



APOSTROPH  
ÜBERSETZUNGEN & BERATUNG  
*Dr. Elisabeth Stofer Wolfgang Krebs*

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APOSTROPH AG

Dr. Elisabetha Stofer  
Präsidentin des Verwaltungsrates  
Chair of the Board of Directors  
Présidente du Conseil d'administration  
Presidentessa del Consiglio d'amministrazione  
Presidenta del Consejo de Administración

**Bescheinigung**

Der beurkundende Notar des Kantons Luzern bescheinigt hiermit, dass Elisabetha Stofer, geb. 13. Februar 1950, geschieden, Unternehmerin, von Neuenkirch (Luzern), wohnhaft Rigistrasse 63, 6006 Luzern, die obenstehende Unterschrift in seiner Gegenwart angebracht hat.

Frau Elisabetha Stofer ist dem Notar persönlich bekannt.

**Certification**

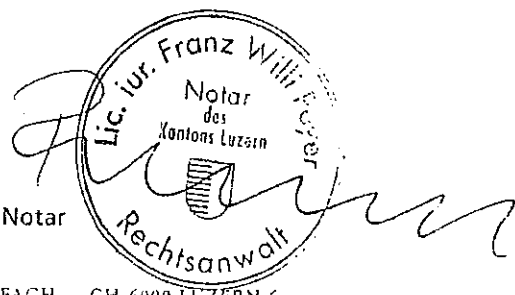
The certifying Notary of the Canton of Lucerne hereby confirms that Elisabetha Stofer, born 13 February 1950, divorced, entrepreneur, of Neuenkirch (Lucerne), residing at Rigistrasse 63, 6006 Lucerne, has affixed the above signature in his presence.

Ms. Elisabetha Stofer is known personally to the Notary.

Luzern, 20. November 2009

Ord. Nr. 2009/1349/M

Der Notar





/Coat of Arms/  
THE GOVERNMENT

**Government Decision IS**

5 Nov 2009

N2008/147/FIN

Ministry of Enterprise,  
Energy and  
Communications

Nord Stream AG  
Representative: Mikael Berglund, Attorney-at-Law  
Fröberg & Lundholm Advokatbyrå AB  
Strandvägen 7B  
114 56 STOCKHOLM  
SWEDEN

**Application for a licence under section 15 a of the Continental Shelf Act (1966:314) to lay two pipelines for the transport of natural gas on the continental shelf in the Swedish economic zone of the Baltic**

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2 appendices

**The Government's decision**

Pursuant to section 15 a of the Continental Shelf Act (1966:314), the Government grants a licence for Nord Stream AG (the Company) to lay two pipelines for the transport of natural gas on the continental shelf in the Swedish economic zone of the Baltic along routes specified in the Company's application, *Appendix 1*.

The building and construction work needed to lay the pipelines (the activity) must have been completed by no later than 1 January 2016. The licence will lapse on that part of the activity on which such actions have not been taken at that time.

The following conditions and undertakings made by the Company shall apply to the licence:

1. Save as otherwise appears from the conditions and undertakings below, the activity shall be designed and carried on in accordance with the Company's statements and undertakings in the application and other documents relating to the matter.
2. The pipelines shall be positioned in accordance with the coordinates to be established by Geological Survey of Sweden (SGO) pursuant to the instructions that the Government has today given the agency, *Appendix 2*.

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3. The activity must not impair or render impossible the use and repair of existing underwater cables and pipelines. Agreements on these shall be entered into with the owners of the cables and pipelines concerned.

This applies to both known and currently unknown owners of the cables and pipelines

4. In order to be able to keep shipping informed using internationally established methods, such as Notices to Mariners (NM), electronic nautical charts (ENC) and navigational warnings, the Company shall inform the Swedish Maritime Administration of work at least one calendar month before the activity begins and thereafter on an ongoing basis as the activity progresses and when the work finishes. Information to the Swedish Maritime Administration must be sent to the following address:

Sjöfartsverket (the Swedish Maritime Administration)  
Ufs/Baltico  
601 78 Norrköping  
Sweden

Tel: +46 11 19 10 45

Fax: +46 11 23 89 45

Email: ntm.baltico@sjofartsverket.se

5. At least one calendar month before work on laying each pipeline begins, the Company shall consult the Swedish Maritime Administration, the Swedish Transport Agency and the Swedish Coastguard on the measures required to safeguard shipping against disruption and to ensure the safety of passing vessels during the laying of each pipeline in the deepwater sections south of Norra Midsjöbank and Hoburgs Bank. The Company shall pay for such measures and shall follow the instructions given by the Swedish Maritime Administration, the Swedish Transport Agency and the Swedish Coastguard.

6. After each pipeline has been laid, the Company shall provide the Geological Survey of Sweden, the Swedish Maritime Administration, the Swedish Coastguard, the Swedish Meteorological and Hydrological Institute (SMHI) and the Swedish Armed Forces with the coordinates of the exact route of the pipeline in question and its height above the seabed along its entire route.

7. The Company shall have an audit programme for supervision of the activity during the construction and operations phases of each pipeline. This audit programme shall be developed in consultation with the Swedish Coastguard, the Geological Survey of Sweden, the Swedish Environmental Protection Agency, the Swedish Maritime Administration, the Swedish Transport Agency, the Swedish Board of Fisheries and the Swedish Meteorological and Hydrological Institute. The forms and scope of the audit programme shall be established

sufficiently in advance of the commencement of the work. The audit programme shall be the object of ongoing review and shall be revised as required. Any surveys, studies etc. carried out as part of this audit programme shall be made available to the relevant authority.

8. The Company's audit programme shall include monitoring bottom currents and stratification of bottom water in the Bornholm Basin, monitoring sediment spillage during the construction phase and monitoring turbidity levels during underwater operations as provided by section 9.

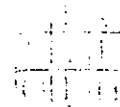
9. When handling anchors and performing construction work in depths of less than 35 metres during construction work in the deepwater sections south of Norra Midsjöbank and Hoburgs Bank, the Company shall take measurements of the actual depth immediately after laying of the pipe is complete and confirm to the Swedish Maritime Administration and the Swedish Transport Agency that the depth has not changed with the laying of the pipe in question.

10. Turbidity caused by seafloor operations connected with the laying of each pipeline should, as a guideline, amount to a maximum of 15 mg/l at the boundaries of the Hoburgs Bank and Norra Midsjöbank (in accordance with the classification of these areas as Natura 2000 areas). The measurement technique and procedure shall be governed by the audit programme that the Company is to produce pursuant to section 7. If an audit of the turbidity shows that this value has been exceeded, additional precautionary measures shall be taken during seafloor operations, such as cutting back on or temporarily ceasing seafloor operations so that the value can be maintained. Thereafter, the Company shall, in so far as possible, ensure that any breach of the limit is not repeated.

11. Waste, both solid and liquid, shall be source-sorted, stored so that no pollution occurs and transported ashore to be dealt with in accordance with the rules applicable to the waste in question.

12. When running down the operation, the Company shall take restorative measures. The Company shall inform the Government of its intentions in plenty of time before the pipelines are taken out of service and, at the same time, provide a plan of how it is proposed that the rundown should proceed. The operation shall be deemed to have been closed down if there has been no transport of natural gas for a continuous period of two years. The Government will decide to what extent the pipelines should be removed by the Company and what other measures are required to restore the seabed to as close to its original state as possible.

The Government draws attention to the Swedish Armed Forces' opinion that it will be necessary to sweep military debris. Where such sweeping is needed, the Company shall take measures to monitor the occurrence of and frighten away marine mammals and fish. In the event of mines



and other unexploded ammunition or other military debris, such as chemical weapons, in addition to those identified in the Company's application, being encountered during construction work etc., the Company shall be responsible for the removal of those objects if there is a need to do so from a safety point of view.

The Government further draws attention to the fact that, by section 2 a of the Continental Shelf Order (1966:315), the Swedish Coastguard monitors compliance with section 15 a of the Continental Shelf Act and conditions made pursuant to that subsection.

### **The Matter**

#### Application

On 21 December 2007, Nord Stream AG applied for the Government's permission under section 15 a of the Continental Shelf Act (1966:314) to lay two pipelines for the transport of natural gas on the Swedish Continental Shelf in the Baltic along routes further specified in *Appendix 1*, within a 200 metre corridor along each route.

The Company states that the construction work will be carried out and the activity pursued as follows.

The application relates to the Swedish part of a network of pipelines consisting of two pipelines for the transport of natural gas through the Baltic from Portovaya in Viborg, Russia, to Lubmin in Greifswald, Germany. The pipelines will be laid outside the territorial limits of the Russian, Finnish, Swedish, Danish and German continental shelves, and on the Russian, Danish and German continental shelves in those countries' territories. The Company will be responsible for developing and laying the pipelines on the bottom of the Baltic and will also subsequently be responsible for their operation.

The individual steel tubes of the pipelines are approximately 12 metres long. Their wall thickness varies along the route between 26.8 millimetres and 41.0 millimetres depending on where the pipe is to be laid. The pipes have a nominal diameter of 1,200 mm. The pipes will be coated internally with an epoxy-based material to increase the flow rate. Externally the pipelines will be provided with an anti-corrosion coating. The anti-corrosion coating will in turn be coated with reinforced concrete. The concrete coating will be applied in thicknesses of between 60 millimetres and 110 millimetres and will provide the pipelines with extra weight so that they rest firmly on the seabed. In addition the pipelines will be provided with cathodic protection (corrosion protection) in the form of sacrificial anodes, for example an aluminium alloy that is activated by indium.

According to the Company, the pipelines will be laid using a pipe-laying vessel. The pipe-laying vessel will be manoeuvred and propelled by means of anchors. The anchors will be laid by small specialised vessels. The pipe-laying vessel will also be supported by other vessels including those that deliver the sections of pipe and survey vessels. The steel pipes will be delivered to the pipe-laying vessel, where they will be welded together into a continuous pipeline. The pipes thus joined together will then be launched over the stern of the pipe-laying vessel and sunk to the bottom as the vessel moves forward. Because the seabed is uneven, underwater operations will be required in certain parts of the route in order to ensure the stability of the pipelines by avoiding both excessively long free spans without any contact with the seabed and movement of the pipelines caused by currents. In certain places the work on the seabed will also protect the pipelines from the effect of shipping traffic. Interference with the seabed in the Swedish economic zone consists mainly of laying stone east of Gotland and Hoburgs Bank, while excavations are planned east of Gotska Sandön in the area between Norra Midsjöbank and Södra Midsjöbank. The pipe-laying process and interference with the seabed will cause turbidity from bottom sediment. Underwater operations may also be required when crossing the four cables that have been located along the route on the Swedish continental shelf.

Mathematical models of the spread and sedimentation of disturbed sediment show that the spread of sediment from construction operations has a temporary local effect on water quality in the area of the construction work. The Hoburgs Bank and Norra Midsjöbank Natura 2000 areas are not affected by this activity. Noise will not reach populated areas because of the long distance to the Swedish coast. The noise levels are comparable with those generated by shipping traffic in general, and it is believed that noise will not disturb birds other than very temporarily. As regards underwater noise, it is believed that this may lead to avoidance reactions in fish and mammals, but that the effect will only be short term.

