



Energistyrelsen

Nord Stream 2 AG
Hinterbergstrasse 38A
6312 Steinhausen,
Switzerland

Office/department

Underground

Date

28-01-2025

J no.2024 - 4298

/mklh/lsm

Decision on permitting work at and on the Nord Stream 2 pipeline facility in the Baltic Sea

The Danish Energy Agency hereby grants permission for Nord Stream 2 AG to carry out work at and on the Nord Stream 2 pipeline facility in the Baltic Sea, cf. the Continental Shelf Act.¹Section 4(1) and the Executive Order on Certain Pipeline Facilities²Section 2, subsection 1.

It is a condition of the permit that Nord Stream 2 AG carries out the works within the physical and environmental framework and assumptions stated in the application and the habitat assessment. The habitat assessment contains a significance assessment in accordance with the Offshore Habitat Executive Order.³Section 3 and an assessment according to the rules on species protection in Section 5 of the Executive Order.

Terms

The permit is granted on the following terms, cf. Section 4(2) of the Continental Shelf Act and Section 4(1) of the Executive Order on Certain Pipeline Facilities in the Territorial Sea and on the Continental Shelf:

1. The work must be carried out in the period from 1 April 2025 to 30 September 2025.
2. The work must be carried out in accordance with the Danish Energy Agency's standard terms and conditions for offshore surveys (Appendix 1).
3. Nord Stream 2 AG must complete the Danish Energy Agency's attached form regarding the statement of compliance with conditions (Appendix 2) and return the completed form to the Danish Energy Agency no later than 4 weeks after the completion of the works.

¹Act on the Continental Shelf and Certain Activities in the Territorial Sea, cf. Consolidation Act No. 199 of 27 February 2024

²Executive Order No. 1520 of 15 December 2017 on certain pipeline installations in the territorial sea and the continental shelf, as amended.

³Executive Order No. 846 of 26 June 2024 on the administration of international nature conservation areas and the protection of certain species during scientific studies, feasibility studies, exploration and extraction of hydrocarbons, underground storage, pipelines, etc. offshore.

Danish Energy Agency

Carsten Niebuhrs Gade 43
1577 Copenhagen V

T: +45 3392 6700

E: ens@ens.dk

www.ens.dk



The following email addresses **bowl** be informed: mklh@ens.dk and indvindingsekr@ens.dk.

4. Nord Stream 2 AG must complete the attached NoiseRegisterTemplate form (Appendix 3) and submit the form to the Danish Environmental Protection Agency. The report must be made under the column "Generic explicitly impulsive source" and include the date of the noisy activity (day), position, sound level and an indication of which activity has caused the impulsive noise. Documentation that the report has been submitted to the Danish Environmental Protection Agency must be submitted to indvindingsekr@ens.dk no later than 3 months after the completion of the work.
5. Nord Stream 2 AG must submit information about the vessel(s) and companies used for the applied works for the Danish Energy Agency's approval no later than 6 weeks before the works commence.
6. Nord Stream 2 AG must submit survey data and results from the applied works, including data and results from the final as-left survey, to the Danish Energy Agency as soon as these are ready and no later than 3 months after the end of the survey program.
7. Nord Stream 2 AG shall submit a plan for the Nord Stream 2 pipeline facility to the Danish Energy Agency annually. The plan shall contain the company's specific future plans for the entire pipeline facility, including the cut pipe sections that are expected to be laid on the seabed in connection with the applied works.

The conditions are explained in more detail and justified in the section of this decision on the Danish Energy Agency's assessment and justification.

Case presentation

On 26 September 2024, Nord Stream 2 AG applied for a permit to carry out remedial works on the Nord Stream 2 pipeline facility in the Danish exclusive economic zone in the Baltic Sea (see Figure 1) in Q2-Q3 2025. In May 2024, the company applied for a permit to carry out the works in Q3-Q4 2024, but postponed the works to Q2-Q3 2025 and therefore submitted an updated application in September 2024. The current application from Nord Stream 2 AG is supplemented by a habitat assessment.

