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Introductory remarks

This document is a draft of a permit for Nord Stream 2 AG to construct two parallel natural gas pipelines on the Danish continental shelf north and west of Bornholm. It should be emphasised that it has not been decided whether a permit for the project applied for can be granted on the proposed route, as it depends on the results of the public consultations both in Denmark and in the countries being consulted under the Espoo Convention as well as the ongoing case proceedings taking place in parallel with these.

It should also be emphasised that the results of the public consultation and case proceedings may change the content of a potential permit and that conditions may be added beyond what is listed in the draft. The conditions set out in the draft are conditions that will be laid down if a permit is granted regardless of the outcome of the public consultation and the ongoing case proceedings.

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Date

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10917

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Draft ‘Permit for Nord Stream 2 natural gas pipelines’

In a letter dated 10 August 2018, Nord Stream 2 AG has applied the Danish Energy Agency for a permit to construct two parallel natural gas pipelines in the Danish continental shelf area in the Baltic Sea north and west of Bornholm.

The construction and operation of pipeline installations for the transportation of hydrocarbons on the Danish continental shelf may only take place with the permission of the Danish Minister of Energy, Utilities and Climate. Access to granting permits has been delegated to the Danish Energy Agency.

1. Permit

1.1. Decision

The Danish Energy Agency hereby grants a permit for the construction of the natural gas pipelines applied for by Nord Stream 2 AG.

The permit is granted in accordance with section 4 of the Act on the Continental Shelf (Continental Shelf Act), cf. Consolidated Act no. 1101 of 18 November 2005, with subsequent amendments, and section 2 of Executive Order no. 1520 of 15 December 2017 on Certain Pipeline Installations in Territorial Waters and on the Continental Shelf.

This permit covers construction, including laying, of the natural gas pipelines in the Danish continental shelf area. Before the pipelines are put into operation, Nord Stream 2 AG must apply to the Danish Energy Agency for permission to operate the pipeline, cf. section 2 of Executive Order no. 1520 of 15 December 2017 on Certain Pipeline Installations in Territorial Waters and on the Continental Shelf.

The permit is granted after consultation with, amongst others, the Danish Environmental Protection Agency, the Danish Defence Command, the Danish Maritime Authority, the Danish Fisheries Agency, the Danish Coastal Authority, the Danish Working Environment Authority, the Ministry of Foreign Affairs of Denmark, the Danish Geodata Agency and the Danish Agency for Culture and Palaces.

The permit may not be utilised before the deadline for appeals of 4 weeks from publication has expired, cf. section 6 a, subsections 4 and 5 of the Act on the Continental Shelf.

[The final format and content of the section is pending the results of the public consultation, among other things]

1.2. Conditions

The permit is granted on the following conditions pursuant to section 4 of the Continental Shelf Act, cf. section 4, subsection 2 of the Continental Shelf Act and section 4 of Executive Order no. 1520 of 15 December 2017 on Certain Pipeline Installations in Territorial Waters and on the Continental Shelf:

1. If Nord Stream 2 AG abandons the project fully or partially or cannot realise the project for other reasons, this permit expires. Nord Stream 2 AG shall notify the Danish Energy Agency if the pipeline project is not implemented as applied for.
2. Nord Stream 2 AG shall conclude agreements with the owners of the cable and pipeline installations which are crossed by the pipelines. The agreements are for the purpose of ensuring indemnity of the owners as a result of the crossing.
3. Nord Stream 2 AG shall take out insurance for compensation of damage caused by the activities exercised in accordance with the permit, even if the damage is incidental.
4. Nord Stream 2 AG shall submit design and method choice for the Danish Energy Agency's approval in connection with the crossing of other infrastructure after entering agreements with the owners of the infrastructure to be crossed, but before the laying of the pipelines.
5. Nord Stream 2 AG shall prepare a monitoring programme for the construction phase, including in connection with laying of pipelines. The monitoring programme shall include the environmental considerations and be approved by the Danish Energy Agency before laying of pipelines is begun.
6. Nord Stream 2 AG shall make an assessment of the pipelines after they have been laid, including a post-lay survey. The assessment with conclusions shall be submitted for the Danish Energy Agency's approval in terms of whether further seabed intervention works must be performed.
7. The final location (coordinates) for the laid pipelines shall be submitted to the Danish Energy Agency.
8. For all phases of the project, Nord Stream 2 AG shall have an emergency service established for addressing the consequences of spills of hydrocarbons or other unintentional incidents. Plans for the established emergency preparedness shall be submitted to the Danish Energy Agency annually.
9. Nord Stream 2 AG shall submit documentation for the management system for operation, inspection and maintenance of the pipelines before the pipelines can be put into use. The management system shall ensure that operations and conditions are constantly monitored to ensure maintenance of the pipelines' integrity. The management system is reassessed using a risk-based approach based on the observations made on the pipelines' condition and based on the pipelines' operating conditions.

