

Warsaw, 17 November 2017

To: Southern Finland Regional State Administrative Agency

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FINLAND

MEMORANDUM

**PERTAINING TO THE PUBLIC CONSULTATION PROCESS
REGARDING THE INVESTOR'S WATER PERMIT APPLICATION
FOR THE NORDSTREAM 2 PROJECT**

In response to Nord Stream 2 AG's (hereinafter referred to as the „**Applicant**”) application for a water permit pursuant to Chapter 3 of the Finnish Water Act (587/2011) (hereinafter referred to as the “**Water Permit**”) and a survey permit pursuant to Chapter 18, section 7 of said act (hereinafter referred to as the “**Survey Permit**”)(the application is hereinafter referred to as the “**Application**”), ClientEarth Prawnicy dla Ziemi, a foundation registered in Poland (hereinafter referred to as “**ClientEarth**”) would like to state that both the Water Permit and the Survey Permit should not be granted, inter alia for the reasons specified in this memorandum.

Point IV of this memorandum sets forth ClientEarth's position regarding the Applicant's request for authorization for preparation (p. 137-141 of the Application).

I. REGARDING THE LEGAL PREREQUISITES FOR GRANTING THE WATER PERMIT

The Applicant claims (p. 128 – 129 of the English-language version of the Application) that “the benefits gained from the project to the public interest in Europe are considerable” and bases this claim on the following assertions:

- a) “(...) the Nord Stream 2 pipeline will contribute to the closure of the import gap from 2020 onwards, thus providing state of the art efficient and reliable additional supply capacity ensuring security of supply with natural gas.”;
- b) “(...) natural gas can serve as both a transitional energy source, enabling a build-out of renewables as well as a back-up energy source guaranteeing overall security of energy supply. (...) Through the continued use of natural gas, ambitious targets set by the Paris Agreement of 2016 on climate change can be reached without jeopardizing the overall security of energy supply.”
- c) “Also, from an environmental perspective Nord Stream 2 AG (...) has significant advantages in terms of environmental and climate impacts.”
- d) “A sufficient energy supply to the countries of the European Union is of vital importance for the functioning of the common market. It is, therefore, of vital economic importance also to Finland even though Finland is not amongst the countries directly receiving the Nord Stream 2 pipeline system. Therefore, the benefit gained from the project to public interests is considerable.”

Additionally, while briefly summarizing the economic benefits to the Applicant’s private interest, the Applicant states that “the losses incurred for the public interest are generally minor” and bases this claim on the assertion that the impact of the Nord Stream 2 project will be negligible or minor on, *inter alia*:

- a) climate and air quality;
- b) water quality;
- c) fish;
- d) marine mammals;
- e) protected areas;
- f) biodiversity.

The Applicant has further indicated, that “the impacts from munitions clearance on grey seals on an individual level has been assessed to be moderate at the highest” whilst “the impact on grey seals on a population level is minor and that the conservation status of the grey seal population is favorable in the Gulf of Finland and the Baltic Proper.”

Concluding its analysis of these issues, the Applicant asserts that “it is evident that the benefit gained from the project to public and private interests is considerable in comparison to the losses incurred for public or private interest.”

ClientEarth strongly opposes the Applicant’s analysis and conclusions in this regard and observes that the legal prerequisites for the granting the Water Permit and the Survey Permit have not been met.

The following are the specific grounds justifying ClientEarth’s position. In view of the fact that the Application and attached documentation is voluminous and mostly in the Finnish language, as well as

the fact that only 30 days have been provided for the submission of remarks, ClientEarth reserves the right to make additional observations at a later date.

II. THE ISSUE OF GAS SUPPLY TO THE EUROPEAN UNION

Irrespective of whether natural gas is considered a fuel facilitating a transition to cleaner energy or a typical fossil fuel which should be replaced as soon as possible by renewable sources of energy, the Applicant's assertions that additional gas supply is a necessity for the European Union are not based on objective fact and cannot, therefore, be the basis for a successful application.

As has been noted already in the Espoo consultation process:

- a) there is at present an over-supply of natural gas in Europe and this over-supply is expected to continue in the future with demand expected to increase and internal EU supply to decrease only marginally until 2035¹;
- b) the current gas infrastructure for importing natural gas to the European Union is not utilized in full, i.e. in 2016 gas imported from Russia into the European Union was at a level of 146 billion m³, whereas the total volume which could be imported from Russia using existing infrastructure equals 228 billion m³. This should be compounded with the data provided by NABU in its Comments on NordStream 2 in which gas import capacities were listed as 54 billion m³ from Norway, 208 billion m³ from Russia and "some 25 m³" (presumably 25 billion m³) from the Netherlands and the connection of Nord Stream 2 was expected to expand the import of capacity by a further 55 billion m³ per year (p. 4 of said comments, and as is stated in the Application).

