on commercial fishing has been dealt with in a relatively superficial manner and downgrading the issue.

### Impacts on human living conditions

The Nord Stream 2 project will positively impact employment in the Kymenlaakso area.

### Cumulative impacts

The cumulative impacts of the NS2 project with other projects are not likely to be significant. During the construction stage, munitions clearance, rock placement, the pipelay and the use of an anchor-

positioned pipelay vessel may damage the existing infrastructure on the seabed. Rock placement necessary during the operational stage as a maintenance measure may further cause mechanical damage to the existing infrastructure.

#### Mitigation of harmful impacts

Appropriate attention has been paid to mitigation of harmful impacts. Munitions clearance by detonation causes high underwater noise peaks which are not present in the normal noise environment. In order to mitigate harmful impacts on marine mammals, acoustic methods have been proposed for driving off mammals from the impacted area as well as using alternative methods for munitions clearance. Better alternatives for munitions handling, such as transfer or disassembly on board ship are analysed. The construction works have not been planned to be carried out in winter ice conditions.

For the notification for mariners, the Finnish Transport Agency must be sent information relating to the plans, routes and time schedules of the project vessels. To safeguard the preservation of underwater heritage, a safety zone of a minimum of 50 metres must be formed around each object.

At the meeting with the authority on April 25, 2017 it was indicated that an anchor-positioned pipelay vessel will not be used for the project within the Finnish EEZ. It was stated that when a dynamically positioned pipelay vessel is used in the Gulf of Finland section, the impact on the marine environment caused by the construction works are significantly reduced. In addition, further analyses are underway relating to munitions handling.

#### Impact monitoring

The proposed project monitoring programme is considered appropriate. Underwater noise is measured close to the clearing location and within the seal protection areas. It is suggested that impacts possibly caused to fishing be monitored after the construction stage using surveys targeted at fishermen and analysing the movements of fishing vessels. It was considered to be important that monitoring of cultural heritage objects is also included both during and after the construction period.

It is also necessary, both during and after the construction phase, to monitor the levels of pollutants in the water and in fish. Special attention should be paid to operations which cause the significant spreading of sediments and contaminants.

### Impacts on long-term monitoring

If significant seabed sediment disturbances occur near the monitoring stations, alternative monitoring stations must be established.

## **Summary of the opinions**

### General

The EIA Report has been compiled well for the most part.

During the construction stage, which includes mine clearance, rock material transfers and deposition of sediments, care must be taken to ensure that the work is carried out so as to cause as little damage as possible. It was stated that, as the owner of the public water area, the state must apply for compensation for the permanent detriment caused to the water area.

The gas pipeline will not supply energy to Finland or Estonia, but it may endanger the functioning of data communication and data communication infrastructure important for society. Undisturbed communications must be secured. If the cables are damaged in conjunction with the gas pipeline laying and are rendered inoperable, the impact on customers and the operator will be significant. The project developer must cover the costs related to emergency preparedness and any potential detriment incurred.

Objections were raised against the project on the basis that it poses a serious strategic and safety issue for the EU and is particularly harmful to the unique ecosystem of the Baltic Sea.

It was stated that the assessment procedure entirely lacked consideration as to how the rights of the owners of the areas impacted by the gas pipeline area will be secured and taken into consideration.

### Impacts on nature

The impact of the project on the Natura 2000 areas, particularly the areas where seals are the protection objective, has not been appropriately assessed. The decision in favour of construction cannot be made until the authority has provided assurances in their statement that the project will not have a significant hazardous impact on the conservation value of the Natura 2000 areas. It was considered that inadequate documentation relating to the Natura 2000 areas will also render the EIA consultation procedure inadequate.

### Impacts on shipping

The assessment in the Report relating to the impacts on shipping are presented comprehensively for the most part. Impacts of the project and possible risks to shipping are mainly shown at the pipeline construction stage. It is considered positive that in conjunction with the Report, a risk assessment relating to shipping has been drafted for the entire pipeline route and that the collision risk of the vessel traffic passing the pipelay vessel has been identified as a medium risk, which must be reduced by further planning. Observations gained from an assessment made during the Nord Stream project on vessel traffic passing the pipelay vessel during the construction period, can be reduced in the NS2 project. Attention must be paid to the cumulative impact of the different projects during the construction period and the risks to shipping.