Stone will generally be laid in deeper water where the oxygen conditions are worse than in shallower water. The material for stone laying will be obtained from onshore quarries. All rocky material used for laying will be clean, well-fragmented stone from the basalt, gabbro and granite groups. It will not contain any pollutants, e.g. heavy metals, that might be released into the brackish water of the Baltic. The material to be used will remain chemically stable during the system's designed life of fifty years, so that the material is not cemented but will bind together so that its compressive strength does not diminish to any significant extent. The material will not have any significant iron content and will be free of clay, ooze, chalk, vegetable matter and harmful substances such as chemicals from drilling and explosives. Only crushed, new, unweathered stone will be used.

The effect on the environment in the surrounding sea is closely linked to the evaluation of the effect on water quality. The spread of sediment

from pipe laying and anchor handling is considered to be insignificant. It is believed that only excavation and stone laying in shallow water will cause sediment concentrations capable of affecting phytoplankton or zooplankton locally close to the route of the pipeline. Stone laying, which is normally carried out in deeper water, will not affect the pelagic environment. However, nutrients and pollutants may be released. The release of nutrients in the section of the pipeline in relatively shallow water south-east of Gotland may marginally stimulate the production of phytoplankton. However, these effects will last for a very short time and no or very minor consequences for the environment in the open sea are anticipated. The effect on the marine fauna on and close to the bottom is thought to be limited to those areas where the pipeline is placed directly on the seabed, areas where stone embankments are constructed and close to areas where entrenching and stone laying are carried out. The effect on the fauna in areas directly affected by seafloor operations is believed to be of medium to long term, until faunal communities have been re-established. Depending on the oxygen conditions, it is expected that the species of animal concerned will re-colonise the areas shortly after work on the seabed has been completed.

The field study carried out by the Geological Survey of Sweden on behalf of the Company showed that fauna was completely absent on or close to the bottom in many of the deepwater areas, or occurred only in the form of a few individual species. It is believed that the effect on the marine fauna in these areas will be limited since the spread of sediment from stone laying is low and restricted to the lower parts of the body of water close to the seabed. It is expected that construction work, with its locally increased water turbidity, noise, etc., will lead to avoidance reactions among fish and marine mammals. However, no long-term consequences are foreseen. Shipping traffic, noise and light during construction work may disturb birds within a short distance of the pipe laying vessel (1-2 kilometres). However, the duration of the disturbances is limited, since the pipe-laying vessel moves 2-3 kilometres per day. The disturbance will not differ appreciably from that caused by normal shipping traffic, which amounts to 15-20 vessels per day east of Gotland. Observations have also shown that fast-moving vessels have the greatest effect on seabirds. For example, eider and cormorants are affected considerably more by high-speed ferries than by traditional ones. Hoburgs Bank and Norra Midsjöbank and Södra Midsjöbank are particularly important in winter as wintering grounds for large numbers of birds. However, even if the construction work is carried out in the winter, the effect will be insignificant since it will be confined to a very small area that the birds are expected to avoid temporarily during the period of construction. Any substantial reduction in the visible depth resulting from increased turbidity will occur only in the proximity of those places where underwater operations are carried out and only for a limited time. Sediment spillage from construction activities must be monitored throughout the period of construction to evaluate the results of the model and to quantify the actual effect. An

audit programme is being prepared, which will include checking the amount of sediment released.

Several different complementary methods have been used to localise risks to the seabed, including multi-beam echo sounding (MBES), high-resolution side-scan sonar (SSS), penetrating echo sounding and magnetometry. As a second stage, a 6.5 metre wide gradiometer array with 12 sensors was mounted on a remotely operated underwater vehicle (ROV), used to detect ferrous metals on the seabed in the installation corridor. In addition, a geophysical survey has been carried out covering the anchoring corridor, which takes in approx. 800-1,000 metres, depending on the depth of water. The anchoring corridor has been surveyed to ensure that there is a free passage for the laying vessel's anchors. The survey identifies, verifies and charts all obstacles that must be avoided during laying. Eight mines have been found in the anchoring corridor. The majority of the mines have been encountered in or close to historical minefields. A final assessment of whether any of these mines need to be swept is awaiting archaeological examination of the corridor by the Swedish National Maritime Museums, among other things. The company's present assessment is that one of the eight mines will need to be swept, while the others will be avoided during anchor handling. In addition, one intact mine was previously encountered during the surveys of the pipeline corridor. The pipeline corridor constitutes the safety distance around each pipeline that was surveyed in order to establish that there were no munitions or other military debris that could constitute a hazard to the pipelines or the environment in the proximity of the pipeline concerned. Overall, this means that two mines located in the Swedish economic zone will probably have to be swept because of the project. Over the last ten years, navies in the countries in the Baltic region have jointly developed safe and effective methods for sweeping mines and other explosives on the bottom of the Baltic. The Company will follow these well-developed procedures and will also discuss the process with the relevant authorities. Monitoring the environmental effect of the explosion of a mine in the Swedish economic zone will be included in the audit programme. There are also well-proven methods for minimising the effect of detonating mines on maritime animals and birds. This means, for example, that sweeping of munitions will be timetabled outside important periods for spawning and reproduction and that acoustic signals will be used to frighten off any mammals and fish in the area.

The exact coordinates of each pipeline will be provided to all national authorities and maritime agencies to be put on maritime charts. Besides the detailed coordinates of the pipelines, details will be provided of depth of water, the depths to which the pipes are buried in the seabed and of work carried out on the seabed, for example areas of stone laying. All this information will form part of the company's pipeline documentation compiled when construction work is complete. The documentation will be sent to the authorities in digital form with a precision of position measured in metres.

The gas transported will consist of dry natural gas in gaseous form. The pipelines will be checked and controlled from a control room, probably located in Zug, Switzerland. According to the Company, internal and external inspections of the pipeline will be carried out regularly. External inspections include both surveys to monitor the pipelines' position in relation to the seabed and the cathodic protection system. Internal inspections will be carried out using technically advanced cleaning and inspection pigs. In addition, there will be continuous surveillance of the pipeline system to detect leaks from the pipe from the resulting fall in pressure. Despite the pipeline system being designed to be maintenance-free, it may be that signs of premature wear or damage to the pipelines will be encountered on an inspection. If this is the case, repair actions will be taken.

When the need for the pipelines has ceased, or their economic life has been reached, the flow of gas will be turned off. The pipelines will be done away with, either by removing them or by emptying them of gas, filling them with water and leaving them in place on the seabed. The currently prevailing view is that it will have least effect on the environment if the pipelines are left in place on the seabed, but the assessment will be made in accordance with the environmental protection standards in force at the time the operation of the pipelines is run down.

### **Processing of the matter**

#### *Consultation*

On 9 March 2009 the Government Offices (Ministry of Enterprise, Energy and Communications) circulated a request for opinions no later than 8 June 2009 to Swedish authorities including the county administrative boards concerned, municipalities and other organisations. The application was sent to the Swedish Environmental Protection Agency, the Swedish Board of Fisheries, the Geological Survey of Sweden (SGU), the Swedish Maritime Administration, the Swedish Transport Agency, the Armed Forces, the Swedish Meteorological and Hydrological Institute, the Swedish Coastguard, the Swedish Geotechnical Institute (SGI), Swedish National Maritime Museums, the National Board of Housing, Building and Planning, the Swedish National Heritage Board (RAÄ), Swedish Civil Contingencies Agency (MSB), the Swedish Energy Agency, the National Defence Radio Establishment (FRA), the Swedish National Police Board (RPS), the Legal, Financial and Administrative Services Agency, the Stockholm, Kalmar, Gotland, Skåne, Blekinge, Södermanland and Östergötland county administrative boards, municipalities of Nynäshamn, Södertälje, Nyköping, Oxelösund, Trosa, Söderköping, Valdemarsvik, Oskarshamn, Torsås, Norrköping, Borgholm, Kalmar, Mönsterås, Mörbylånga, Västervik, Karlskrona, Sölvesborg, Karlshamn, Kristianstad, Ronneby, Bromölla, Simrishamn, Ystad and Gotland, Gotland University and the University of Kalmar, the Swedish Defence Research Agency (FOI), the Stockholm Marine Research Centre, the Swedish Environmental Impact Assessment Centre at the Swedish University of Agricultural Sciences,

the Swedish Society for Nature Conservation (SNF), the WWF, Greenpeace, the Swedish Ornithological Society (SOF), the Swedish Fishermen's Federation (SFR), the Swedish Professional Fishermen's Financial Association (Sveriges yrkesfiskares ekonomiska förening) and the Swedish Species Information Centre.

In addition, views were received from the Gotland Ornithological Association, the Chamber of Commerce of East Sweden, Stiftelsen Våröhus and Swedish Wind Energy.

On 5 June 2009 the Company came back with supplementary documentation on alternative routings of the pipeline south east of Gotland in accordance with the views previously stated by the Swedish Environmental Protection Agency, the Swedish Maritime Administration and the Swedish Transport Agency. This additional documentation was sent to the above bodies for their opinion and at the same time the deadline for responses was extended until 21 August 2009.

#### *Views of the bodies consulted*

Several of the bodies consulted, including the Swedish Energy Agency, the National Defence Radio Establishment (FRA) and the Swedish National Police Board (RPS) had no objection to the application or to the Government granting a licence. The Geological Survey of Sweden considered that the Company should discuss in an acceptable manner the effect of the installation on geological conditions and processes and their effect on the installation. The Geological Survey of Sweden had no other objections. The Swedish Coastguard suggested that the measures it was intended to take to warn other shipping and to monitor the sea area employed during the laying phase were in accordance with current practice and were adequate to avoid incidents and accidents. According to the Swedish Coastguard, the activities during the laying phase should not appreciably increase the risk of major acute environmental accidents resulting in releases of oil or any other harmful substance. The Coastguard therefore believes that any accidents can be countered by means of the same resources as are available on a daily basis at national and international level plus additional reinforcements that have already been planned. Given this, the Swedish Coastguard cannot see that the risks and their consequences are of such a nature that the project should not be carried out.

There were, however, objections from a number of the bodies consulted. The majority of bodies consulted also proposed that a licence be combined with conditions or undertakings by the Company.

The Swedish Environmental Protection Agency suggested that a combination of the eastern alternative routes that the company reported on in June 2009 was preferable from an environmental protection point of view to the route for which the Company was applying. According to the Environmental Protection Agency, this would involve an expanded buffer zone between the Hoburgs Bank and Norra

Midsjöbank Natura 2000 areas and the pipelines. It is the Swedish Environmental Protection Agency's view that special attention should be paid and the greatest possible prudence shown when routing the pipelines past these offshore banks. The Agency notes that over a million long-tailed duck, rather over a quarter of the total European population, winter on the banks, and that this means that Sweden has special responsibility for the species under Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds. The Agency therefore considers that, so far as possible, construction work in those sea areas should be avoided during that part of the year. Furthermore, according to the Agency, this would also involve less need for construction and strengthening work during laying and hence reduced turnover of sediment.