It is simply not the case that the Nord Stream 2 investment is necessary to safeguard gas supplies and energy provision to the European Union;

- c) the construction of the Nord Stream 2 investment will further ensure the dominance of Russia as a provider of natural gas to the European Union. The Applicant, both in its written documents and in its statements made during public hearings as part of the Espoo process, holds the position that this is an investment made by a private company based on economic considerations and, therefore, market conditions and the economic outlook justify the construction of the investment. ClientEarth believes that this is not the case. As stated above, there are at least serious doubts as to whether the investment is economically justified. Additionally, and in connection with this, the expansion of natural gas supply from Russia into the European Union can have a serious, detrimental effect on the European Union's drive to increase its energy independence, encourage the development of renewable energy sources, and meet its climate change obligations.

Expanding the importation infrastructure of natural gas when the existing infrastructure is under-utilized will mean that investment in renewable energy sources will become less attractive and feasible, and will inevitably lead to an increase in the use of natural gas which is, after all, a fossil fuel contributing to climate change. ClientEarth has indicated this

¹ Medium and Long Term Natural Gas Outlook 2016, CEDIGAZ, June 2016 <http://www.cedigaz.org/documents/2016/SummaryMLTOutlook.pdf>, p. 9

issue in its previous remarks made in the Espoo process, adding its voice to other parties which have drawn attention to the fact that the Nord Stream 2 investment:

- i. increases European dependency on Russian gas supply;
- ii. decreases Europe's ability to meet its climate change obligations.

A move away from fossil fuels to renewable energy will not happen when fossil fuel infrastructure is expanded even when it is superfluous.

For this reason alone, ClientEarth considers the Nord Stream 2 investment to be without justification and the Application should, as a consequence, be rejected. In any event, the Southern Finland Regional State Administrative Agency should order an independent assessment of the problem of gas supply in Europe until at least 2050 to be able to determine whether the Application is based on sound projections. **Given the serious doubts raised by entities from various countries (inter alia: Poland, Sweden and Germany), the competent Finnish authority cannot rely solely on the assertions and analyses of the Applicant.**

ClientEarth would like to state at this point that the impact of the investment on fossil fuel importation to Europe, as well as its effect on European Union and Member States' obligations and on climate change are of obvious moment for an environmental NGO registered in Poland.

Shortly stated: in this case, what happens in Finland does not stay in Finland, contrary to what the Applicant tries to demonstrate in the Application.

III. ENVIRONMENTAL CONSIDERATIONS

a) Impact on marine mammals

ClientEarth has serious reservations concerning the impact of the Nord Stream 2 investment on marine mammals.

As regards (i) porpoises and (ii) ringed seals, the impact of the investment on individual specimens should be held to be tantamount to its impact on the entire population of the species. This is so due to the small populations of each species.

In the case of:

- i. the porpoise – the Baltic Sea subpopulation is critically endangered, according to the IUCN red list of threatened species (<http://www.iucnredlist.org/details/17031/0>) and the Applicant itself has stated in the Espoo Report that “the project estimated the remaining number of porpoises in the Baltic Proper to be approximately 500”;
- ii. the ringed seal – the Applicant itself in the Espoo Report stated that the Baltic Sea population is assessed as vulnerable due to the isolation of the population and impeded growth rates caused by the multiple anthropogenic pressures of the Baltic Sea (p. 194 of the English version of the Espoo report). According to the Applicant, 75%

of the ringed seal population occurs in waters adjacent to Finland (the Bothnian Bay and the Gulf of Finland).

It is clear that the information provided by the Applicant does not allow for the determination that the risk of causing severe damage (inter alia severe damage to the acoustic receptors) to the porpoises and the ringed seals present in the Baltic is eliminated.

The risk should be eliminated, in ClientEarth's view, due to the fact that the small population of both species (and the critically endangered status of the porpoise) makes it so that a severe adverse impact on one member of the population could have a serious detrimental effect on the entire population (and as a result also on the Natura 2000 site established for the protection of these species).

As regards grey seals, the Applicant in its EIA Report (attachment no. 1 to the Application), states that "Grey seals are found throughout the Gulf of Finland and in Western Waters in Finland. Based on the available information, it is not possible to estimate the number of individuals that could be affected by the NSP2 pipeline. However, based on the breakdown of discontinuous areas and the available telemetry data, it is likely that grey seals will occur in all those waters that are relevant to the construction of the NSP2 project, including areas where pain or permanent hearing loss can occur." (translated from the Finnish, attachment no. 1 to the application, ympäristövaikutusten arviointiselostus, p. 347)

Therefore, ClientEarth concludes from this that the Applicant does not have precise data as to the impact of the Nord Stream 2 project on the population of grey seals in the Baltic Sea. It is not enough for the Applicant to state that the population is "abundant" and, therefore, even if some impact were to be present, said impact would be minor or not significant – this is, it should be noted, a recurring theme in the Applicant's documents, as in the Espoo Report (in the part concerning the impact on grey seals) the Applicant asserted that, as regards blast injury: "At the population level, due to the number of individuals affected, there may be a short-term decline in a portion of the population over one generation. The population as a whole is, however, increasing and has good environmental status, so that such an event is highly unlikely to affect the long-term viability or functioning." (p. 361 of the English version of the Espoo Report).