If the safety zone around the pipelay vessel is reduced, the size and location of the safety zone should be discussed with the Finnish Transport Agency.

It was remarked that the Report does not present an assessment on the likely impact of the gas pipeline construction and operation on emergency anchoring areas and their operation. At the pipeline operation stage, restrictions relating to emergency anchoring must be marked clearly on the charts.

### Impacts on fishing

The survey undertaken with commercial fishermen shows that the planned pipeline passes through commonly used trawling areas. Therefore, the project will affect the livelihood of fishermen. Fisherman should be fully compensated for any detriment caused to fishing by the project.

## **Summary of the international consultation**

The Ministry of Environment has submitted to the Uusimaa ELY Centre the statements and opinions gained from other countries regarding the international assessment of the project. Responses have been received from Estonia, Sweden, Denmark, Lithuania, Latvia, Poland and Germany.

Many of the statements emphasise that climate change has not been sufficiently discussed in the assessment and that the project is contrary to the international climate targets and the Paris Treaty. The project increases dependency on fossil fuels and Russian gas. The project is unnecessary from the European security perspective and the investments should be targeted at renewable fuels.

In order to find an optimal implementation alternative, it was required that the pipeline alternatives routed overland be assessed and compared against the marine alternative. Operation of dynamically positioned vessels during the construction is necessary in order to reduce the need for munitions clearance and the possible effects of anchoring in the risk areas. Testing of the pipeline must be undertaken using air, not water. Special attention must be paid to the prevention of corrosion and the covering of the pipeline must be analysed as a mitigation method against harmful impacts. Emergency response and co-ordination of cooperation must be planned in detail. The compensation procedure for harmful effects must also be developed.

The project will have adverse impacts on the particularly sensitive ecosystem of the Baltic Sea and the Natura 2000 areas. However, an assessment of the overall effects at the level of the Baltic Sea ecosystem is missing. Due to the deficiencies in the analyses undertaken, the Espoo report must be supplemented in numerous aspects. Among other things, the spreading of sediments and release of nutrients and contaminants have been insufficiently assessed. Implementation of the project is likely to cause an increase in genotoxic effects and this will have a harmful impact particularly on fish populations and, hence, also on fishing. In addition, the construction may have harmful impacts on marine mammals and birds. Harmful impacts on the long-tailed duck and other birds overwintering in the Baltic Sea have not been sufficiently taken into consideration. Harm can also be caused to the existing pipelines and cables. Cumulative impacts have been insufficiently studied.

Information relating to additional studies and the results of the monitoring must be submitted to the target countries. Feedback received from international consultations should be taken into consideration in the preparation of the monitoring programme.

The pipeline must be removed from the seabed at the end of its operational life. Any environmental impacts caused by decommissioning must be assessed more accurately and taken into consideration in the permitting process.

The statements received are presented in the following to the degree that they apply to the part of the project to be implemented within the Finnish EEZ and the impacts arising from it.

One of the most significant concerns, in the feedback from Estonia relates to marine mammals, particularly the endangered ringed seal. Underwater noise caused by munitions clearance is a significant transboundary impact. However, no geophysical assessment relating to munitions has been conducted within the Finnish EEZ during the EIA



process. The presented monitoring plan for the marine mammals is insufficient. All mitigation of harmful impacts must be taken into use.

Sweden remarked that the locations for munitions clearance in the Finnish EEZ are not yet known. Therefore, it has not been possible to sufficiently assess the impact of the underwater noise on seals and other animals caused by clearing. The impacts on the Natura 2000 areas must be assessed before the implementation decision.

Based on the views of Lithuania, the project will have harmful effects on fish stocks and fishing and, therefore, the Espoo Report must include a description of a method to assess the extent of the harmful impacts and to calculate the losses to fishermen.