The Swedish Maritime Administration and the Swedish Transport Agency have suggested that, where the pipelines cross the deepwater channel south of Norra Midsjöbank and Hoburgs Bank, they should be laid at right angles to the direction of the deepwater channel in order that vessels are affected by the pipelines to the minimum possible extent. By this, the Maritime Administration and Transport Agency mean both risks related to delayed anchoring during the operation phase and risks of collisions during the construction phase, and maintenance and repair work and from any leakage from the pipelines. As the Swedish Maritime Administration and Swedish Transport Agency see it, the basis of responsibility in the event of an accident from emergency anchoring should therefore be clarified if and before the pipelines are run through the buffer zones of the deepwater channels. The routing of an unprotected gas pipeline should, in the opinion of the Maritime Administration and the Transport Agency, be done outside the buffer zones.

The Swedish Board of Fisheries suggested that the project would have unfavourable consequences for both the aquatic environment and for the fishing industry in the Baltic. According to the Board of Fisheries, the effect on fish will arise mainly during the time the pipelines are being laid, chiefly as a result of the spreading of sediment and pollutants, sedimentation and noise. The Board of Fisheries therefore opposes construction work being carried out in the Bornholm Deep during the period May-October when the spawning of cod takes place. The Board of Fisheries further considers that there should be an audit programme in which proposals for surveys of effects on recruitment of cod, herring and flatfish and effects on catches and fishing patterns in commercial fishery and leisure fishing should be reported.

The Swedish Armed Forces have suggested that the width of the safety corridor (pipeline corridor) should be increased to 100 metres and that the requisite surveys be carried out within it. The Swedish Armed Forces consider that, with a minor adjustment, one of the more easterly alternative routes on which the Company has reported constitutes the safest alternative in terms of the risk of munitions, since, unlike the route applied for by the Company, such a route crosses only one

minefield instead of three. In the Armed Forces' view, it is probable that there are more mines and mine-related objects than are put forward in the application. In the Swedish Armed Forces' view, these will be encountered when the bottom surveys of the anchoring corridor have been carried out.

The Swedish Meteorological and Hydrological Institute has suggested that it is remarkable that the documentation model used for calculating bottom currents, stratification and sediment spillage, has not been validated to the extent one might expect in an industrial project such as the one at hand. The Institute considers that there are grounds for requiring monitoring of sediment spillage to be carried out consistently during the construction period in order to ensure that the actual spread of sediment keeps within reasonable bounds and accords with the results from the model. The Institute further suggests that the documentation should be supplemented by detailed mathematical models of the immediate proximity to the pipelines and by measurements of currents and stratification in critical areas where effects may be expected. According to the Institute, the practice should be to follow the best conceivable and existing techniques to show that the effects are negligible and that small effects do not have an impact over time.

The Swedish Geotechnical Institute has suggested that the Company has not stated how the geotechnical analyses were performed. According to the Institute this means that it is not possible to decide whether the documentation and calculations are deficient in this respect. The Institute considers that the activity should be made conditional on an audit programme being designed and on taking adjoining protected objects into account. The Institute further believes that turbidity from the construction phase should be limited in intensity, time and space so as not to harm the surrounding environment.

The Swedish National Heritage Board suggested that there was no obstacle to granting the project a licence from the point of view of conservation of the cultural environment, provided that the pipeline alignments sought by the Company were chosen. According to the National Heritage Board, a further condition should be that the anchoring corridor needed for the laying work should have undergone an archaeological analysis before work got underway and measures should have been taken to protect any existing fixed prehistoric remains within the corridor from damage.

The Stockholm County Administrative Board suggested, among other things, that there should be descriptions of the length of sections to be ploughed, the sections that were currently under consideration for ploughing and whether those sections adjoin areas with more sensitive ecosystems. If blasted rock/gravel is used, the County Administrative Board considers that it should be ensured that this is cleansed of explosive residues in order to minimise the release of nitrogen pollution into the water. According to the County Administrative Board, in order

to be able to assess the total environmental impact of the project, the risk assessment chapter should be supplemented by a worst case scenario. In order to ensure that there are resources for restoration work in 50 years, the County Administrative Board considers that there should be some form of economic security before the pipelines are laid to cover the cost of lifting and dealing with the pipelines and of restoration work on the seabed.

The Kalmar County Administrative Board suggested that the alternative routes past Hoburgs Bank and Norra Midsjöbank and Södra Midsjöbank as put forward by the Company in June 2009, have consequences for Södra Midsjöbank that are worse than the route sought by the Company. An alignment of the pipelines across Södra Midsjöbank should, according to the County Administrative Board, be avoided from the point of view of both the cultural environment and fisheries and so as not to make it impossible to use the area for wind power production. With regard to the alignment of the pipelines past Norra Midsjöbank, the County Administrative Board considers that, from the pollution point of view, the impact of the route applied for by the Company is greater on the bank during the construction phase. However, during the operating phase the impact is the same as for other alternative routes.

The Gotland County Administrative Board suggested that the project would have a negative impact on the already manifestly disturbed environment of the Baltic. According to the County Administrative Board, the alternative routes south east of Hoburgs Bank put forward by the Company are all worse than that applied for by the Company. In the County Administrative Board's view, the risk of permanent damage to protected and sensitive areas within the Swedish economic zone is probably small. The County Administrative Board notes that the assessments of the affects that the Company reports in its environmental impact statement show that overall effect of ammunition and chemical munitions is insignificant to moderate. The County Administrative Board would nevertheless like to point out that the local effects of sweeping munitions along the planned route may be relatively extensive.

The Skåne County Administrative Board suggests that the possibility of entrenching or jetting over relevant parts of the pipeline should be examined, in the first instance in those areas where fishery interests are significant. In order to be able to make a further assessment of the risk of shipping and fishing accidents in the area around the gas pipeline, the County Administrative Board would like a report on the currently intended preventive measures, e.g. targeted awareness campaigns and audit programmes.

The Swedish Species Information Centre questioned whether the environmental impact statement was complete and adequate for the important and difficult examination that the Government had to perform. The Swedish Species Information Centre suggested that the alternative route that the Company put forward in June 2009 was not

good from an overall environmental point of view. The alternative passed through deeper areas than the option applied for by the Company, with a higher concentration of envirottoxins and a risk of their release during pipe-laying. All alternative routes passed across Södra Midsjöbank, which has a rich fauna and flora.

The Swedish Society for Nature Conservation (SNF) feared that a pipeline would impede work on achieving a good ecological status for the Baltic. The Society therefore considers that there must be a fundamental requirement that the project should not mean the environmental position being impaired in any respect. The effect that it is believed will result from the project, during construction and operation and later on when dismantling the pipelines, must, in the Society's view, be counteracted by preventive and compensatory measures.

The Swedish Ornithological Society (SOF) considers that the route proposed by the Company and the alternatives investigated most recently probably do not risk causing serious damage to bird life in the relevant areas. The alignments have a closest distance of 3.2 kilometres from Norra Midsjöbank and 4 kilometres from Hoburgs Bank. According to the Society, these shallows must be regarded as extremely important for wintering seabirds, particularly long-tailed ducks. The Society notes that Hoburgs Bank alone has around a million long-tailed ducks in the winter and is one of the world's most important wintering grounds for that species, and furthermore that the long-tailed duck has declined greatly in recent years. Every additional risk of disturbance must therefore be avoided in the Society's view. The Society considers that the present large number of shipping movements off Hoburgs Bank and Norra Midsjöbank and other activities such as future maintenance should therefore take place a long way from the shallows. The Society believes that any work in the winter when the birds are concentrated demands special attention. The Society sees no advantages and possibly disadvantages in alternative alignments since, among other things, they pass over or close to Södra Midsjöbank.

*The Company's response to the points made in reply*

The Company has been given the opportunity to respond to the views of the bodies consulted. It has done so in a statement that was received by the Government Offices (Ministry of Enterprise, Energy and Communications) on 30 September 2009. In it, the Company proposed that approval of the Company's application be combined with the measures set out in the statement.

The Company's response to opinions was sent to the Swedish Environmental Protection Agency, the Swedish Maritime Administration, the Swedish Transport Agency, the Swedish Board of Fisheries, the Swedish Coastguard, the Swedish Geotechnical Institute, the Swedish Meteorological and Hydrological Institute, the Swedish Armed Forces, the Swedish Civil Contingencies Agency, the Swedish

National Heritage Board (RAÄ) and the Swedish Defence Research Agency (FOI).

*Additional views of the bodies consulted*

The Swedish Coastguard stated that the risks and possible consequences had been dealt with exhaustively in the consultative documents and that the agency had no further suggestions.

The Swedish Civil Contingencies Agency (MSB) stated that the Company had responded to the Agency's views in a satisfactory manner and that the authority had no further suggestions.

The Swedish National Heritage Board (RAÄ) stated that the Company had accommodated the Board's views and, provided that the alignment identified by the Company was chosen and that the Company followed the instructions given by the Swedish National Maritime Museums, no barrier remained from a cultural environment point of view to a licence for the project being granted.

The Swedish Transport Agency persists in its views (*see p. 9*) and is otherwise satisfied with the Company's response.

The Swedish Defence Research Agency (FOI) stated that, in the environmental classification of polluted areas in Sweden, an "overall risk assessment" was made on the basis of facts about the hazardousness of the contaminants, pollution level, etc. According to the Agency, it is not apparent how the Company has actually incorporated such a factual basis into its qualitative environmental assessments of e.g. chemical munitions.

The Swedish Environmental Protection Agency adheres to its views (*see p. 9*) and considers that, in addition to the undertakings made by the Company, any licence should be combined with further conditions with local specifications, detailed timetables, etc.

The Swedish Meteorological and Hydrological Institute draws the conclusion that the project's impact on the environment, flow and eutrophication may be regarded as negligible if a requisite audit programme is implemented and if the Company reports the position and height above the bottom of the gas pipelines along the entire route.

The Swedish Geotechnical Institute (SGI) prefers a greater safety margin in the assessment of the strength of the bottom clay, but believes that other questions have been dealt with satisfactorily.

The Swedish Maritime Administration maintains its previous position (*see p. 9*) and notes that, in unfavourable circumstances, the route sought by the Company could lead to a delay in anchoring and hence increase the probability of oil spills from vessels. The Administration

further considers that the Company's proposed conditions broadly correspond to those that it has specified.

The Swedish Board of Fisheries notes that the majority of the views previously put forward by the Board have been taken into account by the Company but maintains that, when major maintenance or repair work in the Bornholm Deep is needed, the Company should consult the Board so that disturbances to cod are minimised. The Board of Fisheries presumes that fishermen who are not members of the Swedish Fishermen's Federation (SFR) will receive compensation under the contract that the Federation has concluded with the Company. The Board also considers that further conditions should be added concerning compensation, disaster planning in the event of accidents, etc.

The Swedish Armed Forces abide by their views (see p. 10) and note that the agency has received totally adequate information from the Company on the bottom surveys carried out, but that there is still a risk of undiscovered unexploded ammunition being present in both the anchoring and safety corridors.

#### *The Company's response to the additional views of the bodies consulted*

The Company responded to the views of the bodies consulted in a statement received by the Government Offices (Ministry of Enterprise, Energy and Communications) on 28 October 2009. The Company subsequently concluded its case on 30 October 2009 stating, among other things, that very detailed surveys of both the safety and anchoring corridors were being carried out. The Company also made suggestions for further measures.