An assessment of the type presented by the Applicant seems premature and unfounded, given that "it is not possible to estimate the number of individuals that could be affected by the NSP2 pipeline" – this statement was repeated in the Natura Assessment for Natura Site Kallbadana Islets and Waters (FIO1000089), approved by the Applicant on 7 September 2017.

This is particularly true given that, according to the Applicant (p. 347-348 of the EIA report attached to the application):

- i. as regards sensitivity to pain injuries: "taking into account mitigation measures, the magnitude of change at individual level is thus estimated to be medium-sized. Bearing in mind that grey seals have a high sensitivity to pressure injuries, the magnitude of the effects is thus moderate in all regions. When looking at the situation at the population level it is important to note that the population of grey

seals in the Baltic Sea is abundant and has grown over the past decades. Consequently, sensitivity to pain injuries is considered to be low at the population level and therefore the magnitude of the effects is estimated to be negligible in all regions.”;

- ii. as regards permanent hearing loss at the individual and population level: “Seals are considered to be very susceptible to permanent hearing loss and the risk of permanent loss of hearing is considered to be great if seals are near the munitions blasting spots. However, the use of spoolers reduces this risk. As seals near the blast spot (within a few hundred meters) move further, the risk of seals being exposed to significant levels of hearing loss is significantly reduced. Farther away (about 1 km away) the seals may not leave the area but spend more time above the water surface (keeping the head above the surface effectively protects the hearing loss during detonation). Spur gears are unlikely to affect grey seals that are more than 1-2 kilometers from the blast site. Thus they are subjected to the same risk of hearing loss as in detonations without the use of mitigating harm. Overall, however, the use of seal scanners reduces the number of seals receiving hearing loss and reduces the average hearing loss rate. Thus, the significance of the effect is estimated to be at most moderate at individual level and low at the population level in all regions. Multiple blasts can cause synergies if the same individual is exposed several times to various blasting operations. This is likely to be the case for a few grey seals because they are fairly abundant, particularly in M3, where most of the detonations are likely to be carried out (42 detonations during the Nord Stream project construction phase). Based on the above, it is assumed that the significance of the effects on seals close to area M3 at individual level may increase at a certain point due to increased cumulative risk. However, the interaction at population level in M3 is unlikely to change the estimation, as the status of the grey seal population is considered to be good.”

How are the statements cited above feasible if it is impossible to estimate the number of grey seals which could be affected by the NSP2 pipeline? Additionally, how can the Applicant put forward such definitive statements, given that the Applicant’s assessment is based on the belief that the conclusions regarding the abundance of grey seals and the known status of the species are “most probably reliable” (p. 25 of the Natura Assessment for Natura Site Kallbadan Islets and Waters (FIO1000089)? – the Applicant is not even sure of the reliability of the studies on which its environmental impact assessment is based. Furthermore, the authors of the Natura Assessment for Natura Site Kallbadan Islets and Waters (FIO1000089) themselves stated that “Quantifying [the phenomenon of cumulative impacts at population level] is however extremely difficult as it would need accurate knowledge of the risks involved as well as behavior and distribution of the animals in the impact area.”

Without this knowledge a proper assessment in this matter is, therefore, not possible (even the distribution of the seal population provided by the Applicant on p. 22 of the Natura Assessment for Natura Site Kallbadan Islets and Waters is not comprehensive and accurate and “can be used only as an informative overview of seals in Baltic”).

ClientEarth would also like to draw the Finnish authorities' attention to the statement of the county administrative board in Skåne, Sweden (dated 2 June 2017) in which the board rightly noted that as regards the noise from the proposed pipeline "Although the company makes the assessment that the intensity and magnitude of the sound is low, there is no analysis of whether the pipeline, in operation, can be expected to have a barrier effect on the distribution of various species." This statement, with which ClientEarth concurs, echoes that made by the Institute of Oceanology of the Polish Academy of Sciences (dated 29 May 2017), according to which "The gas transported in the pipeline does not travel silently. No data exists which would allow a rough assessment of such noise. The absence of data does not mean this has no environmental impact." This is another flaw in the environmental assessment which impedes the granting of consent for the Nord Stream 2 project.

Due to the lack of precise and definitive information concerning such fundamental matters, the Applicant's assertions in this regard are not credible and cannot be the basis for a successful application.

b) Natura 2000

ClientEarth has serious reservations concerning the impact of the Nord Stream 2 investment on particular Natura 2000 sites and the entire Natura 2000 network.

Even in view of the additional environmental impact assessments which were lacking during the Espoo procedure, i.e. those for the (i) Sea Area South of Sandkallan, Porvoo and (ii) Kallbadan Islets and Waters, the assessment of the impact of the Nord Stream 2 investment cannot be considered adequate, for the reasons stated below.