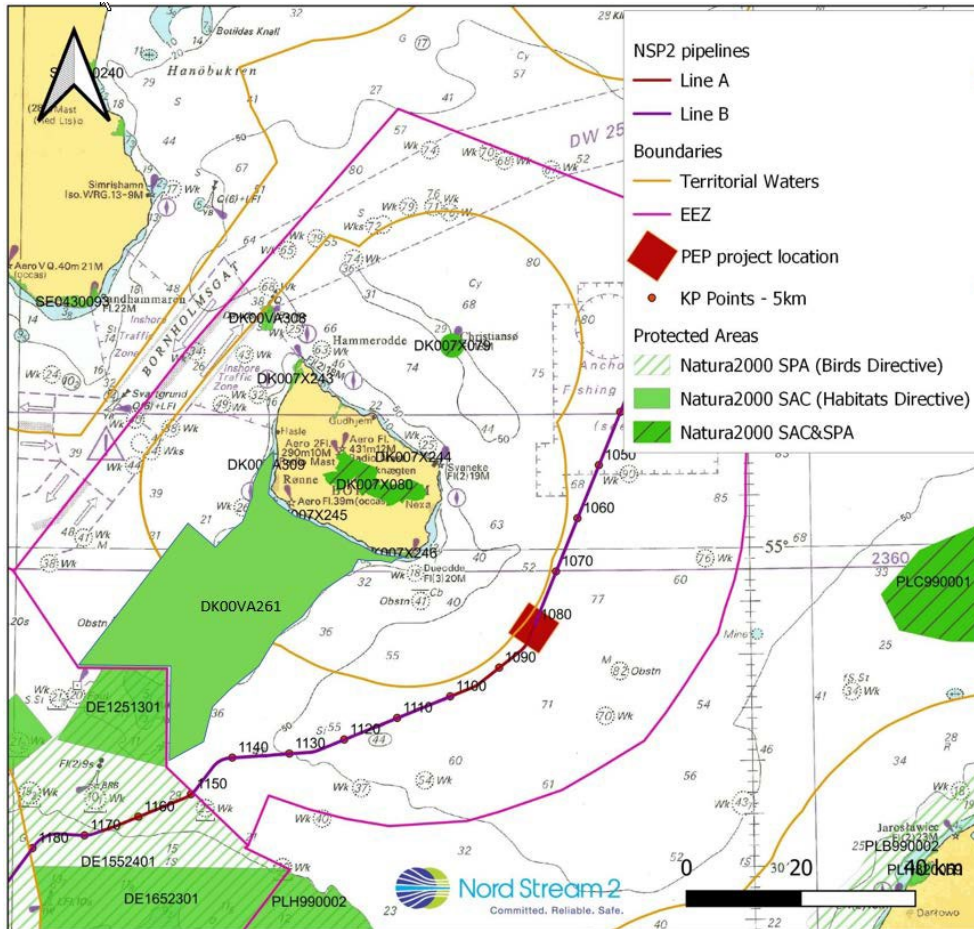


Figure 1. Map of the Baltic Sea around Bornholm showing the Nord Stream 2 pipeline route and the project area (red) for the applied works with nearby Natura 2000 areas (green).

The purpose of the applied works is to minimize the risk to the environment and people by preserving a damaged pipeline (pipeline A) on the Nord Stream 2 pipeline facility in the Danish exclusive economic zone, thereby preventing further gas blowout from the pipeline and the introduction of oxygenated seawater into the pipelines.

The preservation is carried out by installing specially designed insulating plugs at each of the two open pipeline ends. Before the insulating plugs can be installed, it is necessary to cut the pipeline in a "clean cut" at an appropriate distance from the damaged pipe ends, as the current pipe ends are deformed (see Figure 2). In addition, before and after the installation work, stones will be placed at the pipeline ends to protect and stabilize the pipelines.

The work is carried out from a dynamic positioning vessel equipped with an underwater drone (*Remotely Operated Vehicle*, "ROV") and a crane used for underwater work.



Nord Stream 2 AG describes in the application material that prior to cutting the damaged pipeline, minor seabed excavation and rock placement is necessary to gain sufficient access to the pipeline. The material further describes that the total amount of sediment to be excavated is in the order of approximately 60-100 m³. To reduce sediment suspension during excavation, an ROV-based pump is used to move the excavated sediment backward at a controlled rate. Rock bags are then placed in the excavations to stabilize the pipeline.

Before the cutting work begins, a flooded member detection check is carried out to determine whether the pipeline is flooded at the cutting in question, so that a gas pocket is not cut into. If the survey identifies a gas pocket at the cutting area, the project area is abandoned and plans to preserve the pipeline are temporarily abandoned.