#### **The Espoo convention**

The UN/ECE convention on environmental impact statements in a trans-boundary context, the Espoo Convention, contains provisions on environmental impact statements and trans-boundary consultation for activities that may be assumed to have a substantial harmful trans-boundary impact. All the states bordering the Baltic are parties to this Convention with the exception of Russia. Because of the project at hand, there has been consultation in accordance with the Convention between the parties concerned around the Baltic and Russia has also cooperated in these. As a result of this consultation, the Company has received views from the states concerned and produced an environmental impact statement for the pipelines along their entire route. In addition, Sweden has received views from Russia, Finland, Denmark, Germany, Estonia, Latvia, Lithuania and Poland through the Swedish Environmental Protection Agency. According to the Company, these relate to the part of the pipelines that will be laid within the Swedish economic zone. Sweden, via the Swedish Environmental Protection Agency, has sent the views of Swedish government agencies

etc. to Russia, Finland, Denmark and Germany on the parts of the pipelines that are intended to be laid there.

Sweden, via the Swedish Environmental Protection Agency, has sent the Company's comments on the views received to Finland, Estonia, Latvia, Lithuania and Poland. Replies to the Company's comments have been received from Finland, Estonia, Lithuania and Poland.

#### *Examination in other countries*

The Company has also applied for corresponding licences in Finland, Denmark, Germany and Russia. On 20 October 2009, Denmark granted a licence for the part of the gas pipelines involving Danish territory and the Danish economic zone.

#### **The reasons for the Government's decision**

Nord Stream AG has applied for a licence under section 15 a of the Continental Shelf Act to lay two pipelines for the transport of natural gas on the Swedish continental shelf in the Baltic along a route as shown in *Appendix 1*.

To begin with, the Government notes that the examination of the application must be based on the following circumstances.

The Company intends to lay the pipelines on the continental shelf within the Swedish economic zone. The pipelines will thus not involve Swedish territorial waters. The economic zone is not part of Swedish territory but is an area of international water over which Sweden, as a coastal state, has only such rights and duties as international law guarantees a coastal state.

The Government's room for manoeuvre in examining the application is thus considerably more limited than in a matter involving Swedish territorial waters. This is because the examination and decision must fall within the framework provided by Sweden's rights and duties under the United Nations Convention on the Law of the Sea (UNCLOS) and international law otherwise.

The application must be examined in accordance with section 15 a of the Continental Shelf Act (1966:314). This provision applies to the continental shelf outside Sweden's territorial limits and is based on the rules of international law, in particular on Article 79 of the UN Convention on the Law of the Sea.

Article 79 of the UN Convention on the Law of the Sea gives every state the right to lay pipelines on a coastal state's continental shelf within the economic zone. Subject to reservation of the right to take reasonable measures for exploring the continental shelf, extracting its natural resources and preventing, limiting and controlling pollution from pipelines, the coastal state may not impede the laying or upkeep of

pipelines. However, under the Convention, the route of a pipeline must be approved by the coastal state. It follows from the Convention on the Law of the Sea that, when pipelines are laid, states must give proper consideration to existing cables or pipelines. In particular, opportunities for repairing these must not be reduced.

When examining an application for a licence under section 15 a of the Continental Shelf Act, the assumption is that it is permitted to lay pipelines on the continental shelf outside the territorial limit. However, this right is not unconditional. A licence may be combined with the conditions needed to make it possible to explore the continental shelf and extract its natural resources, prevent, limit and control pollution from pipelines, and protect the opportunity to use and repair existing underwater cables and pipelines. A decision on a licence must state the route of the pipeline on the continental shelf to which the licence relates. The Government must examine whether the route applied for is suitable.

The rules of the UN Convention on the Law of the Sea involve a clear and general duty on all states to protect and conserve the marine environment, with special responsibility by the coastal state for preventing any harmful environmental impact in its economic zone and on its continental shelf. This must be taken into account when examining the Company's application.

The aim of the extensive preparatory work on this matter was, among other things, to create the conditions for the Company to accommodate the views of the bodies consulted. This has resulted in the comprehensive undertaking by the Company, which constitutes an important part of the Government's assessment.

The Company has made the following undertakings:

- To inform the Swedish Coastguard, the Swedish Armed Forces and the Swedish Transport Agency of work in plenty of time before the operation begins, and thereafter to keep the authorities informed on an ongoing basis of the progress of the work and when it is completed.
- To prepare a more detailed schedule for the construction work in plenty of time before the operation begins, and send this to the authorities concerned.
- Together with Swedish agencies, to draw up an audit programme in order to monitor the spread of sediment during entrenching and stone laying etc. so that there is no spreading of sediment within the Natura 2000 areas at Hoburgs Bank and Norra Midsjöbank.
- Where it is necessary to sweep military debris, to frighten away fish and drive away marine mammals by using acoustic scarers, etc., and letting off small explosive charges.

- During the construction phase to take risk-reduction measures identified in the Company's risk analysis and use an evacuation plan (Construction Emergency Response Plan, CERP) and other measures to avoid pollution as a result of any poisonous gas that has been salvaged and has been activated by contact with the air.
- To monitor the operation of the pipelines continuously, around the clock, seven days a week by means of a system for detecting leakage (Leak Detection System, LDS).
- If an emergency occurs during the operating phase, to apply an evacuation plan (Pipeline Emergency Response Plan, PERP) and immediately to take the actions laid down by the plan if a leak occurs.
- That all rocky material used in laying will be clean, well broken stone from the basalt, gabbro or granite groups, and that the rocky material will not contain any pollutants such as heavy metals that can dissolve in the brackish waters of the Baltic.
- The material will not have any significant iron content and will be free of clay, ooze, chalk, vegetable matter and harmful substances such as chemicals from drilling and explosives. Only crushed, new, unweathered stone will be used.
- To develop an emergency plan.
- Not to lay the pipelines in the Bornholm Deep during the cod spawning period in May-October, and to monitor any changed fishing patterns as part of the audit programme.
- To investigate whether it is possible to modify the construction schedule in line with the views put forward by the Swedish Environmental Protection Agency and the Swedish Board of Fisheries on laying the pipelines during the cod spawning period and while birds are wintering in the vicinity of Hoburgs Bank and Norra Midsjöbank.
- By means of an agreement with the Swedish Fishermen's Federation (SFR), to compensate Swedish commercial fishermen – both members and non-members of the Swedish Fishermen's Federation – who may be affected by any impact of the pipelines on fishing by providing new trawling gear, etc.
- During the construction phase, to offer a Swedish speaking person/fisherman who is familiar with fishing matters the opportunity to be present on the bridge of the pipe laying vessel during laying in the Swedish economic zone in order to facilitate communication with nearby fishing vessels.

- In the event of an archaeological analysis of geophysical data indicating that there are items of cultural heritage that need to be protected in the anchoring corridor, to ensure in consultation with the Swedish National Maritime Museums, that there will be no impact on those locations and objects.
- If requested, also to offer representatives of other Swedish government agencies concerned besides the supervisory agency the opportunity to be present on the pipe-laying vessel to a reasonable extent during construction work.

Several of the bodies consulted suggested, especially in the first consultative round, that the documentation of the matter should be added to in various respects. The Company has accommodated their views, since which time the majority of them have stated the Company has thereby responded to their views in a satisfactory manner. According to the Government's assessment, the Company's application can be examined on the basis of the existing brief.

The Swedish Environmental Protection Agency has rejected the route applied for by the Company and suggested that a more easterly route off Hoburgs Bank and Norra Midsjöbank is preferable from a nature conservancy viewpoint. The Swedish Society for Nature Conservation shares the Environmental Protection Agency's assessment. In response to this the Company has stated that the route off Södra Midsjöbank preferred by the Environmental Protection Agency crosses an area with many wintering seabirds including black guillemot and long-tailed ducks. The Company has also stated that part of this area is also classified as an 'IBA area' (*Important Birdlife Area*) — and that the route preferred by the Swedish Environmental Protection Agency runs for a long way through a risk area containing dumped chemical munitions. Several others of the bodies consulted, including the Gotland and Kalmar county administrative boards and the Swedish Species Information Centre, have suggested that the alternative routes presented by the Company involve a worse environmental impact in various respects than the route the one for which the Company has applied.

Several of the bodies consulted, including the Swedish Environmental Protection Agency, have also suggested that on the route applied for by the Company, the pipelines should not affect the large long-tailed duck population present in the area in question, especially in the winter. The Company has suggested that birds generally tend to avoid areas with construction work, and return as the work moves on, and that the planned route runs such a distance from the banks that there should not be any unacceptable effects on the birds in the Natura 2000 areas at Hoburgs Bank and Norra Midsjöbank, either in the long or short term. The Swedish Ornithological Society has also decided that the proposed route probably does not risk causing serious damage to the birdlife in the areas in question. The Society does, however, suggest that the long-tailed duck has been in serious decline in recent years and that any

additional disturbance must be avoided. The large current number of shipping movements off Hoburgs Bank and Norra Midsjöbank or other activities such as future maintenance of the pipelines should therefore, in the Society's view, be carried out a long way from the banks. The Company has responded to this by suggesting that all important birdlife areas in the Swedish part of the Baltic are sensitive to disturbance, especially in winter. Because of the distance between those areas and the planned route of the pipelines, the Company believes that the disturbance will be less significant for the birds in those areas. Since the effects will be small, their geographical extent only local and their duration short, the Company has come to the view that the impact of noise from pipe laying and other disturbances will be less significant for the birds. The Company has therefore undertaken that the turbidity caused by underwater operations while each pipeline is being laid, should not, as a guideline, exceed 15 mg/l at the border with Hoburgs Bank and Norra Midsjöbank. If the audit shows that this value is being exceeded, the Company must take additional precautionary measures in underwater operations such as reducing or temporarily stopping them so that the value can be kept to. The Company must thereafter ensure that the over-run is not repeated insofar as is possible.

Some of the bodies consulted, including the Gotland county administrative board, have also suggested that there is a high risk of effects on areas of the bottom meaning that toxins and nutrients are released and returned to the body of water. The Company has responded to this by suggesting that the calculated quantities released during construction of the pipelines are insignificant compared with the total contribution of nitrogen and phosphorus to the Baltic. Since the majority of the nutrients is bound to the turbid sediments, the Company considers that they will also re-sediment in the proximity of the pipelines and not reach the photic layer, i.e. the depth reached by sufficient light for photosynthesis, where it can be absorbed by phytoplankton. Furthermore, according to the Company, external sources and natural processes such as isostasy and returbidisation, and human activities such as bottom trawling for deepwater fish also contribute to sediment and nutrients being released into the body of water. The Company notes that every year several hundred times more sediment is returbidised by bottom-trawling activities in the Baltic than will be spread in total by construction of the pipelines. According to the Company, in all probability this applies correspondingly to nutrients.

The Swedish Geotechnical Institute (SGI) and the Swedish Meteorological and Hydrological Institute (SMHI) have suggested that the application is deficient in various respects, which makes it difficult to check the Company's assertions. The SMHI has further suggested that there are reasons for requiring that monitoring of sediment spillage be carried out consistently throughout the construction period. The Company has suggested that the SGI and the SMHI were then given the information requested. The Company has further stated that sediment spillage from construction work will be monitored throughout the construction period to evaluate the results of the model and to quantify

the actual effects. The Company is therefore preparing an audit programme, which will include checking the amount of sediment released. The SGI and the SMHI subsequently stated in relation to several points that they were satisfied with the Company's response to the authorities' views.