Poland stated that the assessment is insufficient and the documentation material provided is only provisional; for example, the Natura assessments are not complete. Due to the appropriate assessments relating to the Natura 2000 areas in the Kallbådan Islets and water area having not been done, significant impacts cannot be ruled out. Approval for the project can only be granted once it has been ensured that the project would not have a significant and negative impact on the Natura 2000 areas. The Espoo Report must be supplemented with the impacts of the project on commercial fishing.

German statements also indicated that no accurate munitions information relating to the Finnish EEZ was yet available. Munitions clearance releases nutrients and pollutants from the sediment which will have significant negative effects on the loaded ecosystem. The Report does not include any detailed information about the quantities of nutrients and pollutants released within the Finnish EEZ. Based on the assessment material relating to marine mammals, it appears that munitions clearance in the Finnish EEZ can have direct impacts, not only on grey seals but also on porpoises and ringed seals. It was stated that the implementation of the pipeline in the Finnish EEZ may cause a collapse of the endangered ringed seal population.

Denmark and Latvia have no views relating particularly to the Finnish EEZ.

The international statements are found in their entirety online at: [www.ymparisto.fi/nordstream2YVA](http://www.ymparisto.fi/nordstream2YVA).

#### **4. STATEMENT OF THE COORDINATING AUTHORITY**

**The assessment report of the Nord Stream 2 natural gas pipeline project meets the content requirements referred to in section 10 of the EIA decree. The assessment report has been appropriately processed according to the EIA legislation and the updates based**

**on the statement of the coordinating authority on 4.7.2013 regarding the assessment programme have been adequately considered at this planning phase.**

The following sections present the opinion of the coordinating authority regarding the environmental impacts of the project, recommendations for further planning, issues that should be considered in permitting procedure and the feasibility of alternatives with regard to environmental impacts. The statement is based on the assessment report, statements and opinions provided on the report and information provided by the experts of the Uusimaa ELY Centre.

### **Project description**

The assessment report is unambiguous and illustrative. The project will be specified in further planning and after the completion of additional studies and Natura assessments.

### **Definition of alternatives**

The coordinating authority states that the comparison of alternatives has been presented in a sufficient way with regard to the planning phase.

### **Assessment and significance of impacts**

The impacts of the project have been systematically identified and the assessment has focused on the essential impacts of the project. Assessed issues have been clearly brought up. The significance of impacts has been evaluated based on the magnitude of change and sensitivity of the receptor. Mitigation measures to harmful impacts have also been presented.

The most significant harmful impacts of the project occur during the construction of the natural gas pipelines. Essential harmful impacts are directed to marine mammals, which are the protection objective for Natura areas. Construction can also cause harmful impacts on sea birds and underwater habitats in Natura areas as well as the spreading of solid substance and contaminants. Disturbances to onshore and offshore traffic can also be caused during construction. During operation, the Nord Stream 2 project can have harmful impacts on professional fishing and restrict the future use of the Finnish Exclusive Economic Zone.

### **Impacts in the Gulf of Finland**

Munitions clearance must be conducted along the installation corridor and along a wider safety zone prior to construction for securing safe

installation and operation of the pipelines. In addition to the methods used in the Nord Stream project, alternative clearance methods are evaluated in the project for reducing underwater noise impacts. In this case, the spreading of solid substance and contaminants would also be reduced. The coordinating authority requires that the report will be supplemented in the permitting phase by assessments, which are based on the actual munitions subject to clearance along the selected installation corridor to secure safe installation of the new pipelines.

Impacts on water quality and further to organisms are mainly caused by munitions clearance and rock placement. As a result of these activities, solid substance, contaminants in sediment and nutrients are released. According to modelling studies and the monitoring results of the previous project, impacts on water quality are estimated to be directed to lower water layers and relatively close to the project area, and the significance of impacts is considered to be minor, at most. When clearance and construction plans are specified, this estimate is to be revised, if necessary.