First, the Kallbadan Islets and Waters assessment – in so far as it refers to grey seals – is based on information that is not certain, but rather that is either described by the Applicant as "most probably reliable" (in the case of the status of the grey seal population) or as allowing for an "informative overview" (in the case of the distribution of the population of the grey seal). This uncertain information leads the assessment to be not so much an assessment as an (at best) educated guess. This is evidenced by statements such as, for example: "The exact amount of grey seals in the areas near Natura site that may be affected cannot be known for sure, but considering the very short duration (less than a second) of one detonation and use of bubble curtains for the most critical munitions the amount should be very low. Because of this and the general good status of grey seal population, the overall significance at population level is assessed to be not more than minor." (p. 25 of the relevant Natura assessment). Additionally, the Applicant states in the Natura Assessment for Kallbadan Islets and Waters that "Also behavioral reactions (disturbance) due to the short-term noise peaks are possible. These are for example startle reflex, which may lead to fear conditioning or a brief cessation of current activities. The overall significance of disturbance is assessed to be not more than minor for grey seals." There is no basis given for this conclusion and there is no explanation as to what is meant

by (i) “short-term noise peaks”, (ii) “startle reflex”, (ii) “fear conditioning”, (iii) “current activities”. There is also no explanation of what the Applicant means by “brief”.

Second, ClientEarth considers that, due to the lack of important information concerning the population status and migration of grey seals, the environmental impact assessment for Nord Stream 2 should take into account the Natura 2000 site “Zatoka Pucka i Półwysep Helski” (PLH220032) which, although farther away than other Natura 2000 sites located in Poland which were taken into account by the Applicant, was designated for the protection of the grey seal and may, therefore, be affected by the proposed investment. It must be borne in mind that a proper assessment of the environmental impact of an investment, including on Natura 2000 sites and the network as a whole, must take into account not only the direct effects of the investment, but also its indirect effects – it is for this reason that eliminating certain Natura 2000 sites from consideration solely on the basis of their distance to the investment must be considered improper.

Third, and in relation to the second point above, the Applicant incorrectly omitted the Natura 2000 site “Ławica Słupska” (PLC990001), stating that it is located approximately 70 km from the proposed route of Nord Stream 2 and that the site is not designated for mammals, therefore the noise generated by the construction and operation of NS2 will not have an effect on the site. It must be noted that said Natura 2000 site is designated for four bird species and, given the information provided in the EIA raport attached to the Application concerning the reaction of birds to shipping traffic, noise and air pollution in the Baltic, it cannot be stated that the NS2 pipeline cannot have any influence on the Natura 2000 site “Ławica Słupska”.

Fourth, the assessment made by the Applicant concerning the Natura 2000 sites (including those in Finland) and the network in its entirety seems to take into account existing causes of deterioration of said sites and network, thereby demonstrating that the Nord Stream 2 pipeline will not significantly (or even moderately) adversely affect protected habitats and species, since these are already adversely affected by other factors. This is the case, for example, in the Applicant’s Responses to Relevant Comments to the Espoo Report in the Statement from Poland: “The proposed Natura 2000 site (SE0330380) is already exposed to heavy vessel traffic due to the fact that it is crossed by the primary deep water ship traffic route to/from the Gulf of Finland for deep-draught vessels, used by the largest vessels in the Baltic Sea, with more than 8,500 annual ship movements in 2014. There are also ferries and fishing vessels etc. operating in this area. Compared to these, the disturbance from a single pipe laying vessel which is expected to move with at least an average daily speed of 2.5 km (but more likely closer to 4 km) per day, or from a trenching vessel, which moves at typically 7 km (but up to 10 km) per day, would be extremely limited in both its temporal and spatial extent at any specific location.” The fact that there is already activity significantly impacting the ecosystem of the Baltic Sea and certain Natura 2000 sites cannot be a justification for an investment to go ahead on the basis that it does not, according to the Applicant, “make a bad situation worse”.

Fifth, cumulative impacts have only been assessed with certain other projects, not with all possible other anthropological factors influencing Natura 2000 sites and the network, and

furthermore – as was stated in the Polish government’s remarks made in the Espoo process – these other factors have not been taken into consideration properly. The Applicant has only taken into consideration projects which overlap with the Nord Stream 2 investment either by virtue of location or time. ClientEarth considers that in the impact assessment attached to the Application (available in Finnish only), the Applicant has only analyzed the interaction of the NS2 project with the first Nord Stream project and the BalticConnector investment (pt. 14 of the attachment); no separate analysis has been made of whether and to what extent the Nord Stream 2 project’s impact will coincide with other factors such as, for example, the sea dumping sites and sea sand extraction sites mentioned on p. 27 of the Natura 2000 Assessment for Natura Site “Kallbadan Islets and Waters”, and p. 29 and 30 of the Natura 2000 Assessment for Natura Site “Sea Area South of Sandkallan, Porvoo”. It seems as though the Applicant has not conducted any real assessment in this regard, but simply decided that the distance between individual projects is enough to conclude that no cumulative impacts will occur. ClientEarth considers these actions as being in contravention of both Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the “**Habitats Directive**”), as well as Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2012, p. 1–21, hereinafter referred to as the “**EIA Directive**”).

c) **The Status of the Baltic**

ClientEarth observes that, owing to the already poor ecological status of the Baltic, the Nord Stream 2 project will prevent Member States, including Finland, from fulfilling their obligations under the:

- i. Water Framework Directive,
- ii. Marine Strategy Framework Directive.