In the Government's judgement, the natural environment in the area affected by the activity applied for will be affected to only a limited extent, and then only for a very restricted time during construction. Analysis of the matter shows that it is mainly during construction work that turbidity, sediment spreading and noise may occur. The route applied for entails the shortest distance between Hoburgs Bank and the pipelines being 4 kilometres. The shortest distance between Norra Midsjöbank and the pipelines is 3.2 kilometres. Hence, in the Government's assessment, the distances between the pipelines and the environmentally sensitive banks are big enough that the effects of the construction work should not have any negative impact on natural values on the banks themselves. The Government therefore judges that the alternative routes that the Company presented are worse from the nature conservancy point of view than that applied for by the Company. Approval of the application is therefore, in the Government's assessment, compatible with Sweden's obligation to protect and conserve the marine environment in the economic zone. In issuing this judgement, the Government has also taken into account the undertakings the Company has made to minimise the impact of the operation on the environment.

The Swedish Maritime Administration and the Swedish Transport Agency rejected the route applied for by the Company and suggested that a more easterly alignment was preferable for the safety of and for navigability by shipping. According to the agencies, the route that runs through the deepwater channel south of Norra Midsjöbank may cause problems with e.g. emergency anchoring and it should therefore be separated from shipping traffic as much as possible. The Maritime Administration and the Transport Agency have further suggested that the pipelines should cross the channel at right angles in relation to its direction in order to obtain the least possible effect on navigation. In response to this, the Swedish Coastguard has suggested that the measures that it is intended to take in order to warn other shipping and to monitor the sea areas used during the construction phase in accordance with currently accepted practice and are sufficient to avoid incidents and accidents. The Coastguard has further suggested that the activities during the construction phase should not increase to any appreciable extent the risk of any major acute environmental accidents resulting in releases of oil or other harmful substances. The Coastguard considers that any accidents could be dealt with using the same resources as are currently available on a national and international basis and with additional enhancements already planned.

The Company has suggested that the route applied for in the area of Hoburgs Bank and the Norra Midsjöbank and Södra Midsjöbank is at a



sufficient distance from these areas for it to be possible for a hampered vessel to anchor in an emergency. The Company has further suggested that the material from investigations shows that the risks to personnel aboard construction vessels and third party vessels are considered to be acceptable by a wide margin. A series of risk reduction measures have also been identified by the Company and discussed with the Swedish Maritime Administration. These include safety zones for vessels, detailed working procedures, automated position finding and collision warning systems and continuous information about the construction work. Other safety procedures that will apply, according to the Company, are emergency and evacuation plans that meet the requirements of the Baltic Marine Environment Protection Commission (HELCOM) guidelines and special training for all crew members concerned. In the operation phase, the Company's conclusion is that the risk to third parties aboard vessels and to the environment is far below internationally recognised acceptance criteria. In a supplementary assessment of the areas around Norra Midsjöbank and Södra Midsjöbank carried out by SSPA, formerly the National Ship Testing Establishment, the level of risk was calculated with and without the pipelines, and the conclusion is that the increase in the level of risk resulting from the existence of the pipelines is insignificant for the safety of and navigability by shipping.

Given this, especially in view of what the Swedish Coastguard has stated and what the Company has said about its intentions for the forthcoming work, the Government's overall assessment is that the consequences for navigation of building and operating the pipelines are also acceptable. There is also the fact that a more easterly route, which the Swedish Maritime Administration and the Swedish Transport Agency prefer, goes through an area that the Swedish Energy Agency and the Geological Survey of Sweden have decided are of national importance for wind farms. Swedish Wind Energy shares the Swedish Energy Agency's judgement and rejects a more easterly route, having regard for the possible expansion of offshore wind power at Södra Midsjöbank.

The Swedish Armed Forces have questioned whether a sufficiently wide safety corridor has been surveyed on the bottom. In the Armed Forces' assessment it is likely that more mines and mine-related objects will be encountered in the anchoring corridor. The Company has suggested that the matter of the width of the safety corridor is theoretical since the Company carried out highly detailed surveys of both the safety and anchoring corridors. In the event of munitions being encountered, an action plan has been worked out.

The Government notes in response to this that the Company is responsible for the pipelines being constructed and operated in a way that takes account of both the two mines found that the Company has undertaken to sweep, and other military debris encountered by the Company. However, the Government would like to emphasise that construction work on the seabed that includes explosions, detonation of military debris and similar measures, may generate noise and pressure

waves that can be immediately harmful to fish and marine mammals. Marine mammals can suffer serious harm at distances as great as 10-30 kilometres. However, the disturbances to marine mammals relates mostly to coastal creatures such as seals and porpoises. The construction work is taking place at sea and at such a distance that there should be no effect on these animals. The disturbances to marine mammals that might occur are not believed to be more extensive than those from normal shipping. Furthermore, the Company has undertaken to drive fish and marine mammals away during the construction phases using acoustic scarers and by setting off small explosive charges. This will minimise the risk of disturbances to marine mammals.

The Swedish Board of Fisheries has suggested that pipelines may affect conditions for the fishing industry in several ways. The Company has suggested that increased water turbidity and increased noise levels during pipe-laying will cause temporary avoidance reactions in fish in the proximity of the laying vessel and its support vessels. According to the Company, the assessments made show that fish will avoid the area closest to the vessels, but come back when the vessels have passed. The Company has further suggested that the area affected is limited to the pipeline corridor, and that the duration of disturbance in a particular area is short. The effect of construction and operation on fish along the entire length of the pipeline is thought by the Company to be of little to moderate significance and to have a temporary impact. The Company has suggested that the pipelines should be designed for it to be possible to trawl over them and cope with the effects of every type of trawling gear used in the Baltic. In order to provide information about free spans and how trawling is best carried out in the various pipeline areas, the Company has contacted the Fishermen's Information about Oil and Gas Activities (FOGA), an organisation that provides weekly information about offshore activities for fishermen in the North Sea. According to the Company, FOGA will be running a similar operation for fishermen in the Baltic during pipe-laying work and, if necessary, also during the operating phase. In order to be able to deal with all relevant questions directly with Baltic fishermen, the Company has suggested that a fisheries working party be organised to keep in contact with fishermen and fisheries organisations around the Baltic and to negotiate agreements in accordance with national legislation.

The Swedish Fishermen's Federation (SFR) has suggested that disturbances may arise for the fishing industry that may entail financial loss. The Company then suggested that an agreement be concluded between it and the Federation. The agreement states that individual fishermen fishing with bottom trawls in areas where the pipelines are laid will be compensated. These agreements comprise arrangements for information as well as compensation for the extra work that will be required by some fishermen. The Company and the Swedish Fishermen's Federation (SFR) have also agreed to draw up joint guidelines describing best practice and policy that are to be observed when fishing in the vicinity of the pipelines.

The Swedish National Heritage Board (RAÄ) and Swedish National Maritime Museums have stated that the authorities previously had certain views on the Company's surveys that had been carried out as the basis for an archaeological analysis. However, the Company has accommodated the authorities' views. Since then, the National Heritage Board has issued an opinion on the route applied for by the Company. The Board considers that there is no objection from a cultural environment point of view to granting a licence for the project, provided that the pipeline route applied for by the Company is chosen.

Given the above, the Government believes that on an overall assessment the route applied for by the Company can be approved and that a licence should be granted. However, the licence should be combined with both the undertakings that the Company has committed to follow and the conditions otherwise needed to ensure the activity's compatibility with Sweden's general duty to protect and conserve the marine environment in the Baltic.

The Government would like to point out that the Swedish Coastguard is the supervisory authority responsible for compliance with this decision. The exercise of supervision may include visiting the vessels engaged to carry out the activity covered by the licence. According to section 15 c of the Continental Shelf Act (1966:314), the supervisory authority must give notice of the orders needed to comply with the conditions of this decision. The Company has further undertaken, if requested, to offer representatives of other Swedish authorities concerned the opportunity to be present on the pipe-laying vessel to a reasonable extent during construction work.

Furthermore, Sweden has obligations under international agreements on the safety of navigation to collect, assess and evaluate information and pass it on to navigators. Via the Swedish Maritime Administration, Sweden is sub-area coordinator for the entire Baltic. So that Sweden can fulfil its duty to inform shipping by means of internationally established methods, such as notices to mariners (M-notices), electronic nautical charts (ENC) and navigation warnings, the licence should be attended by the condition that the Company must inform the Swedish Maritime Administration at least one month before work begins and thereafter on an ongoing basis as operations proceed.

The Government considers that it is vital for it to be possible to restore the site if the pipelines cease operation. In the Government's assessment a risk of future pollution from degradation of the pipelines cannot be ruled out. It should be ensured that the pipelines can be removed and the seabed restored as closely as possible to its original state on closure. When the pipelines are taken out of operation, the Government will decide what action should be taken.

The Government has today instructed the Geological Survey of Sweden, on the basis of a request from the Company, to establish the exact coordinates of the pipelines' licensed location on the seabed, *see*

*Appendix 2.* The pipelines must then be positioned in accordance with the coordinates as determined by the Geological Survey of Sweden.

For and on behalf of the Government,

[SIGNATURE]

Andreas Carlgren

[SIGNATURE]