### **Impacts on the environmental goals of water and marine management**

The EU Marine Strategy Framework Directive obliges the application of an ecosystem-based approach to the management of human activities in marine areas. In Finland the directive and strategy is implemented through marine management plans. Based on the Act on Water Resources and Marine Resources Management and the Government Decree on Marine Resources Management, the good environmental status of marine environment is described with 11 qualitative descriptors. New qualitative issues to be considered include underwater noise and littering.

With regard to coastal waters, the goal of good environmental status is also included in water management planning. New significant projects were supposed to be examined as part of water management planning, which can have impacts on surface water and ground water in the water management area. Nord Stream 2 project has been examined as one of these projects in the Water Management Plan of the Kymijoki River–Gulf of Finland water management area. The impacts of the project are found to be mainly local and temporary and they occur during construction.

The goals to achieve a good environmental status of the sea areas and potential threats related to this have been comprehensively examined and interpreted in the assessment report. Impacts on water and marine management and related environmental goals, which were presented in the statement of the coordinating authority regarding the assessment programme, have been adequately taken into consideration.

The coordinating authority states that the Nord Stream 2 project does not prevent the achievement of the good environmental status of water areas. This is assured in the permitting phase of the project, when additional studies and Natura assessments are available.

### **Impacts on nature**

The probable harmful impacts of pipelines on nature are generated in the construction phase as a result of munitions clearance, rock placement and pipe-lay. Impacts during operation are clearly minor. Munitions clearance can cause negative impacts especially in those Natura 2000 areas, where noise-sensitive marine mammals, grey seals and Baltic ringed seals are the protection objective. Construction can also have impacts on sea birds and underwater habitats in Natura areas.

The impacts of pipeline construction must be appropriately assessed with regard to the following areas included in the Natura 2000 network: Tammisaari and Hanko Archipelago and Pohjanpitäjänlahti Marine Protected Area (FI0100005, SAC/SPA), Kallbådan Islets and Waters (FI0100089, SAC), Söderskär and Långören Archipelago (FI010100077, SAC/SPA), Pernaja Bay and Pernaja Archipelago Marine Protected Area (FI0100078, SAC/SPA), Sea Area South of Sandkallan (FI0100106, SAC) and Eastern Gulf of Finland Archipelago and Waters (FI0408001, SAC/SPA). The latest information about munitions and their location from seabed surveys as well as mitigation measures regarding clearance activities must be taken into consideration in the assessments.

Separate statements will be provided on impact assessments regarding the Natura areas. The Uusimaa ELY centre will provide a statement with regard to the Natura 2000 areas located in Uusimaa and the Southeast Finland ELY Centre will provide a statement with regard to the Natura area "Eastern Gulf of Finland Archipelago and Waters", which is located in southeastern Finland.

### **Noise impacts**

Noise from onshore areas and from vessels/equipment operating on water surface during construction is relatively minor. In onshore areas noise from traffic and other project-related ancillary activities is concentrated in areas, which are already now considered as noise impact areas. The potential increase in the noise level caused by the project will be small and disturbance will be temporary.

The most significant noise disturbance is generated by underwater detonations during the construction phase of the pipeline. The actual noise impacts during operation mainly consist of underwater noise from

the gas pipeline. Based on experiences and results from the Nord Stream project, noise emission during operation will probably not affect fauna, as the noise impact stays below the background noise level. Furthermore, the pipeline is located in areas, which are not significant breeding or feeding areas of fish, marine mammals, birds or other organisms. Even if these areas were located along the pipeline route, the noise levels during operation would be so low according to the assessment report, that these impacts cannot be distinguished from other impact factors or impacts caused by other activities.

The propagation of underwater noise has been studied with calculations and measurements. A calculation model has been used, which takes underwater circumstances into account in a versatile way. Modelling studies have been performed in summer and winter conditions so that different sound propagation characteristics of underwater noise could be considered. The noise levels in the study always describe the worst case scenario of a certain site. Noise caused by different activities (for example detonations, rock placement) were modelled at a few sites. This can be considered sufficient, as the propagation of noise especially from rock placement does not essentially change between different sites. With regard to detonations, noise measurement sites were thoroughly selected taking the potential differences in the spreading of impacts and probability of detonations into consideration.