It is common knowledge that the waters of the Baltic Sea are among the most polluted in the world.

According to the joint website of Finland’s environmental administration², “the 2013 ecological assessment of surface waters accords a good or high status to 85% of the surface area of Finnish lakes, and 65% of rivers. Only a quarter of coastal waters achieved the same status. (...) No coastal areas achieved a high status, while the proportion of those with a good status decreased from 36% [2008] to 25% [2013] between the two surveys. This change is due to changes in criteria, since the 2008 survey was based on preliminary criteria that have since been adjusted and integrated.”

²

[http://www.ymparisto.fi/en-US/Maps_and_statistics/The_state_of_the_environment_indicators/Fresh_water_and_the_sea/Big_lakes_in_good_condition_coastal_wate\(28958\)](http://www.ymparisto.fi/en-US/Maps_and_statistics/The_state_of_the_environment_indicators/Fresh_water_and_the_sea/Big_lakes_in_good_condition_coastal_wate(28958))

The situation is similar in other countries bordering the Baltic and involved in the Nord Stream 2 project. For example, according to the main German environmental protection agency, Umweltbundesamt³ (article published on 20 October 2017), “In 2015 no water body of the coastal and transitional waters of the German parts of North and Baltic Seas achieved good or very good ecological status. The target set by the European Water Framework Directive (WFD, EU Directive 2000/60/EC) i.e. that all waters should be in at least a good environmental status by 2015, was therefore missed by a wide margin. As this goal was clearly missed, the two subsequent management cycles under the WFD now need to be used to reach the ambitious targets by 2027 at the latest.”

Granting consent to any action which would contribute to the modification of the Baltic ecosystem without contributing to its improvement would be at variance with Finland’s obligation under the Water Framework Directive.

Any such consent would also constitute a violation of the Marine Strategy Framework Directive, a fact which ClientEarth has already indicated in its comments made during the Espoo process. Owing to the content of the application and the Applicant’s statements to date, ClientEarth deems it necessary to once again stress that the Marine Strategy Framework Directive requires EU member states to:

- i. take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest. Good environmental status means the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use of the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations, i.e.:
 - a. the structure, functions and processes of the constituent marine ecosystems, together with the associated physiographic, geographic, geological and climatic factors, allow those ecosystems to function fully and to maintain their resilience to human-induced environmental change. Marine species and habitats are protected, human-induced decline of biodiversity is prevented and diverse biological components function in balance;
 - b. hydro-morphological, physical and chemical properties of the ecosystems, including those properties which result from human activities in the area concerned, support the ecosystems as described above. Anthropogenic inputs of substances and energy, including noise, into the marine environment do not cause pollution effects;
- ii. develop and implement marine strategies in order to:

³ <https://www.umweltbundesamt.de/en/indicator-ecological-status-of-transitional-coastal>

- a. protect and preserve the marine environment, prevent its deterioration or, where practicable, restore marine ecosystems in areas where they have been adversely affected;
- b. prevent and reduce inputs in the marine environment, with a view to phasing out pollution, so as to ensure that there are no significant impacts on or risks to marine biodiversity, marine ecosystems, human health or legitimate uses of the sea.

The Baltic Sea is a marine region covered by the scope of said directive, therefore it is the responsibility of all EU member states which are parties of origin for the proposed investment – and this includes Finland – to ensure that no actions are undertaken that will make more difficult the attainment or maintenance before 2020 of the good environmental status of the waters of the Baltic Sea.

It is clear to us that Nord Stream 2 will make this task more difficult and will do nothing to improve the environmental status of the Baltic. It is, therefore, equally clear that any consent for the Nord Stream 2 project will be in conflict with the obligations arising under the Marine Strategy Framework Directive.

ClientEarth would further like to indicate that the consequences of the construction of pipelines, such as: (i) smothering and (ii) underwater noise, are listed by the Baltic Marine Environment Protection Commission (HELCOM) as having the potential to directly cause the decline of biodiversity in the Baltic⁴ and were one of the causes leading to the adoption (in Kraków, Poland) of the Helcom Baltic Sea Action Plan of 15 November 2017⁵. Ten years have passed since this document was adopted and it would be a shame for Finland or any other EU member state to approve a project which does not contribute to the attainment of the goals envisaged therein, particularly when the project design is not yet ready and such issues as: (i) the precise locations and quantities of the rock material required for the pipeline route (pt. 11.3.5, p. 303 of the EIA report attached to the application), as well as (ii) the grey seal population and migration routes, are not known.