Maria Dahl Torgerson

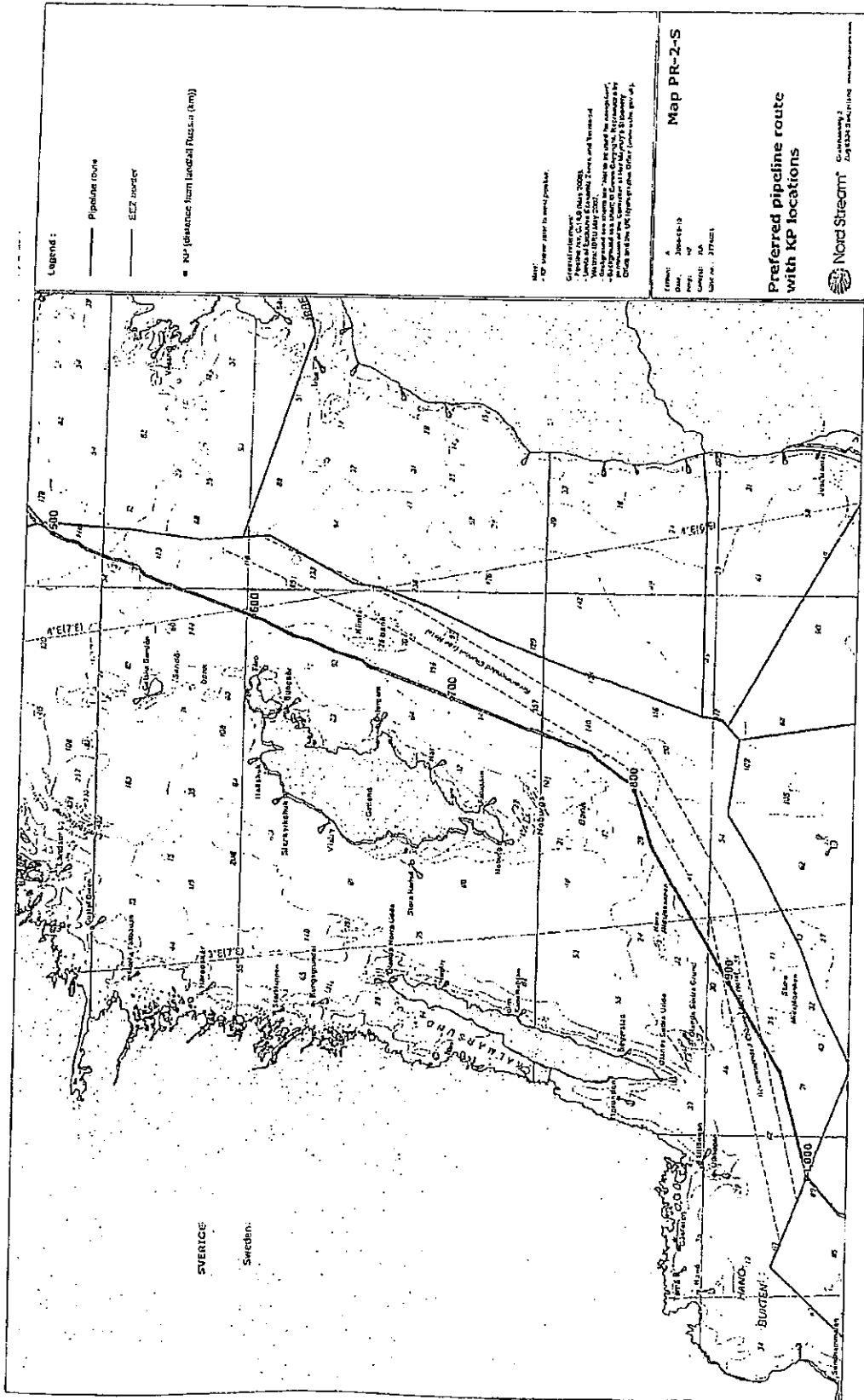
Cc:

The Prime Minister's Office/SAM  
The Ministry of Foreign Affairs/SP1, EC2, FMR, EU NORD and URP  
The Ministry of Defence/MIL, SSK and SI P  
The Ministry of Finance/BA1 and BA2  
The Ministry of Agriculture/JFS  
The Ministry of the Environment/R, F, H and SÄRSK  
The Ministry of Culture/KT  
The Swedish Armed Forces  
The National Defence Radio Establishment  
The National Police Board  
The Swedish Maritime Administration  
The Swedish Transport Agency  
The Swedish Meteorological and Hydrological Institute  
The Swedish Board of Fisheries  
The Swedish National Heritage Board  
The Swedish National Maritime Museums  
The Swedish Geotechnical Institute  
The Swedish Environmental Protection Agency  
The Legal, Financial and Administrative Services Agency  
The National Board of Housing, Building and Planning  
The Swedish Coastguard  
The Swedish Energy Agency  
The Swedish Civil Contingencies Agency  
The Geological Survey of Sweden  
Stockholm county administrative board

Södermanland county administrative board  
Östergötland county administrative board  
Kalmar county administrative board  
Gotland county administrative board  
Blekinge county administrative board  
Skåne county administrative board  
Nynäshamn municipality  
Södertälje municipality  
Nyköping municipality  
Oxelösund municipality  
Trosa municipality  
Norrköping municipality  
Söderköping municipality  
Valdemarsvik municipality  
Borgholm municipality  
Kalmar municipality  
Mönsterås municipality  
Mörbylånga municipality  
Oskarshamn municipality  
Torsås municipality  
Västervik municipality  
Gotland municipality  
Karlshamn municipality  
Karlskrona municipality  
Ronneby municipality  
Sölvesborg municipality  
Bromölla municipality  
Kristianstad municipality  
Simrishamn municipality  
Ystad municipality  
Gotland University  
University of Kalmar  
The Swedish Defence Research Agency (FOI)  
The Stockholm Marine Research Centre  
The Swedish EIA [*Environmental Impact Assessment*] Centre, the Swedish University of Agricultural Sciences  
The Swedish Society for Nature Conservation  
The World Wide Fund for nature  
Greenpeace  
The Swedish Ornithological Society (SOF)  
The Swedish Fisherman's Federation  
The Swedish Professional Fishermen's Financial Association (Sveriges yrkesfiskares ekonomiska förening)  
The Swedish Species Information Centre  
The Ornithological Society of Gotland (GOF)  
The Chamber of Commerce of East Sweden  
The Våröhus Foundation  
Swedish Wind Energy

Appendix 1 to GOVERNMENT DECISION no. I 5

Taken at the Government meeting of 5 November 2009-11-17 N2008/147/FIN



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Date:05/05/2008

PIPELINE ROUTE ALIGNMENT DATA								
NOS East route								
Points	Coordinates		Distances		Azimuth	Radius	Coordinates of Center	
	East	North	Partial	Cumulative			East	North
UTM_34/33	686080.420	6233567.370		839171.668				
TG' V.194	680238.761	6229590.087	7067.090	846238.758	235° 45' 03.89"			
V.194	679996.598	6229425.211				5000.0	677424.814	6233723.089
TG" V.194	679736.837	6229289.744	585.256	846824.014				
TG' V.195	677657.722	6228205.470	2344.861	849168.874	242° 27' 27.44"			
V.195	677183.463	6227958.140				5000.0	679969.745	6223772.124
TG" V.195	676772.254	6227616.087	1066.701	850234.575				
TG' V.196	674399.615	6225642.475	3086.188	853320.764	230° 14' 44.11"			
V.196	674214.777	6225488.723				5000.0	671202.124	6229486.438
TG" V.196	674016.040	6225353.415	480.482	853801.246				
TG' V.197	654492.005	6212060.726	23619.558	877420.804	235° 45' 05.43"			
V.197	654375.425	6211981.354				5000.0	657305.921	6207927.703
TG" V.197	654263.504	6211895.537	281.995	877702.799				
TG' V.198	652695.116	6210692.943	1976.379	879679.178	232° 31' 12.31"			
V.198	652549.771	6210581.497				5000.0	649652.699	6214660.776
TG" V.198	652396.662	6210480.984	366.144	880045.322				
TG' V.199	646143.035	6206375.584	7480.786	887526.108	236° 42' 56.82"			
V.199	646107.861	6206352.493				5000.0	648866.998	6202195.791
TG" V.199	646073.081	6206328.813	84.150	887610.258				
TG' V.200	639598.307	6201920.544	7832.977	895443.235	235° 45' 05.38"			
V.200	639494.329	6201849.752				5000.0	636784.390	6206053.566
TG" V.200	639386.923	6201784.278	251.525	895694.760				
TG' V.201	636135.526	6199802.245	3807.892	899502.652	238° 38' 01.54"			
V.201	635935.525	6199680.326				5000.0	638738.059	6195532.957
TG" V.201	635747.798	6199540.243	468.122	899970.774				
TG' V.202	632143.671	6196850.822	4496.968	904467.741	233° 16' 10.14"			
V.202	632056.814	6196786.009				5000.0	629153.411	6200858.108
TG" V.202	631967.230	6196725.020	216.714	904684.455				
TG' V.203	593076.790	6170248.284	47047.677	951732.132	235° 45' 10.23"			
V.203	592456.426	6169825.938				5000.0	590262.970	6174381.372
TG" V.203	591739.406	6169604.329	1489.848	953221.980				
TG' V.204	546033.822	6155478.146	47838.787	1001060.767	252° 49' 30.86"			
V.204	544896.966	6155126.779				5000.0	547510.258	6150701.103
TG" V.204	544040.257	6154300.977	2336.371	1003397.138				

C14-0\_East\_Z34.vrt

Date:05/05/2008

PIPELINE ROUTE ALIGNMENT DATA								
NOS East route								
Points	Coordinates		Distances		Azimuth	Radius	Coordinates of Center	
	East	North	Partial	Cumulative			East	North
TG" V.154	469983.677	6524176.530	1108.962	495774.318				
TG' V.155	469147.699	6522609.039	1776.482	497550.800	208° 04' 19.25"			
V.155	468745.372	6521854.662				7500.0	462530.022	6526138.396
TG" V.155	468183.584	6521210.188	1702.565	499253.365				
TG' V.156	466916.501	6519756.610	1928.313	501181.678	221° 04' 43.15"			
V.156	466347.151	6519103.461				7500.0	472570.063	6514828.402
TG" V.156	465941.726	6518337.697	1725.283	502906.961				
TG' V.157	464075.410	6514812.611	3988.655	506695.616	207° 53' 54.46"			
V.157	463869.012	6514422.767				7500.0	457447.074	6518321.907
TG" V.157	463618.337	6514059.805	881.207	507776.822				
TG' V.158	463524.523	6513923.968	165.084	507941.906	214° 37' 49.38"			
V.158	463011.141	6513180.622				7500.0	469695.787	6509661.867
TG" V.158	462688.958	6512336.629	1798.130	509740.037				
TG' V.159	462570.685	6512026.801	331.635	510071.672	200° 53' 37.25"			
V.159	462195.798	6511044.743				7500.0	469577.514	6509352.039
TG" V.159	462105.337	6509997.463	2088.753	512160.425				
TG' V.160	462039.788	6509238.594	761.694	512922.119	184° 56' 12.42"			
V.160	461824.864	6506750.382				7500.0	454567.611	6509884.019
TG" V.160	460161.125	6504887.759	4821.717	517743.836				
TG' V.161	460052.266	6504765.888	163.410	517907.246	221° 46' 19.17"			
V.161	459136.695	6503740.869				7500.0	465645.779	6499769.628
TG" V.161	458644.084	6502457.799	2718.606	520625.852				
TG' V.162	458369.109	6501741.590	767.181	521393.034	201° 00' 12.13"			
V.162	458284.923	6501522.317				5000.0	453701.312	6503533.704
TG" V.162	458180.552	6501311.902	469.412	521862.445				
TG' V.163	457713.819	6500370.948	-1050.349	522912.795	206° 22' 56.74"			
V.163	457589.082	6500119.434				5000.0	462193.059	6498149.146
TG" V.163	457493.246	6499855.534	560.922	523473.717				
TG' V.164	454964.898	6492891.842	7408.479	530882.195	199° 57' 17.05"			
V.164	454730.265	6492245.605				7500.0	462014.617	6490332.260
TG" V.164	454617.034	6491567.480	1371.195	532253.390				
TG' V.165	453908.932	6487326.744	4299.447	536552.838	189° 28' 46.48"			
V.165	453839.103	6486908.545				5000.0	448977.210	6488150.224
TG" V.165	453699.852	6486508.076	845.954	537398.792				
TG' V.166	451492.333	6480159.487	6721.437	544120.229	199° 10' 24.58"			
V.166	451026.272	6478819.147				5000.0	446769.691	6481801.636
TG" V.166	449925.602	6477923.463	2765.396	546885.625				
TG' V.167	448463.211	6476733.424	1885.412	548771.037	230° 51' 45.36"			
V.167	447464.231	6475920.492				5000.0	451619.122	6472855.251
TG" V.167	446982.319	6474726.096	2521.097	551292.134				
TG' V.168	443911.000	6467113.973	8208.375	559500.509	201° 58' 22.66"			
V.168	443604.467	6466354.246				5000.0	448547.802	6465243.128
TG" V.168	443556.412	6465536.420	1624.042	561124.551				
TG' V.169	443532.680	6465132.536	404.581	561529.132	183° 21' 46.12"			
V.169	443456.770	6463840.666				5000.0	438541.289	6465425.828