The pipeline is cut with a diamond cutting unit (*Diamond wire cutting tool, "DWCT"*), which is lowered onto the seabed from the vessel via a crane, after which the ROV guides the unit into position. The cutting unit is clamped onto the pipeline and cuts a 12-16 m long pipe section in a 'clean' and geometrically correct cut at each pipe end, before the unit returns to the vessel.

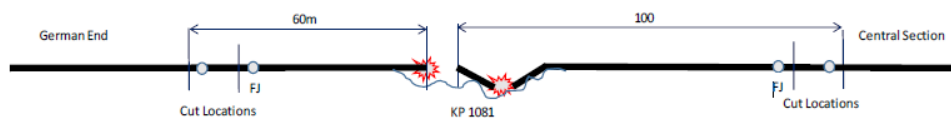


Figure 2: Outline of the cutting works at Pipeline A in the Danish sector. The precise location of the cutting works will be determined during the initial investigations of the area.

The cut and disconnected pipe sections are placed on the seabed immediately adjacent to the pipeline itself unless Nord Stream 2 AG assesses that it is safe to pick up the pipe sections. An ROV will then guide the isolating pipeline plugs into the open pipe ends of the pipeline system. Once it is confirmed that the plugs are correctly seated, their closing mechanisms are activated via the interface on the ROV. Finally, a final check is carried out to confirm and verify that the seal is tight and that the pipeline is fully isolated. The isolating plugs have a design life of 10 years after they are installed, but there is a possibility that the life is longer depending on their condition upon closer inspection. Nord Stream 2 AG further describes that the solution and design with isolating plugs is supported by DNV's recommended practices for repair of subsea pipelines, and that the proposed design will be reviewed and assessed by an independent third party.



After the installation of plugs, the pipe ends are protected with stones or concrete mattresses so that the pipeline is protected from external influences, including fishing activities.

Nord Stream 2 AG has stated that they do not currently know which vessel and which contractor will be used to carry out the work.

The work is expected to last a total of 2-3 weeks, and is planned to be carried out in the period from April 1, 2025 to September 30, 2025.

The applied works include the following activities:

- Preparatory surveys (as-found survey) in the project area with ROV.
- Local seabed excavation and rock placement to support the pipeline prior to cutting.
- Cutting of pipeline ends with an ROV equipped with DWCT, so that two approximately 12-16 meter long pipeline sections can be disconnected from pipeline A.
- Moving the cut pipeline sections for temporary storage next to the existing pipeline.
- Installation of a pipeline plug in each open pipeline end.
- Rock laying and/or installation of concrete mattresses to support and protect the pipeline.
- Final surveys (as-left survey) with ROV.

Environmental conditions

Nord Stream 2 AG has, in accordance with Section 3(1) and Section 5(1) of the Offshore Habitats Executive Order, prepared a report describing how the remedial works may significantly impact international protected areas (Natura 2000 areas) and Annex IV species.

It appears from the application material that the nearest marine Natura 2000 site is Adler Grund and Rønne Banke (DK00VA261), which is located 25 km from the project area. Nord Stream 2 AG has described that Adler Grund and Rønne Banke have the species porpoise and the habitat types reef and sandbank on the site's designation basis.

Nord Stream 2 AG describes in the application material that the works will be carried out using an ROV, which will also use ultra-short baseline ("USBL") equipment for positioning the ROV and a multibeam echosounder ("MBES"). Both the USBL equipment and the MBES generate underwater noise. The company has further described that the cutting workers on the pipeline with the diamond cutting unit will not produce metal shavings and that the noise from the cutting workers will not exceed threshold values for either temporary (TTS) or permanent hearing damage (PTS) to marine mammals.



Nord Stream 2 AG assesses that the MBES used will not have an impact on marine mammals, as the equipment emits sounds in a frequency range that is outside their hearing range. Nord Stream 2 AG also explains in the application material that the USBL equipment may cause TTS and PTS for porpoises, respectively. It appears that the calculated distances for TTS and PTS impacts for porpoises will be 150 meters for TTS and 15 meters for PTS, respectively. The company further assesses that the project activities will not affect birds, as the works will take place on the seabed and as the sediment dispersion from the works will be short-lived and limited to the deeper water layers.