ClientEarth would also like to draw the Finnish authorities' attention to the fact that according to the UmweltBundesamt, the conclusions made by the Applicant in the environmental impact assessment about the environmental impact of the substances released during the operation of the NS2 pipeline are not presented with sufficient accuracy (p. 2 of the UmweltBudesamt's letter to the Federal Maritime and Hydrographic Agency, 23 June 2017).

A project of this nature cannot go ahead in the Baltic Sea without all data being available and all aspects of the investment being thoroughly analyzed.

d) Alternative Routes and “Salami Slicing”

⁴ <http://helcom.fi/lists/publications/bsep122.pdf>, p. 43.

⁵ http://www.helcom.fi/Documents/Baltic%20sea%20action%20plan/BSAP_Final.pdf

The lack of proper analysis of all aspects of the investment is visible also in the fact that the Applicant has failed to provide an analysis of:

- i. a land-based alternative route – the Applicant has provided no concrete data or analysis supporting its view that a land-based route would be unacceptable for socio-economic and environmental reasons. In particular, the Applicant should not be allowed to omit such an alternative, when the only other alternatives given are mere modifications of one sea-based route and the only justification given for such a choice are the Applicant’s experiences gained from the first Nord Stream project – these experiences have not been elaborated on and, therefore, this justification cannot be considered convincing;
- ii. an environmental impact assessment which would provide an adequate assessment of Nord Stream 2’s impact on the entire route of the project and the Baltic basin, not just those areas which are within or directly adjacent to Finnish territory. This is particularly important as the effects of the investment will be felt in such countries as Poland and the national permitting authority must have exhaustive information as to what effect the permit issued in Finland will have on the environment as a whole.

e) **Climate and Air Quality**

ClientEarth continues to be of the opinion that the environmental considerations included in the EIA documentation and now in the Application provide an inadequate analysis concerning the investment’s impact on the climate and air. The Applicant seems to continue to act as in the Espoo procedure, where the investment’s impact is analyzed only as concerns Finland and not, as is required by EU law, in relation to the short and long-term effects of the investment on the climate as a whole, including in other countries, particularly in affected countries other than the countries of origin.

Moreover, ClientEarth still considers that the assessment conducted by the Applicant is in violation of art. 3 of the EIA Directive, which requires an environmental impact assessment to identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12 of said directive, the direct and indirect effects of a project on the following factors:

- i. human beings, fauna and flora;
- ii. soil, water, air, climate and the landscape;
- iii. material assets and the cultural heritage;
- iv. the interaction between the factors referred to in points a, b and c above.

Moreover, the Applicant has not adequately justified its omission of an analysis of the investment’s impact – both direct and indirect – on the levels of pollutants other than CO₂, NO_x, SO₂ and PM. It is not enough to state that such an omission is in accordance with certain recommendations of bodies not empowered to interpret and rule upon EU law. The requirement to monitor, analyze and observe levels of these other pollutants is

envisaged by the EIA Directive and Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008, p. 1–44).

f) **The Russian EIA**

ClientEarth reiterates its view that the entire environmental impact assessment – not just the Finnish EIA – in this matter is flawed due to the serious doubts concerning the adequacy of the Russian assessment of the environmental considerations and consequences of the planned investment. Specifically, this refers to the chosen route of the investment through the Kurgalsky Nature Reserve, in relation to which – according to the Espoo Report – “The project will require temporary construction activities within the Kurgalsky Nature Reserve and result in some long term changes to habitats. However, due to the small areas affected and the fact that the most valuable habitats will not be impacted and the overall integrity and functioning of the reserve will not be affected, the impact ranking on the protected area is evaluated as minor.” We cannot accept that long-term changes to habitats deemed not the “most valuable” but only “valuable” or “less valuable” mean that the impact on the protected area is minor. This is an unacceptable assessment grounded on a criterion that is not to be found in international law and which would not be deemed adequate under EU law, if EU law were applicable in this regard (note: EU law calls for the protection of all habitats for which protection areas are created, not just those branded “most valuable”).

We have serious reservations as to the accuracy and validity of this assessment also because:

- i. it is based on the conclusions of the Russian EIA procedure, during which serious objections were raised concerning whether the chosen route is the least damaging to the environment – we believe that environmental aspects were largely ignored when selecting the route of the investment through the Kurgalsky Nature Reserve;
- ii. it is in violation of Russia’s obligations under:
 - a. the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat;
 - b. the Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area.