C14-0\_East\_Z34.vrt

Date:05/05/2008

TG" V.169	442763.653	6462747.835	2532.622	564061.754				
TG' V.170	442075.802	6461663.308	1284.265	565346.019	212° 23' 04.26"			
V.170	441524.517	6460794.103				7500.0	448409.347	6457646.319
TG" V.170	441227.781	6459808.517	2045.795	567391.814				
TG' V.171	439296.711	6453394.626	6698.285	574090.099	196° 45' 20.85"			
V.171	439231.748	6453178.655				7500.0	432115.145	6455556.824
TG" V.171	439153.948	6452967.374	450.541	574540.640				
TG' V.172	427626.791	6421633.546	33386.885	607927.525	200° 11' 51.61"			
V.172	427373.518	6420945.083				7500.0	420587.988	6424222.996
TG" V.172	426991.644	6420318.744	1462.493	609390.018				
TG' V.173	425448.987	6417788.517	2963.417	612353.435	211° 22' 13.05"			
V.173	425232.712	6417433.787				7500.0	431852.644	6413884.264
TG" V.173	425056.940	6417057.340	830.074	613183.509				
TG' V.174	420315.877	6406903.514	11206.153	624389.662	205° 01' 44.37"			
V.174	420034.418	6406300.720				7500.0	427111.581	6403730.438
TG" V.174	419863.457	6405657.795	1327.061	625716.723				
TG' V.175	418315.969	6399838.225	6021.804	631738.526	194° 53' 27.58"			
V.175	418145.549	6399197.335				7500.0	411067.845	6401765.581
TG" V.175	417865.316	6398596.293	1322.881	633061.408				
TG' V.176	413802.207	6389881.760	9615.194	642676.601	204° 59' 49.42"			
V.176	413603.218	6389454.970				7500.0	420599.678	6386712.471
TG" V.176	413459.175	6389006.643	940.563	643617.164				
TG' V.177	409506.015	6378702.614	12923.490	656540.654	197° 48' 42.07"			
V.177	409099.567	6375437.563				5000.0	404745.680	6378232.062
TG" V.177	408118.722	6374541.183	2597.449	659138.103				
TG' V.178	407973.309	6374408.292	196.989	659335.092	227° 34' 34.52"			
V.178	406151.785	6372743.627				7500.0	413032.872	6368871.974
TG" V.178	406674.502	6370322.623	4767.867	664102.959				
TG' V.179	405335.561	6368603.359	1752.355	665855.314	191° 09' 08.75"			
V.179	405198.191	6367906.552				7500.0	397977.191	6370054.008
TG" V.179	404932.466	6367247.917	1416.214	667271.528				
TG' V.180	377143.222	6298368.531	74273.898	741545.426	201° 58' 17.43"			
V.180	376709.262	6297292.903				7500.0	384098.497	6295562.439
TG" V.180	376620.494	6296136.436	2301.505	743846.931				
TG' V.181	376565.212	6295416.232	722.322	744569.254	184° 23' 21.49"			
V.181	376463.886	6294096.155				7500.0	369087.210	6295990.229
TG" V.181	375916.707	6292890.557	2620.918	747190.172				
TG' V.182	373257.350	6287031.203	6434.611	753624.783	204° 24' 41.92"			
V.182	373080.015	6286640.481				5000.0	377810.348	6284964.755
TG" V.182	372971.843	6286225.258	856.066	754480.849				
TG' V.183	372750.735	6285376.522	877.064	755357.913	194° 36' 06.65"			
V.183	372665.442	6285049.121				5000.0	367912.230	6286637.025
TG" V.183	372536.821	6284736.194	675.628	756033.541				
TG' V.184	371280.350	6281679.286	3305.058	759338.600	202° 20' 38.30"			
V.184	371103.399	6281248.777				5000.0	366655.758	6283580.118
TG" V.184	370850.024	6280858.328	928.237	760266.836				
TG' V.185	370374.461	6280125.486	873.624	761140.460	212° 58' 50.81"			
V.185	369940.661	6279457.002				5000.0	374568.727	6277403.697
TG" V.185	369736.162	6278686.786	1580.511	762720.971				

C14-0\_East\_Z34.vrt

Date:05/05/2008

TG' V.186	369164.119	6276532.272	2229.162	764950.133	194° 52' 10.07"			
V.186	369100.826	6276293.887				4000.0	365298.067	6277558.743
TG" V.186	368008.725	6276065.084	492.665	765442.798				
TG' V.187	366758.832	6270475.734	6025.185	771467.982	201° 55' 34.95"			
V.187	366695.865	6270319.307				5000.0	371397.154	6268608.660
TG" V.187	366643.580	6270158.993	337.121	771805.104				
TG' V.188	366531.579	6269815.581	361.215	772166.319	198° 03' 47.70"			
V.188	366401.286	6269416.080				5000.0	361778.005	6271365.914
TG" V.188	366206.141	6269043.930	838.451	773004.770				
TG' V.189	365900.584	6268461.217	657.966	773662.736	207° 40' 16.29"			
V.189	365791.205	6268252.626				5000.0	370328.720	6266139.233
TG" V.189	365701.919	6268034.677	470.711	774133.447				
TG' V.190	365652.028	6267912.894	131.605	774265.052	202° 16' 38.09"			
V.190	365274.179	6266990.559				5000.0	361025.227	6269808.338
TG" V.190	364571.539	6266283.615	1967.668	776232.720				
TG' V.191	362546.290	6264245.961	2872.920	779105.640	224° 49' 30.23"			
V.191	362250.436	6263948.295				5000.0	366092.602	6260721.238
TG" V.191	362008.342	6263605.475	837.405	779943.045				
TG' V.192	350610.651	6247465.634	19758.589	799701.634	215° 13' 44.80"			
V.192	349820.772	6246347.116				4000.0	347343.244	6249773.024
TG" V.192	348511.133	6245947.317	2638.576	802340.209				
TG' V.193	321695.032	6237761.054	28037.799	830378.008	253° 01' 26.12"			
V.193	321179.751	6237603.752				5000.0	323154.894	6232978.920
TG" V.193	320709.807	6237340.291	1073.372	831451.380				
UTM_34/33	313975.601	6233564.936	7720.288	839171.668	240° 43' 26.34"			

C14-0\_West\_Z33.vrt

Date:05/05/2008

PIPELINE ROUTE ALIGNMENT DATA								
NOS West route								
Points	Coordinates		Distances		Azimuth	Radius	Coordinates of Center	
	East	North	Partial	Cumulative			East	North
UTM_34/33	686024.141	6233650.030		839188.244				
TG' V.207	680187.324	6229676.045	7061.231	846249.475	235° 45' 03.91"			
V.207	679945.162	6229511.169				5000.0	677373.378	6233809.047
TG" V.207	679685.402	6229375.702	585.255	846834.730				
TG' V.208	677601.996	6226289.189	2349.700	849184.430	242° 27' 27.39"			
V.208	677127.737	6228041.860				5000.0	679914.019	6223855.845
TG" V.208	676716.528	6227699.807	1065.700	850250.131				
TG' V.209	674339.362	6225722.429	3092.077	853342.208	230° 14' 44.10"			
V.209	674154.524	6225568.677				5000.0	671141.871	6229566.392
TG" V.209	673955.786	6225433.369	480.483	853822.690				
TG' V.210	654433.394	6212141.799	23617.570	877440.261	235° 45' 05.44"			
V.210	654316.815	6212062.427				5000.0	657247.310	6208008.776
TG" V.210	654204.895	6211976.610	281.994	877722.254				
TG' V.211	652637.173	6210774.528	1975.539	879697.793	232° 31' 12.37"			
V.211	652491.829	6210663.083				5000.0	649594.758	6214742.363
TG" V.211	652338.721	6210562.570	366.142	880063.935				
TG' V.212	646087.453	6206458.718	7477.965	887541.900	236° 42' 56.79"			
V.212	646052.279	6206435.627				5000.0	648831.416	6202278.925
TG" V.212	646017.499	6206411.947	84.149	887626.049				
TG' V.213	639544.109	6202004.620	7831.303	895457.352	235° 45' 05.38"			
V.213	639440.131	6201933.828				5000.0	636730.192	6206137.642
TG" V.213	639332.725	6201868.354	251.526	895708.878				
TG' V.214	636079.476	6199885.193	3810.059	899518.937	236° 38' 01.58"			
V.214	635879.475	6199763.274				5000.0	638682.008	6195615.905
TG" V.214	635691.748	6199623.191	468.123	899987.060				
TG' V.215	632085.603	6196932.264	4499.485	904486.545	233° 16' 10.13"			
V.215	631998.746	6196867.451				5000.0	629095.342	6200939.550
TG" V.215	631909.162	6196806.462	216.714	904703.259				
TG' V.216	592978.698	6170302.477	47096.097	951799.355	235° 45' 10.23"			
V.216	592357.874	6169879.682				5000.0	590164.878	6174435.565
TG" V.216	591639.823	6169858.062	1491.408	953290.764				
TG' V.217	545895.855	6155535.656	47874.345	1001165.109	252° 50' 35.24"			
V.217	544753.483	6155182.975				5000.0	547370.800	6150758.153
TG" V.217	543894.219	6154351.672	2347.080	1003512.188				