10. Nord Stream 2 AG shall ensure that the gas composition remains within the design specification for the pipelines. Any significant change of composition must be accepted by the Danish Energy Agency.
11. Nord Stream 2 AG shall prepare a monitoring programme for the operation phase. The monitoring programme shall include the environmental considerations and be approved by the Danish Energy Agency before the pipelines are put into operation.
12. Nord Stream 2 AG shall publish the results from the monitoring during the construction and operation phases of the environmental considerations as they become available.
13. A verifying third party must issue a "Certificate of Compliance" that documents that the installations comply with applicable laws, standards and Nord Stream 2 AG's technical specifications. The Danish Energy Agency requests that the "Certificate of Compliance" be submitted to the Danish Energy Agency when it is available, but before the commissioning of the pipeline installations.
14. Before the pipelines are commissioned, there must be an Offshore Inspection Release Note from the certifying company. The Inspection Release Note shall be submitted to the Danish Energy Agency as soon as it is available.
15. Nord Stream 2 AG shall prepare a monitoring programme for the operation phase. The monitoring programme shall include the safety considerations. The monitoring programme must be approved by the Danish Energy Agency and must be launched before the pipelines can be put into operation.
16. During the construction phase and during operation, the pipeline installations are subject to supervision by the Danish authorities. As part of the Danish Energy Agency's supervision of the pipelines, the Danish Energy Agency may at any time request submission of internal and external audits in order to gain insight into the auditing and independent third-party verification performed.
17. Nord Stream 2 AG shall, well in advance before one or both pipelines are expected to be taken out of operation, prepare a plan for decommissioning of the pipeline installations and present the plan to the Danish Energy Agency for the Danish Energy Agency's approval. After prior dialogue with Nord Stream 2 AG, the Danish Energy Agency may require that the company remove the pipeline installations covered by this approval from the seabed in whole or in part within a later-specified deadline after final use, cf. section 4, subsection 2 of Executive Order no. 1520 of 15 December 2017 on Certain Pipeline Installations in Territorial Waters and on the Continental Shelf.
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[The final format and content of the section is pending the results of the public consultation, among other things]

1.3. Guidelines for appeals

The decision can be appealed in writing to the Danish Energy Board of Appeal, Toldboden 2, 8800 Viborg, within 4 weeks after the decision is published, cf. section 6 a of the Continental Shelf Act.

According to section 6 a, subsection 1 of the Continental Shelf Act, anyone with a significant and individual interest in the decision as well as local and national associations and organisations whose main purpose is the protection of nature and the environment has the right to appeal. The same applies to local and national associations whose purpose is to safeguard significant recreational interests if the decision affects such interests.

Best regards,

[Signature Danish Energy Agency]

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2. Permit application

[The content of the section is pending the ongoing case proceedings]

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3. Environmental impact assessment (EIA)

The environmental considerations concerning the pipeline project applied for are set out in:

- Nord Stream 2, Environmental Impact Assessment, Denmark North-Western Route
- Nord Stream 2, Environmental Impact Assessment, Denmark North-Western Route, Atlas

The company's environmental assessment of the pipeline project applied for has been prepared in accordance with the Continental Shelf Act and Consolidated Act no. 448 of 10 May 2017 on Environmental Assessment of Plans and Programmes and of Specific Projects (EIA).