Nord Stream 2 AG explains that the applied works will not have an impact on the integrity of the Natura 2000 sites or the basis for their designation due to the distance of more than 20 km to the nearest Natura 2000 site. The company further assesses that impacts on Annex IV species as a result of the applied works will be insignificant (*negligible*), as the TTS distance of 150 m is conditional on the porpoises staying within that impact radius for 4 hours. Companies thus assess that porpoises are displaced from the impact zone for TTS, and thus also PTS, as a result of the activity.

The applicant further explains that the project activities take place below the breakwater, which limits the spread of sediment to the upper water layers. The company further assesses that sediment spread as a result of the minor excavation work on the seabed will result in a local and short-term increased turbidity near the seabed, of which the majority of the suspended sediment will settle back to the seabed within a few hours and at a distance of 500 m from the excavation site. It is therefore assessed that the sediment spread will remain outside Danish territorial waters. Nord Stream 2 AG describes that the rocks to be laid will be clean and free of pollutants, and that the suspended sediment from rock laying will settle in the vicinity of the project area, and that the increased sediment concentration in the water column will be both local and short-term.

The application material also contains an assessment of the applied works according to the 11 descriptors in the Marine Strategy Act.⁴Appendix 2. Nord Stream 2 AG assesses that there will be no or negligible impact on relevant descriptors, and that the applied works will not affect the general environmental status or have a negative impact on the environmental objectives of the 11 descriptors, nor will they hinder or delay the achievement of good environmental status for the 11 descriptors.

Hearing

Authority hearing

The application material has been under consultation from May 31, 2024 to June 21, 2024 and again in the period from October 10, 2024 to November 7, 2024, when it applied

⁴Marine Strategy Act, cf. Consolidation Act No. 123 of 1 February 2024



The execution date was changed to Q2-Q3 2025. The material has been consulted with the Ministry of Defence's Property Board, the Danish Maritime Authority, the Danish Fisheries Authority, the Danish Environmental Protection Agency, the Danish Agency for Palaces and Culture, the Viking Ship Museum and the Danish Business Authority.

The Danish Energy Agency has received consultation responses from all consulted authorities.

The Danish Business Authority The Area for Better Regulation has stated by e-mail dated June 3, 2024 that the Area for Better Regulation has no comments on the works in question, as the document is not a legal act and therefore does not in itself entail administrative consequences for Danish business.

Danish Maritime Authority has stated by e-mail dated 12 June 2024 that the Danish Maritime Authority has no comments on the works in question, but refers to Executive Order No. 1229 of 3 October 2023 on navigational safety during construction work and other activities in Danish waters. The Executive Order and assessment form can be found at <https://www.soefartsstyrelsen.dk/sekkerhed-tilsoes/sejladssekkerhed/enqesprenoeropvarger-til-soes> and <https://www.dma.dk/safetyat-sea/safety-of-navigation/construction-works-at-sea> .

The Danish Maritime Authority further states that, in accordance with normal practice, the Authority will publish a notice in the Danish Maritime Authority's Notices to Mariners about the work, and that Nord Stream 2 AG is requested to inform the Danish Maritime Authority with relevant information about the project at least 4 weeks before the work starts, and that the information is requested to be sent to efs@dma.dk and ccsifa@dma.dk with reference to case number 2024129426. The Danish Maritime Authority mentions that the pipe fragments that are temporarily expected to be left on the seabed should be removed in their entirety as soon as possible.

The Danish Maritime Authority has confirmed in its consultation response of 1 November 2024 that the consultation response from 12 June 2024 is still adequate.

Viking Ship Museum has noted by e-mail dated 19 June 2024 that in the current area, objects have been mapped with side-scan sonar prior to the construction of the original pipeline, and that these objects may be protected by the Museums Act. A protection zone was established around the objects, and the protection zones are still in force. These are two objects with a protection zone of 50 meters and 12.5 meters radius, respectively. If the protection zones cannot be observed during the planned construction work, the Viking Ship Museum will recommend to the Danish Agency for Palaces and Culture that conditions be set for a marine archaeological survey.

The applicant should also be aware of Section 29 h, subsection 1 of the Museums Act, according to which the discovery of traces of ancient monuments or wrecks made during construction work must be immediately reported to the Danish Palaces and Culture Agency and the work must be stopped.



On June 19, 2024, the Danish Energy Agency submitted comments from the Viking Ship Museum to Nord Stream 2 AG.

Nord Stream 2 AG stated on June 21, 2024, that the objects are located more than 1.5 km from the survey area.