C14-0\_West\_Z34.vrt

Date:05/05/2008

PIPELINE ROUTE ALIGNMENT DATA								
NOS West route								
Points	Coordinates		Distances		Azimuth	Radius	Coordinates of Center	
	East	North	Partial	Cumulative			East	North
TG' V.164	470427.134	6525290.930						
V.164	469820.125	6524498.543	257.206	494579.064	217° 27' 14.33"	7500.0	476380.949	6520729.999
TG" V.164	469441.490	6523574.978	1984.670	496563.734				
TG' V.165	469316.501	6523270.106	329.498	496893.232	202° 17' 31.99"			
V.165	468845.864	6522122.130				7500.0	462377.042	6526115.085
TG" V.165	468030.604	6521186.876	2459.139	499352.371				
TG' V.166	466498.316	6519429.060	2331.914	501884.285	221° 04' 43.15"			
V.166	466268.709	6519165.659				7500.0	472151.878	6514500.852
TG" V.166	466064.588	6518882.050	698.349	502382.635				
TG' V.167	464839.791	6517180.304	2096.680	504479.315	215° 44' 37.17"			
V.167	464448.372	6516636.461				7500.0	470927.081	6512799.105
TG" V.167	464159.557	6516031.846	1336.562	505815.877				
TG' V.168	462948.260	6513496.078	2810.224	508626.101	205° 31' 59.07"			
V.168	462782.155	6513148.348				7500.0	469715.785	6510263.337
TG" V.168	462652.565	6512785.425	770.054	509396.155				
TG' V.169	462448.278	6512213.311	607.493	510003.648	199° 39' 01.06"			
V.169	462118.347	6511289.324				7500.0	469511.498	6509691.223
TG" V.169	462037.197	6510311.561	1951.171	511954.819				
TG' V.170	461952.467	6509290.671	1024.399	512979.218	184° 44' 40.01"			
V.170	461742.343	6506758.938				7500.0	454478.165	6509911.009
TG" V.170	460036.880	6504876.062	4898.929	517878.147				
TG' V.171	459671.253	6504472.400	544.634	518422.781	222° 10' 10.23"			
V.171	458688.631	6503387.559				7500.0	465229.968	6499437.453
TG" V.171	458186.014	6502012.859	2891.066	521313.847				
TG' V.172	454818.014	6492801.093	9808.162	531122.009	200° 05' 00.20"			
V.172	454660.425	6492370.073				5000.0	459513.984	6491084.166
TG" V.172	454583.930	6491917.567	915.287	532037.296				
TG' V.173	453810.723	6487343.653	4638.809	536676.105	189° 35' 41.90"			
V.173	453740.897	6486930.595				5000.0	448880.670	6488177.064
TG" V.173	453603.312	6486534.915	835.884	537511.988				
TG' V.174	451379.049	6480138.174	6772.418	544284.406	199° 10' 24.58"			
V.174	451002.461	6479055.149				4000.0	447600.935	6481451.893
TG" V.174	450109.297	6478336.108	2233.373	546517.779				
TG' V.175	448489.738	6477032.281	2079.167	548596.946	231° 09' 51.13"			
V.175	447475.554	6476215.813				5000.0	451625.191	6473137.550
TG" V.175	446988.388	6475008.395	2547.416	551144.362				
TG' V.176	443802.336	6467111.913	8515.008	559659.370	201° 58' 22.67"			
V.176	443491.527	6466341.588				5000.0	448439.138	6465241.068
TG" V.176	443446.492	6465512.146	1646.292	561305.662				
TG' V.177	443446.339	6465509.321	2.829	561308.491	183° 06' 28.25"			
V.177	443383.460	6464351.237				5000.0	438453.692	6465780.399
TG" V.177	442817.179	6463339.091	2279.272	563587.763				
TG' V.178	441802.419	6461525.354	2078.312	565666.075	209° 13' 34.99"			
V.178	441408.280	6460820.887				7500.0	448347.649	6457863.392
TG" V.178	441173.076	6460048.683	1608.268	567274.343				

C14-0\_West\_Z34.vrt

Date:05/05/2008

TG' V.179	439163.736	6453451.780	6896.128	574170.471	196° 56' 24.44"			
V.179	439103.013	6453252.418				7500.0	431989.163	6455637.071
TG" V.179	439031.313	6453056.736	416.702	574587.172				
TG' V.180	427532.279	6421674.018	33423.087	608010.259	200° 07' 24.56"			
V.180	427280.782	6420987.643				7500.0	420490.129	6424254.353
TG" V.180	426901.480	6420362.749	1457.398	609467.657				
TG' V.181	425383.304	6417861.580	2925.868	612393.525	211° 15' 25.88"			
V.181	425185.584	6417535.840				7500.0	431794.655	6413969.977
TG" V.181	425021.897	6417191.738	761.448	613154.973				
TG' V.182	420314.531	6407295.953	10958.369	624113.342	205° 26' 24.56"			
V.182	420004.022	6406643.204				7500.0	427087.289	6404074.192
TG" V.182	419823.893	6405943.168	1441.227	625554.569				
TG' V.183	418381.828	6400338.877	5786.850	631341.419	194° 25' 47.98"			
V.183	418214.336	6399687.955				7500.0	411118.431	6402207.854
TG" V.183	417933.776	6399077.186	1340.670	632682.089				
TG' V.184	413649.593	6389750.685	10263.423	642945.512	204° 40' 19.05"			
V.184	413461.945	6389342.181				7500.0	420464.938	6386620.017
TG" V.184	413324.435	6388914.188	898.008	643843.519				
TG' V.185	409422.740	6376770.340	12755.244	656598.764	197° 48' 42.07"			
V.185	409009.194	6375483.197				5000.0	404662.405	6378299.788
TG" V.185	408003.360	6374579.839	2640.746	659239.509				
TG' V.186	407679.627	6374289.088	435.132	659674.641	228° 04' 20.64"			
V.186	405958.766	6372743.551				7500.0	412691.059	6368709.165
TG" V.186	405407.322	6370497.231	4487.209	664161.850				
TG' V.187	404957.658	6368665.512	1886.105	666047.955	193° 47' 33.53"			
V.187	404833.744	6368160.743				7500.0	397673.922	6370453.578
TG" V.187	404641.387	6367677.892	1037.853	667085.808				
TG' V.188	376907.245	6298060.263	74938.621	742024.429	201° 43' 16.52"			
V.188	376610.738	6297315.977				7500.0	383874.710	6295284.577
TG" V.188	376478.141	6296525.853	1596.292	743620.721				
TG' V.189	376334.011	6295867.008	870.855	744491.576	189° 31' 35.35"			
V.189	376173.573	6294710.980				7500.0	368937.442	6296908.284
TG" V.189	375775.329	6293827.164	1928.103	746419.679				
TG' V.190	374963.755	6292026.048	1975.518	748395.197	204° 15' 21.99"			
V.190	374851.628	6291777.206				7500.0	381801.642	6288944.928
TG" V.190	374757.885	6291520.872	545.634	748940.831				
TG' V.191	373067.821	6286899.498	4920.713	753861.544	200° 05' 15.96"			
V.191	372985.545	6286674.519				5000.0	377763.859	6285182.202
TG" V.191	372925.154	6286442.705	478.737	754340.281				
TG' V.192	372655.671	6285408.280	1068.951	755409.231	194° 36' 06.65"			
V.192	372570.378	6285080.879				5000.0	367817.166	6286668.783
TG" V.192	372441.757	6284767.952	675.628	756084.859				
TG' V.193	371104.161	6281513.673	3518.451	759603.311	202° 20' 38.30"			
V.193	370849.604	6280894.353				5000.0	366479.570	6283414.503
TG" V.193	370441.062	6280363.835	1331.267	760934.578				
TG' V.194	370119.518	6279946.289	527.006	761461.584	217° 35' 57.00"			
V.194	369697.207	6279397.890				4000.0	373288.712	6277505.754
TG" V.194	369483.724	6278739.473	1370.750	762832.333				
TG' V.195	369052.048	6277408.114	1399.593	764231.926	197° 57' 52.65"			

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Date:05/05/2008

V.195	368937.619	6277055.198					5000.0	373808.283	6275865.966
TG" V.195	368876.530	6276689.258	740.651	764972.577					
TG' V.196	368756.998	6275973.230	725.936	765698.513	189° 28' 38.62"				
V.196	368685.937	6275547.552					4000.0	364811.596	6276631.864
TG" V.196	368525.713	6275146.828	859.812	766558.325					
TG' V.197	368686.075	6270545.843	4955.131	771513.456	201° 47' 35.86"				
V.197	368646.131	6270445.942					5000.0	371328.721	6268689.547
TG" V.197	366610.521	6270344.415	215.148	771728.604					
TG' V.198	366436.788	6269849.084	524.915	772253.519	199° 19' 40.37"				
V.198	366344.821	6269586.876					5000.0	361718.588	6271503.952
TG" V.198	366224.366	6269336.473	555.167	772808.686					
TG' V.199	365826.401	6268509.180	918.035	773726.722	205° 41' 22.66"				
V.199	365761.706	6268374.691					5000.0	370332.179	6266341.701
TG" V.199	365705.147	6268236.582	298.393	774025.115					
TG' V.200	365616.408	6268019.893	234.156	774259.271	202° 16' 13.05"				
V.200	365238.096	6267096.110					5000.0	360989.376	6269914.775
TG" V.200	364534.062	6266388.417	1970.581	776229.853					
TG' V.201	364484.924	6266339.023	69.672	776299.525	224° 51' 05.37"				
V.201	364329.366	6266182.657					7500.0	369801.953	6261049.486
TG" V.201	364183.266	6266017.419	441.002	776740.527					
TG' V.202	363757.112	6265535.443	643.358	777383.884	221° 28' 56.96"				
V.202	363610.964	6265370.151					7500.0	358138.425	6270503.376
TG" V.202	363455.352	6265213.737	441.146	777825.030					
TG' V.203	363219.544	6264976.712	334.345	778159.375	224° 51' 09.34"				
V.203	363096.304	6264852.836					7500.0	357902.617	6270266.351
TG" V.203	362967.429	6264734.834	349.412	778508.787					
TG' V.204	362518.135	6264323.448	609.183	779117.970	227° 31' 18.86"				
V.204	362119.889	6263958.803					5000.0	365894.676	6260635.770
TG" V.204	361808.676	6263517.541	1075.767	780193.737					
TG' V.205	350549.200	6247552.978	19535.687	799729.424	215° 11' 40.29"				
V.205	349759.219	6246432.881					4000.0	347280.401	6249858.395
TG" V.205	348448.290	6246032.688	2640.990	802370.414					
TG' V.206	321655.530	6237853.550	28013.395	830383.809	253° 01' 26.12"				
V.206	321140.249	6237696.248					5000.0	323115.392	6233071.416
TG" V.206	320670.306	6237432.787	1073.371	831457.180					
UTM_34/33	313926.699	6233652.164	7731.064	839188.244	240° 43' 26.38"				

/Coat of Arms/  
THE GOVERNMENT

Appendix 2 to GOVERNMENT DECISION 15  
Taken at the Government meeting of 5 November 2009-  
11-17 N2008/147/FIN

Government decision 16

05-11-2009 N2009/8327/FIN

The Ministry of Enterprise, Energy and  
Communications

The Geological Survey of Sweden  
Box 670  
751 28 UPPSALA

**Commission to establish the coordinates for a corridor on the continental shelf within the Swedish economic zone in the Baltic Sea for laying two pipelines for the transport of natural gas**

**The Government Decision**

The Government hereby commissions the Geological Survey of Sweden (SGU), using the coordinates given in coordinate system SWEREF 99 TM, to more precisely ascertain the pipeline corridor within which Nord Stream AG may lay two pipelines in accordance with the Government Decision made this day (N2008/147/FIN). The corridor shall accommodate the pipe locations proposed by Nord Stream AG and as reported in the documentation most recently submitted to the government, and also minor permissible adjustments.

A report on the commission is to be submitted to the Government Offices (the Ministry of Enterprise, Energy and Communications) by no later than 19 November 2009.

**Background**

Pursuant to section 15 a of the Continental Shelf Act (1966:314), the Government has this day granted a licence for Nord Stream AG to lay two mainly parallel pipelines on the continental shelf in the Swedish economic zone of the Baltic for the transport of natural gas.

For and on behalf of the government

[SIGNATURE]

Andreas Carlgren

[SIGNATURE]

Mattis Loberg

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The Prime Minister's Office/SAM

The Ministry of Foreign Affairs/SP1, EC2, FMR, EU NORD and URP

The Ministry of Defence/MIL, SSK and SI P

The Ministry of Finance/BA1 and BA2

The Ministry of Agriculture/JFS

The Ministry of the Environment/R, F, H and SÄRSK

The Ministry of Culture/KT