Noise from offshore activities is mainly equivalent to the normal noise level caused by marine traffic. Noise level will slightly increase during construction, but noise impacts will be minor, as the project activities proceed fairly quickly past the disturbed or noise sensitive sites. Noise mitigation measures should, however, be implemented in the project, such as timing of the project and its activities so that works are avoided in areas, which have especially sensitive or threatened species during the most susceptible periods of disturbance.

When estimating the harmful impacts of underwater noise, it should also be considered that, with the exception of detonations, the increase of noise level is so slow and it causes no direct harmful impacts, which enables the movement of majority of the disturbed animals outside of the noise impact area and their return to the area after disturbance.

Underwater detonations and related noise and pressure impacts are the most significant impacts of the project. Powerful detonations can, at worst, cause serious permanent damage and even fatalities to animals in the impact zone. This issue has been extensively discussed in the assessment report and new extensive study results as well as experiences and monitoring results from the previous Nord Stream project have been used in the assessment. The coordinating authority considers that the extent of studies and provided information are very comprehensive. In addition to the assessment of harmful impacts, the

assessment report also extensively presents those methods, which can be used for mitigating adverse effects during detonations.

### **Impacts on fish and fishery**

The coordinating authority considers that the impact assessment on fish and fishery presented in the assessment report is sufficient. Impacts on fish population during the construction and operation phase of the project are estimated to be insignificant in the report.

Impacts on commercial fishery during the construction phase are estimated to be insignificant as well, but the significance of impacts during the operating phase is estimated to be minor. Harmful impacts are directed to trawling activities especially in areas of uneven seabed. The coordinating authority disagrees with the view presented in the EIA report that impacts on trawling would be small, but refers to the study conducted during the permitting phase of the previous Nord Stream gas pipeline project. The identified harmful impacts on commercial fishery must be considered in the permitting phase of the project through compensatory methods.

### **Impacts on underwater cultural environment**

Impacts on underwater cultural heritage have been examined appropriately and comprehensively. Impacts on underwater cultural heritage caused by the project, prevention of harmful impacts and further actions for securing underwater cultural heritage are clearly presented in the assessment report.

### **Impacts on long-term monitoring**

It is estimated that disadvantages to long-term monitoring stations are insignificant. For securing this, the aim is to coordinate the works in the construction phase and monitoring studies with the Finnish Environment Institute. However, the establishment of substitutive stations must be agreed with the Finnish Environment Institute, if this turns out to be necessary based on the detailed clearance and construction plans.

### **Traffic impacts**

The coordinating authority considers that the traffic impact assessment presented in the EIA report of the Nord Stream 2 project is sufficient.

In the Kotka region, rock material is transported by trucks from the extraction sites to intermediate storage in the Mussalo port in Kotka. Due to growing heavy traffic volumes, it is important to focus on traffic safety and special questions related to the mitigation of noise and dust problems during the construction phase of the project. Contractor

audits, which are discussed in the EIA report, are necessary for preventing and mitigating harmful impacts.

Existing infrastructure will be utilised in the location of activities in the Koverhar industrial and port area in Hanko. Land use in the vicinity of the project area is not classified as sensitive. The ancillary activities in Koverhar in Hanko during construction include sea transport of pipes and storage of pipes in the port area. The Nord Stream 2 project activities do not generate heavy traffic in Koverhar.

Impacts of the project on marine traffic have been comprehensively studied and information from previous pipeline installation works has been used in the evaluation of cumulative impacts and risks during the construction phase of the new gas pipeline route. The project developer shall have a negotiation with the Finnish Transport Agency regarding the required traffic arrangements and necessary notifications of the project.

### **Mitigation of impacts**

In addition to munitions clearance and mitigation methods of harmful impacts, it is important that the project developer examines alternative clearance methods in more detail, through which the harmful impacts of munitions detonations could be minimized.