On June 25, 2024, the Danish Energy Agency submitted the information about the location of the objects to the Viking Ship Museum, which noted on June 28, 2024 that there are no problems if the objects are at a good distance from the survey area.

The Fisheries Agency has stated by e-mail of June 20, 2024 that the agency has no comments on the implementation of the applied project.

Ministry of Defense Property Board has stated by e-mail dated 21 June 2024 and by e-mail dated 14 November 2024 that, after consulting authorities under the Ministry of Defence, they have no specific comments regarding the work described. However, it is noted that no information has been provided about the work vessel(s), but only that this information will be provided no later than six weeks before the work is carried out. The Defence Command cannot therefore give a final positive commitment to a permit before this information has been submitted and processed. It is recommended that this information be submitted as soon as possible and preferably earlier than the notified six weeks before the start of the work.

The Ministry of Defence's Property Board further notes, with regard to unexploded ammunition, that in general, in connection with all survey areas, attention must be drawn to the fact that if unexploded ammunition or similar dangerous objects are identified/found, the work must be stopped immediately, and the Defence Operations Centre must be contacted, cf. BEK 1229 of 3/10/2023 on navigation safety during construction work and other activities, etc. in Danish waters.

The Danish Defence Operations Centre at the National Maritime Operations Centre (NMOC) can be contacted by telephone at: +45 728 50380/+45 728 50371.

In addition to the above, it should be noted that the issued permits and contact information for the company or ships that may be required to perform the work must be available to the Danish Defence Operations Centre, NMOC via the authority issuing the permit. If there are updates to the contact information, these can be sent directly to the Danish Defence Operations Centre, NMOC at the addresses below:

The Danish Defence Operations Centre, NMOC:



	Telephone	Email
Officer on duty	+ 45 728 50380	fko-ktp-nmoc-vo@mil.dk
Maritime Assistance Service	+ 45 728 50370	mas@sok.dk
	+ 45 728 50371	
Conversion:	+ 45 728 12300	

Any inquiries regarding the case should be directed to case manager Solveig With Uhre Christensen by email: fes-nps24@mil.dk or telephone 7281 3348.

The Danish Agency for Palaces and Culture has sent a consultation response by e-mail dated 21 June 2024, in which the agency draws attention to two designated cultural historical objects with exemption zones, which however initially appear to be able to be respected in the current work. The full consultation response of the Agency for Palaces and Culture is attached as Appendix 4 to this decision.

On 25 June, the Danish Energy Agency forwarded Nord Stream 2 AG's response to comments on the Viking Ship Museum's consultation response to the Danish Agency for Palaces and Culture, as the consultation response from the Viking Ship Museum and the Danish Agency for Palaces and Culture concerns the same two cultural historical objects. The Danish Agency for Palaces and Culture has not returned with further comments.

The Danish Environmental Protection Agency has noted by e-mail sent on June 26, 2024 that permission for the project must be in accordance with the water planning for affected targeted water bodies and the marine strategy for the affected sea areas.

The project area is very close to the border of the Danish territorial waters around Bornholm, and it cannot - based on the submitted material - be ruled out that there may be impacts into the targeted water area as a result of sediment spread. The Danish Environmental Protection Agency has therefore submitted a number of textual comments, primarily relating to impacts from sediment spread in relation to the Water Framework Directive. The Danish Environmental Protection Agency's consultation response from 26 June 2024 is attached as Annex 5 to this decision.

On 27 June 2024, the Danish Energy Agency submitted the comments from the Danish Environmental Protection Agency to Nord Stream 2 AG. On 2 July 2024, Nord Stream 2 AG submitted a response to the Danish Environmental Protection Agency's comments to the Danish Energy Agency. In the response, Nord Stream 2 explains that the distance from the project area to Danish territorial waters is approximately 1.7 km and that the works are being carried out below the breakwater. The company further explains that minor excavation work is being carried out at 4 locations of up to 25 m² each, and that temporarily and locally increased turbidity will occur, which will however return to

⁵Water Planning Act, cf. Consolidated Act No. 126 of 26 January 2017, including Executive Order No. 819 of 15 June 2023 on environmental objectives for surface water bodies and groundwater bodies and Executive Order No. 797 of 13 June 2023 on action programmes for water basin districts.



background level a few hours after the works. Concentrations above 10 mg/l of suspended sediment in seawater close to the seabed may, based on conservative modelling results, occur up to 1.45 km from the excavation area, and will therefore not occur in the territorial waters. Furthermore, it is unlikely that any pollutants will dissolve in the seawater, and will therefore instead settle locally on the seabed again within a few hours. Based on this, Nord Stream 2 does not anticipate any impacts on Danish territorial waters.