We appreciate that Russia is not bound by the Espoo Convention and that, nonetheless, it has elected to act as a party of origin under said convention, to the extent allowed by its laws. This does not mean, however, that Russia can act in violation of its international treaty obligations and that the other states involved in the investment, all of whom are EU member states, can disregard the serious flaws of the Russian EIA procedure, accepting its results in its EIA and decision-making process.

g) Pipeline Decommissioning

ClientEarth considers that the Applicant should provide a detailed assessment of the environmental impact of the removal of the NS2 pipeline. Currently, the Applicant is of the view that “Given the long design life of Nord Stream 2, it would be premature to decide upon the decommissioning programme at this time since it would then not be possible to consider best practices or best available technology” (p. 25 of the Applicant’s Responses to Relevant Comments to the Espoo Report in the Statement from Poland).

At the same time, however, the Applicant has applied for authorization for preparation “for the activities described in the Application, up to and including successful completion of pre-commissioning activities when the pipeline would be left filled with dry air (or nitrogen) close to atmospheric pressure, i.e. not including the actual project activity (natural gas transportation) for which the pipelines are constructed.” (p. 137 of the Application).

The Applicant envisages the possibility of having to remove the pipeline in a short-time frame, should the Water Permit be overturned in a legal proceeding – this is evidenced by the fact that the Applicant tries to convince the competent authority that in such an event the pipeline would be removed and the environment could be “substantially restored”.

The laying of the pipes for the NS2 project is scheduled to be completed by May 2019, as per the information provided in the Application (p. 21 of the Application). Given that a decision of the competent Finnish authority is expected in the first quarter of 2018, this would mean that, should the authorization for preparation be granted and any issued permit be subsequently overturned, the pipeline would likely already be completely constructed, if not yet operational. An overturning of the permit in such an event would mean, of course, that the Applicant would need to totally remove the pipeline and so it would be unrealistic to expect that only at that point (so soon after the initial permit was granted) would the Applicant need to analyze the possible environmental effect of such a removal (decommissioning).

It is therefore necessary, in ClientEarth’s view, for the Applicant to be required at this present stage to provide a full environmental impact assessment for the removal (decommissioning) of the NS2 pipelines. This of course would not prevent the Applicant from undertaking a new assessment in the future, as is the Applicant’s wish, assuming that the NS2 pipelines would indeed be constructed.

h) Additional Considerations

ClientEarth would like to note that the serious doubts raised by numerous participants in the Espoo process should encourage the Finnish authority to appoint an independent expert or experts, should it not decide to immediately deny the Applicant’s request for a permit. ClientEarth is not familiar with the intricacies of the Finnish legal system, but believes that the basic rules governing administrative proceedings are similar in all EU countries with a civil-law system. Hence, ClientEarth observes that if this proceeding were conducted in Poland and the Applicant and the other parties in the case presented

opposing viewpoints on technical issues, supported by appropriate scientific arguments, the competent authority would be legally required to appoint an independent expert or experts to evaluate the contentious issues. The EIA report and its attachments must be considered as the submission of a private party and, therefore, must be examined critically. It cannot be the case that the permitting authority simply dismisses the arguments of one side and accepts the arguments of the other side without having an independent expert conduct an independent review of the matters involved. The competent authority would be required to do so in Poland and ClientEarth expects the same fair standard to be applied in all other EU jurisdictions, including Finland.

Additionally, ClientEarth notes that the majority of the documents made available on the Finnish website https://tietopalvelu.ahtp.fi/Lupa/Lisatiedot.aspx?Asia_ID=1417719 are in the Finnish language and no translation is available. This makes it extremely difficult for entities in other countries to participate in the consultation process, given that there are only 30 days in which to provide comments. This also reflects poorly on the Espoo process, as certain documents were not made available at that time and were only made available now with this short time-limit, although these documents include an analysis of matters mentioned (but not explained) in the Espoo report. ClientEarth is therefore of the opinion that the public in Poland was not afforded an adequate opportunity to participate in the permitting procedure.

ClientEarth considers it plain, moreover, that the entire Nord Stream 2 project, including the part of the project to be constructed on Finnish territory, will have an impact on the territory of Poland and its environment.

IV. THE AUTHORIZATION FOR PREPARATION

ClientEarth is strongly opposed to the Applicant's request for authorization for preparation.

ClientEarth does not doubt that the construction of the Nord Stream 2 project is complex and requires much investment and many experts. However, given the considerable deficiencies of the (i) Application, (ii) the environmental impact assessment and (iii) the Espoo process, the interests of the Applicant and its contractors cannot be held to be more important than that of the environment and society.

The fact that the “project as a whole is highly susceptible to delays”, as the Applicant claims, did not stop it from submitting on 7 November 2017 a revised compensation concept to the Stralsund Mining Authority, the authority responsible for carrying out the permitting procedure and issuing the permit for the route of the Nord Stream 2 Pipeline in German coastal waters.⁶ This revised concept will now need to be “assessed and evaluated, inter alia, by the nature conservation and environmental authorities. Based on these results, the Stralsund Mining Authority will then carry out its assessment, which is a

⁶ <https://www.nord-stream2.com/media-info/news-events/nord-stream-2-submits-revised-compensation-concept-74/>

prerequisite for issuing the decision on the plan approval procedure.” This will of course require a new public consultation process in Germany, possibly also new consultations in the Espoo procedure, and will take a considerable amount of time. Therefore, the Applicant’s assertion that authorization for preparation must be granted as the project can tolerate no delay is not based in fact.