Furthermore, direct monitoring of harmful impacts and immediate repair actions shall be emphasized during the project, if it proves out that disadvantages and damages to fish, birds, mammals and other organisms caused by detonations turn out to be more serious than expected.

### **Decommissioning of gas pipelines**

The decommissioning of gas pipelines has been adequately examined in the assessment report. The planned operational lifespan of the Nord Stream 2 pipelines is about 50 years. A decommissioning programme will be prepared during the operating phase and regulations valid at the time of decommissioning will be taken into consideration.

### **Cumulative impacts with other projects**

Munitions clearance, rock placement, pipe-lay and handling of anchors of the pipe-lay vessel during construction can cause damage to infrastructure on the seabed. Furthermore, rock placement in the operating phase can cause mechanical damage to infrastructure on the seabed.

Gas pipelines crossing the Nord Stream 2 route are protected by rock berms and cables are protected by concrete mattresses.

Nord Stream 2 project will make crossing and/or proximity agreements with cable and pipeline owners in the project impact area to prevent and mitigate harmful impacts.

If the Nord Stream 2 and Balticconnector pipelines are constructed simultaneously, growing ship traffic volumes will lead to increased safety risks.

The Nord Stream 2 pipelines can restrict the future use of the Finnish Exclusive Economic Zone, as a certain distance must be kept for safety reasons between the pipeline system and potential future infrastructure or exploitation area of seabed. It is estimated that the Nord Stream 2 pipelines will not prevent future projects, but they may have impacts on the planning and technical implementation of future projects. The significance of impacts is estimated to be minor.

### **Impacts on safety and human living conditions**

Risk assessments have been prepared for the project, which are related to unexpected hazardous situations during the construction and operation of the pipelines. In the construction phase, risks are related to e.g. munitions clearance and potential oil spills as well as vessel collisions. In the operating phase, risks are related to potential defects in pipes and resulting gas leaks. The coordinating authority considers it important that a mitigation strategy has been prepared for emergency situations, which aims at preventing or mitigating hazardous situations during construction. An emergency response plan will also be prepared and implemented for the project in the operating phase.

In the Kotka region, people were concerned about reduced traffic safety as well as noise and dust problems caused by the extraction of rock material and road transport.

The planned interaction with target communities was considered important, which provided an opportunity to receive direct and immediate information about potential disadvantages. Reactions to disadvantages must also be immediate enough.

### **Monitoring of impacts**

The proposal for the monitoring programme of the project, which was presented in the report, is appropriate. Underwater noise is measured in the vicinity of the munitions clearance sites and in areas, which are known to be significant for marine mammals (seal sanctuaries). It is proposed that potential impacts on fishing will be monitored by



conducting a questionnaire survey directed to fishermen after the construction phase and by analyzing the movements of fishing vessels. Furthermore, the monitoring programme includes the monitoring of the sites of cultural heritage during and after the construction phase. Detailed monitoring programmes will be prepared during the permitting phase. Then, based on specified clearance and construction plans, the monitoring need of the spreading of solid substance and contaminants and related impacts must be re-assessed especially near sensitive objects.

### **International procedure**

International procedure has been applied in this EIA procedure according to sections 14, 15 and 22 of the EIA Act. The obligations of the Espoo Convention (the UNECE Convention on Environmental Impact Assessment in a Transboundary Context E/ECE/1250, SopS 67/1997) and the Agreement between the Government of the Republic of Estonia and the Government of the Republic of Finland on Environmental Impact Assessment in a Transboundary Context (SopS 51/2002) have been considered in the assessment procedure and in the preparation of the assessment report.

The Ministry of the Environment has provided an opportunity for the states of Russia, Estonia, Sweden, Denmark, Lithuania, Latvia, Poland and Germany to give a statement regarding the environmental impact assessment report not later than 30.6.2017. The Ministry of the Environment has delivered the received statements to the Uusimaa ELY Centre, which acts as the coordinating authority.