The response from Nord Stream 2 AG was forwarded by the Danish Energy Agency to the Danish Environmental Protection Agency on 3 July 2024 with a request that any further comments from the Danish Environmental Protection Agency on the company's response be sent to the Danish Energy Agency.

The Danish Environmental Protection Agency submitted comments on Nord Stream 2 AG's response on 12 August 2024. The agency's comments indicate that, on the basis of the available information, it is not clear whether the sediment spread extends into Danish territorial waters, and that the Danish Environmental Protection Agency cannot therefore assess with certainty whether a permit for the project is in accordance with Section 8 of Executive Order No. 797 of 13 June 2023 on action programmes for water basin districts, including whether a permit for the project may entail a risk of deterioration of the condition and failure to meet the objectives for the affected water bodies.

On September 26, 2024, Nord Stream 2 AG submitted an updated application, in which the Danish Environmental Protection Agency's comments regarding sediment dispersion have been addressed.

The Danish Environmental Protection Agency has pointed out by e-mail sent on 7 November 2024 that the permit for the project must be in accordance with water planning for affected target water bodies and the marine strategy for the affected marine areas. Furthermore, the Agency has noted that the application lacks a reference to the Marine Strategy Act, but that this has no impact on the assessments presented.

The Danish Agency for Green Land Redevelopment and Aquatic Environment (SGAV) has noted in the same consultation response that the Danish Energy Agency may consider explaining whether the change in the project period to Q2-Q3 2025 could result in significant impacts on individuals from the vulnerable Baltic Sea population of harbour porpoises as well as impacts on the population. The SGAV also notes that the Danish Energy Agency may consider explaining whether the change in the project period could result in significant impacts on protected birds in the area.

Hearing of parties

The draft decision was sent for consultation with Nord Stream 2 AG on 20 January 2025 with a deadline of 3 February 2025. Nord Stream 2 AG submitted a consultation response on 24 January 2025. The company has submitted a number of textual comments on the draft as well as proposals for adjustments.



Based on the company's consultation response, the Danish Energy Agency has made a few textual corrections in accordance with the comments and proposed adjustments.

Legal basis

Continental Shelf Act

The construction of pipelines for the transport of hydrocarbons on the Danish continental shelf requires a permit from the Minister for Climate, Energy and Utilities, cf. Section 4(1) of the Continental Shelf Act. Pursuant to Section 4(2) of the Continental Shelf Act, conditions may be set for permits granted pursuant to Section 4(1).

It is also apparent from Section 2(1) of the Executive Order on Certain Pipeline Facilities that the establishment and operation of transit pipelines for the transport of hydrocarbons across the Danish continental shelf and the Danish territorial sea from a foreign state to another foreign state, as well as pipelines for the transport of foreign-produced hydrocarbons to Denmark, may only take place after a permit from the Minister for Climate, Energy and Utilities. Pursuant to Section 4(1) of the Executive Order, conditions may be laid down in permits granted pursuant to Section 2 of the Executive Order.

Powers granted to the Minister of Climate, Energy and Utilities pursuant to the Continental Shelf Act are exercised by the Danish Energy Agency on behalf of the Minister, cf. the Delegation Executive Order.⁶Section 3, subsection 1, no. 2.

Offshore Habitat Executive Order

The Offshore Habitat Executive Order applies, among other things, to applications for a permit to lay pipelines for the transport of hydrocarbons on the Danish continental shelf, which require a permit pursuant to Section 4(1) of the Continental Shelf Act, cf. Section 1(2), no. 12 of the Executive Order.

Before a decision on approval can be made pursuant to section 4(1) of the Continental Shelf Act, the Danish Energy Agency must assess whether the project itself, or in connection with other plans and projects, may significantly affect an international nature conservation area, cf. section 3(1) of the Executive Order. If this is the case, a detailed impact assessment of the project's effects on the international nature conservation area must be carried out, taking into account the conservation objective for the area in question, cf. section 3(3) of the Executive Order.