The Espoo part of the environmental impact assessment report has been prepared on the basis of the Espoo Convention (Convention on Environmental Impact Assessment in a Transboundary Context), cf. Executive Order no. 71 of 4 November 1999 of the Convention of 25 February 1991 on Environmental Impact Assessment in a Transboundary Context.

[Most of this section is pending the result of the public consultation]

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4. Authorities' comments and assessment

[The final format and content of the section is pending the results of the public consultation, among other things]

4.1. Applicant

[The final format and content of the section is pending the results of the public consultation, among other things]

4.2. Application materials

[The final format and content of the section is pending the results of the public consultation, among other things]

4.3. Nord Stream 2 project

In the event that Nord Stream 2 AG abandons the project fully or partially or cannot realise the project for other reasons, this permit expires. Nord Stream 2 AG shall notify the Danish Energy Agency if the pipeline project is not implemented as applied for (condition 1).

Nord Stream 2 AG shall take out insurance for compensation of damage caused by the activities exercised in accordance with the permit, even if the damage is incidental (condition 3).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.4. Location of the Danish part of the pipeline project

The coordinates for the specific location in Danish waters are set out in Appendix I of the application. The final coordinates for the location of the pipelines and thus the kilometric points can only be finally determined when the pipelines are laid.

[The final format and content of the section is pending the results of the public consultation, among other things]

4.5. Schedule

[The final format and content of the section is pending the results of the public consultation, among other things]

4.6. Technical considerations

4.6.1. Seabed intervention works

Nine places have been identified where additional stabilisation of the pipelines may be required. Five places where rock placement will occur at the site, which in total constitutes a maximum of 11.3 km, and four places where post-lay trenching will occur, which in total constitutes a maximum of 14.5 km.

It is crucial to the Danish Energy Agency's assessment of the intervention works that the number and location of the sections are not changed and that the length of the planned sections does not change significantly.

After the pipelines have been laid, Nord Stream 2 AG shall prepare an assessment of the pipelines, including conducting a post-lay survey. The assessment shall be approved by the Danish Energy Agency, which, among other things, may lay down requirements for additional seabed intervention works (condition 6).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.6.2. Crossing of infrastructure

In the application, Nord Stream 2 AG identified seven cables and two pipelines that will be crossed by the Nord Stream 2 pipelines. The seven cables are expected to be crossed by laying out concrete mattresses on the seabed and the two pipelines by rock filling, where a concrete mattress will be laid over the existing pipelines and the two Nord Stream 2 pipelines will subsequently be consolidated by rock filling. With regard to the planned infrastructure, the company states in the application that the proposed Nord Stream 2 route crosses the future route for Baltic Pipe. The Danish Energy Agency notes that the crossing, depending on the options the Baltic Pipe project has chosen to pursue, is expected to take place either in German or Danish waters.

Nord Stream 2 AG shall ensure that agreements are concluded with the owners of the infrastructure being crossed (condition 2) and then submit the design and method of execution for the crossing as well as the crossing agreement for the Danish Energy Agency's acceptance before the work is begun (condition 4).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.6.3. Content of hydrocarbons and composition of the gas

After submitting the application, Nord Stream 2 AG has specified the gas composition for the gas to be transported in the pipelines. It is of crucial importance for the permit that the gas composition remains within the design specifications for the pipelines. Any significant change of composition must be accepted by the Danish Energy Agency, cf. condition 10.

[The final format and content of the section is pending the results of the public consultation, among other things]

4.6.4. Design

A verifying third party must issue a "Certificate of Compliance" that documents that the installations comply with applicable laws, standards and Nord Stream 2 AG's technical specifications. The Danish Energy Agency requests that the "Certificate of Compliance" be submitted to the Danish Energy Agency when it is available, but it must be sent before the point in time where the pipeline installation is put into operation (condition 13).