Among other things, the assessment of climate impacts caused by the project has been demanded in the international feedback. The coordinating authority states that the relationship of the project to international and national climate and energy strategies has been examined in the assessment report. The significance of gas is recognized in the Finnish national energy and climate strategy when moving towards carbon neutral society. The planned gas pipeline will not be connected to the Finnish gas network. The coordinating authority states that direct and indirect climate impacts caused by the project in the Finnish Exclusive Economic Zone have been adequately assessed.

The evaluation of onshore alternatives and improved evaluation of the zero-alternative have also been demanded in the international feedback. The coordinating authority considers that the evaluation of alternatives in the assessment report of the Nord Stream 2 project is in accordance with the Finnish national assessment programme and is sufficient in this respect.

Furthermore, the harmful impacts of the project on the integrity of the Natura 2000 network have also been emphasized in the international feedback and the related assessment has been considered insufficient. The coordinating authority states that, among others, studies on the number of munitions to be cleared, their location and clearance methods were not included in the assessment report. This information is necessary in the preparation of required Natura assessments and permit applications. The coordinating authority has required that the project developer must prepare the above mentioned additional studies and Natura assessments, which will be taken into consideration in the permitting procedure. The project has no transboundary impacts on the Natura 2000 areas in other countries.

In addition, the assessment related to fishing and offshore traffic has been considered insufficient in the international feedback. This is also considered in the statement of the coordinating authority.

Despite the deficiencies, the harmful impacts of the project have been identified as well as adequately examined and estimated in the assessment report in this EIA phase. The coordinating authority has presumed that missing additional studies and estimates must be prepared by the time of the permitting procedure of the selected alternative.

The coordinating authority considers that the project developer must deliver a written rejoinder to the coordinating authority, which provides a relevant reply to questions and revision needs received in the international hearing procedure. The Ministry of the Environment is the competent authority in the international hearing procedure according to the Espoo Convention and will deliver a written reply to the providers of feedback.

Pursuant to article 6 of the Espoo Convention, the Parties shall ensure that, in the final decision on the proposed activity, due account is taken of the outcome of the environmental impact assessment, including the environmental impact assessment documentation, as well as the comments thereon received pursuant to Article 3, paragraph 8 and Article 4, paragraph 2.

Pursuant to article 6 of the Espoo Convention and article 13 of the Agreement between Finland and Estonia, the Party of origin shall provide to the affected Party the final decision on the proposed activity along with the reasons and considerations on which it was based. Thus, the permit authority shall provide the decision to the Ministry of the Environment, which will forward it to the affected Party. Relevant parts of the permit should be translated into English.

## Participation and reporting

The participation process has been clearly presented in the assessment report. During the public display of the assessment report, public hearings were organized in Kotka, Helsinki and Hanko, which were attended by the representatives of the project developer, consultant and coordinating authority together with a total of 22 participants. Among other things, the political impacts of the project and the debate raised on the project in other countries were discussed in public hearings. The timetable of the project and Natura assessments, amendments to laws and regulations, permitting procedure, selection of alternative routes, munitions clearance, the need for applying the EIA procedure to ancillary activities as well as the decommissioning options of pipelines were also brought up in the discussion.

For authority cooperation, the project has formed an EIA expert group. Meetings have also been held with other authorities, research institutes, civic organizations and stakeholders. Data and material used in the assessment have been on display in Internet on the web pages of the Uusimaa ELY Centre and the project developer. A possibility to give feedback was also provided through the map portal.

Three questionnaire surveys were conducted in the assessment report, which were directed to residents and fishermen. Information was gathered from trawlers in the Gulf of Finland about the potential impacts of the project and updated information about commercial fishery in the Gulf of Finland was requested. Information about the attitudes of people towards the project and its potential impacts were gathered through a questionnaire study directed to the residents living in the southern coast municipalities. A citizen survey was conducted for the residents living near the Kotka onshore ancillary activities regarding the possible social impacts of the ancillary activities of the project.

The participation process of the project has been managed in a versatile and appropriate way.