Furthermore, it is not true that a delay would be “against the general European interest.” This is the Applicant’s view which, as it happens, is not shared by the Polish and Lithuanian governments, both of which gave their comments during the Espoo proceedings. It is also a view not shared by ClientEarth. It is a view which is, furthermore, not justified by independent analyses conducted by the European Commission, whose experts in 2016 stated that “Large-scale regasification capacity in the EU in 2015 was 195 bcm/year, with 23 bcm/year under construction; it will reach 213 bcm/year by 2019.¹² Planned projects could result in an additional 146 bcm/year. Overall, therefore, the EU’s LNG import capacity is clearly sufficient, taking into account annual gas consumption of 400-500 bcm/year in recent years.”⁷

Additionally, contrary to the Applicant’s assertions and as was noted earlier in this memorandum, the Nord Stream 2 project risks considerable harm for the uses of waters and the natural environment and its functions.

If undertaken, the previously existing conditions would not be essentially restored. The Applicant claims (p. 140 of the Application) that the newly installed pipeline may be recovered (in parts or totally) and the environment can be substantially restored. This claim is at variance with the same Applicant’s statement contained in the Espoo report (p. 496 of the English language version of the Espoo report) that “The potential sources of impacts from the pipeline removal option comprise:

- i. Physical changes to seabed features (natural and man-made), which have the potential to impact benthic habitats in areas where the pipelines have acted as an artificial reef;
- ii. Release of sediments into the water column, which has the potential to impact water quality due to the spreading of sediments, with secondary impacts on marine fauna and flora;
- iii. Release of contaminants and/or nutrients into the water column (e.g. sediment associated contaminants), which has the potential to impact water quality with secondary impacts on marine fauna;
- iv. Sedimentation on the seabed, which has the potential to impact sediment quality, benthic flora and fauna and fish;

⁷ “Commission staff working document accompanying the document communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on an EU strategy for liquefied natural gas and gas storage”, Brussels, 16 February 2016, SWD(2016) 23 final, https://ec.europa.eu/energy/sites/ener/files/documents/1_EN_autre_document_travail_service_part1_v3.pdf

- v. Generation of underwater noise and/or vibrations, which has the potential to impact fish and marine mammals;
- vi. Above water disturbance (noise, visual including light, vessel movement, etc.), which has the potential to impact marine mammals, birds and people;
- vii. Safety zones around vessels, which has the potential to impact commercial fisheries and maritime traffic (shipping);
- viii. Release of air pollutants and GHGs from vessels, which has the potential to impact the climate and local air quality with secondary impacts on people;
- ix. Employment generation.”

It is, therefore, not the case that if the permission is overturned or conditions altered, it is possible to substantially restore the environment.

At any rate, it is surprising that the Applicant would even make this assertion, considering that important data (described earlier in this memorandum) is not now available and will presumably become available only at a later date.

Finally, ClientEarth does not consider it appropriate for the Applicant to submit a decommissioning plan approximately one year prior to the end of the operational lifetime (in about 50 years) of the pipelines. Firstly, one year is too short a time period for the competent authority to review what is likely to be a very complex document and to ensure adequate public and international participation in the matter. Secondly, as was stated earlier in the memorandum, the Applicant should be required to put forth a plan for decommissioning using the available means at the present time. There is no reason for which the Applicant should not be able to do this. In the future, when conditions change and technology improves, a new plan may be required. However, given that the Applicant envisages the possibility that a final permit may not be granted and removal may need to occur sooner, the Finnish authority should require a detailed decommissioning plan and assessment at this stage of the proceedings, before any decision is rendered concerning a permit.

V. SUMMARY

ClientEarth requests that the competent authority deny the Applicant:

- i. the Water Permit;
- ii. the Survey Permit;
- iii. the Authorization for preparation.

The legal prerequisites for the granting of the permits and authorization listed above have not been met and the flaws in the Espoo proceeding, the environmental impact assessment and now, in the permitting process in Finland, are too great for the competent authority to grant any of the above mentioned permits and authorizations.

These flaws include a defective analysis and erroneous conclusions concerning:

- i. the present and future provision of natural gas to the European Union and the state of the EU energy market;
- ii. the impact of Nord Stream 2 on:
 - a. marine mammals,
 - b. the Natura 2000 network,
 - c. the Baltic Sea, and
 - d. climate and air quality.

Nord Stream 2 will be detrimental to the environmental and the energy security of Europe and should not be given consent.

On behalf of ClientEarth Prawnicy dla Ziemi, a foundation registered in Poland:

Dr Marcin Stoczkiewicz, Chairman of the Management Board