The management system must ensure and document in the project phase prior to the pipelines are put into operation that Danish law, as well as the requirements and rules thereunder, is complied with in both normal and critical situations, including that there is appropriate emergency preparedness for unintended incidents, condition 8. Changes in emergency preparedness must be submitted to the Danish Energy Agency and once a year Nord Stream 2 AG shall send the current plan for the established emergency preparedness to the Danish Energy Agency. The time of the annual submission is agreed with the Danish Energy Agency.

Before the pipelines are put into operation, there must be an Inspection Release Note from the certifying company. The Inspection Release Note shall be submitted to the Danish Energy Agency as soon as it is available, cf. condition 14.

The Danish Energy Agency expects Nord Stream 2 AG to audit the Nord Stream 2 project according to a fixed plan and notes in this connection that the Danish Energy Agency may at any time request that an updated list of the audits be submitted as well as necessary insight into the performed auditing and independent third-party verification, where this is required or chosen as documentation of the project's implementation (condition 16).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.6.5. The laying of the pipelines

Commissioning

[The final format and content of the section is pending the results of the public consultation, among other things]

Operation and maintenance

The Danish Energy Agency presumes that Nord Stream 2 AG will continuously monitor the flow of the transported natural gas and its composition to ensure that these are within the design specifications for the pipeline and that the operations are conducted within the pipelines' design specifications. Maintenance and operations are presumed to comply with and follow the manufacturer's instructions and to be implemented in Nord Stream 2 AG's management system for maintenance, so this may be subject to the authorities' supervision (condition 16).

The management system for operation, inspection and maintenance of the pipeline must be prepared and initiated before the pipelines are put into use. The inspection plan should specify how often and to what extent visual inspections (fittings, marine vegetation, integrity of all types of seabed interventions, etc.) are to be performed with ROV, acoustic surveys, etc., with regard to the pipelines' and the seabed's condition, cf. condition 9 in the permit.

The Danish Energy Agency notes that operation, inspection and maintenance shall be reassessed using a risk-based approach based on documented observations of the pipelines' condition and based on the pipelines' operating conditions at the relevant time.

Nord Stream 2 AG shall prepare a monitoring programme for the operation phase. The monitoring programme shall include the safety considerations. The monitoring programme shall be approved by the Danish Energy Agency before the pipeline can be put into operation (condition 15).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.6.6. Decommissioning

Nord Stream 2 AG describes in the application that the preferred option for decommissioning is to leave the pipelines *in situ* on the seabed. In addition, Nord Stream 2 AG advises that decommissioning will be done according to the applicable rules and standards at the time of the decommissioning.

The Danish Energy Agency notes that a full or partial decommissioning of the Nord Stream 2 pipelines in Danish waters requires approval from relevant Danish authorities and that the current starting point for such decommissioning is removal and full clean-up, with the least possible intervention and impact on the marine environment (condition 17).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7. Safety and environmental considerations

4.7.1. Risk assessment

Management system for the design and installation phase

Nord Stream 2 AG shall submit documentation for the management system for operation, inspection and maintenance of the pipelines before the pipelines can be put into use. The management system shall ensure that operations and conditions are constantly monitored to ensure maintenance of the pipelines' integrity. The management system is reassessed using a risk-based approach based on the observations made on the pipelines' condition and based on the pipelines' operating conditions (condition 9).

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.2. Route selection

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.3. Safety of navigation

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.4. Fishing

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.5. Diving work

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.6. Protection zone and safety zone

[The final format and content of the section is pending the results of the public hearing, among other things]

4.7.7. Chemical and conventional munitions and military practice areas

[The final format and content of the section is pending the results of the public hearing, among other things]

4.7.8. Environment

Monitoring programmes

Nord Stream 2 AG shall prepare monitoring programmes for the construction and operation phases that shall include the environmental conditions and be approved by the Danish Energy Agency before laying of pipelines is begun and before the pipelines are put into operation, respectively, cf. conditions 5 and 11.

The results from the monitoring programmes shall be made available to the public as they become available, cf. condition 12.

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.9. Nature conservation areas

[The final format and content of the section is pending the results of the public consultation, among other things]

4.7.10. Cultural heritage

[The final format and content of the section is pending the results of the public consultation, among other things]