The assessment report is illustrative, consistent and written in a professional way. The prepared environmental impact assessment has been an open process. Adequate and diversified opportunities for participation have been provided in the assessment.

## 5. SUMMARY AND RECOMMENDATIONS FOR FURTHER PREPARATION

The coordinating authority considers that the assessment report is properly prepared and adequate in this EIA phase. The EIA report provides a good basis for the preparation of Natura assessments and the permit application according to the Water Act.

The most significant harmful impacts of the project are caused during construction and are directed to marine mammals, which are the protection objective for Natura 2000 areas. Construction can also cause harmful impacts on sea birds and underwater habitats as well as promote the spreading of solid substance and contaminants. Furthermore, disadvantages can also be directed to offshore and onshore traffic during construction. During the operation, Nord Stream 2 project can cause harmful impacts on commercial fishery and restrict the future use of the Finnish Exclusive Economic Zone.

The coordinating authority presumes that harmful impacts will be assessed in more detail in the impact assessments of Natura 2000 areas, which are located in the project impact area. The latest information about munitions and their location from seabed surveys as well as mitigation measures regarding clearance activities must be taken into consideration in these assessments. Detailed plans for munitions clearance must be prepared in the permitting phase, when the results from Natura assessments are available.

Available mitigation measures to harmful impacts must be implemented as extensively as possible in the project. The timing of construction works must be planned so that areas having especially sensitive or threatened species should be avoided during the most susceptible periods of disturbance. Monitoring of harmful impacts and immediate repair works are necessary in order to avoid serious disadvantages and damages to fish, birds, mammals or other organisms caused by underwater detonations. An updated revision of the monitoring programme is to be presented during the permitting procedure.

The coordinating authority emphasizes that the southern route alternatives are clearly less harmful than the northern alternatives with regard to the environmental values of Natura 2000 areas and the future use of the Finnish Exclusive Economic Zone. The use of a dynamically positioned pipe-laying vessel in the Finnish Exclusive Economic Zone will reduce the need for munitions clearance and disadvantages to marine traffic and is clearly a less harmful alternative than the use of an anchor-positioned pipe-laying vessel.

The project developer must deliver a written rejoinder to the Uusimaa ELY Centre, which provides a relevant reply to questions and revision

needs received in the international hearing procedure. The Ministry of the Environment will deliver a written reply to the providers of feedback.

## 6. PUBLIC DISPLAY OF THE STATEMENT

The Uusimaa ELY Centre will send the statement of the coordinating authority to the statement providers and to those who expressed opinions. The statement can be viewed online at: [www.ymparisto.fi/nordstream2YVA](http://www.ymparisto.fi/nordstream2YVA).

The Uusimaa ELY Centre will send copies of the statements and opinions received concerning the assessment to the project developer. The original documents are stored at the Uusimaa ELY Centre. The statements and opinions received can be found in their entirety online at: [www.ymparisto.fi/nordstream2YVA](http://www.ymparisto.fi/nordstream2YVA).

Deputy to Director  
Leading Expert

[signature]  
Eija Lehtonen

Chief Inspector

[signature]  
Leena Eerola

## FOR INFORMATION

Ministry of the Environment  
Finnish Environmental Institute  
Statement Providers  
View Presenters

## APPENDIX

### FEE DETERMINATION AND APPEAL

#### Fee determination

The fee for a statement relating to a demanding project and provided by the ELY Centre as regards the EIA report is EUR 16 000 (24-32 man days).

#### Applied legal instructions

Act on Environmental Impact Assessment Procedure (EIA-Act, 468/1994)

Act on Criteria for Charges Payable to the State (150/1992) 8 §

Government Decree (1554/2016) on the fees payable in 2017 to the Centres for Economic Development, Transport and the Environment, Employment and Economic Development and the Development and Administration Centre.

### **Appealing the fee**

If the party responsible for the fee considers that there has been an error in its determination, they have a right to appeal to the Centre for Economic Development, Transport and the Environment within six months of the date of this statement.