Furthermore, before a decision on approval can be made pursuant to section 4(1) of the Continental Shelf Act, the Danish Energy Agency must, pursuant to section 5(1) of the Executive Order, make an assessment of whether the application can:

⁶Executive Order No. 910 of 26 June 2024 on the tasks and powers of the Danish Energy Agency



- 1) cause deliberate disturbance in the natural range of the animal species listed in Annex IV(a) of the Habitats Directive, at all life stages and in particular during periods when the animals are breeding, rearing, wintering or migrating,
- 2) damage or destroy breeding or resting areas in the natural range of the animal species listed in the Annex to the Habitats Directive IV, point (a), or
- 3) destroy the plant species listed in Annex IV(b) of the Habitats Directive in all life stages.

If the assessment shows that the applied project may involve disturbance, damage or destruction as mentioned in section 5(1) of the Executive Order, the Danish Energy Agency cannot grant approval for the applied project unless the conditions in section 6 for deviating from section 5 are met, cf. section 5(2) of the Executive Order.

Before a decision is made on approval of an applied project covered by the executive order, the Danish Energy Agency may obtain an opinion from the Danish Environmental Protection Agency on the assessments pursuant to sections 3 and 5, cf. section 7 of the executive order.

Marine Strategy Act

EU Marine Strategy Directive⁷ has been implemented in Danish law by the Marine Strategy Act. The purpose of the Act is to establish the framework for the measures that must be implemented to achieve or maintain good environmental status in marine ecosystems and enable sustainable exploitation of marine resources.

The Marine Strategy Act requires the Minister of the Environment to prepare marine strategies for all Danish marine areas in order to:

- 1) protect, conserve and prevent degradation of the marine environment and, where possible, restore marine ecosystems in areas where they have been adversely affected,
- 2) prevent and reduce inputs to the marine environment with a view to gradually phasing out pollution and ensuring that there are no significant impacts on or risks to marine biodiversity, marine ecosystems or human health or legitimate uses of the sea,
- 3) ensure the ability of marine ecosystems to cope with change and
- 4) ensure that the overall pressure from human activities is compatible with the achievement of good environmental status.

Good environmental status is described in Annex 2 of the Marine Strategy Act (Annex I of the Directive) using 11 so-called qualitative descriptors. The descriptors address:

⁷Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy



- 1) Biodiversity
- 2) Non-native species
- 3) Commercially exploited fish
- 4) The ocean food web
- 5) Eutrophication
- 6) The seabed
- 7) Hydrographic changes
- 8) Pollutants
- 9) Contaminants in fish and shellfish for human consumption
- 10) Marine litter
- 11) Underwater noise.

When exercising powers under the legislation, public authorities are bound by the environmental objectives and action programmes decided upon by the Minister for the Environment, cf. section 18 of the Marine Strategy Act. This means that the authorities must base their powers within the framework of the legislation on the Marine Strategy.

Water Planning Act

In the case of investigations taking place within one nautical mile of the baseline, the Danish Energy Agency must assess whether the planned project may have a negative impact on relevant water area plans, including established environmental objectives, cf. the Water Planning Act and associated executive orders.

The Danish Energy Agency's justification and assessment

Assessment of the activity in relation to the Continental Shelf Act and Executive Order on certain pipeline installations in the territorial sea and on the continental shelf

The Danish Energy Agency assesses that the applied works on the Nord Stream 2 pipeline facility in the Danish sector are covered by Section 4(1) of the Continental Shelf Act and Section 2 of the Executive Order on Certain Pipeline Facilities in the Territorial Sea and on the Continental Shelf, as the works are intended to preserve and maintain the integrity of a pipeline facility on the Danish continental shelf area.

The Danish Energy Agency assesses that the works to preserve the damaged pipeline are a necessary step to reduce the environmental and safety risks associated with the facility in its current state, where it is filled with seawater and natural gas. The Agency further emphasizes that Nord Stream 2 AG will ensure that the proposed design of the isolating plugs is assessed by an independent third party, that the pipeline and the installed plugs are inspected regularly and that the pressure in the pipeline is continuously monitored from shore.

Condition 1: Condition 1 on time limitation of the approval is set to ensure that the works are carried out during the period applied for.



Condition 5: The Danish Energy Agency sets conditions 5 on the submission of information about work vessel(s) and companies used for and carrying out the applied works, to ensure that the Agency, as a supervisory authority, has all necessary information about the applied works, and so that the Ministry of Defence's Property Board can respond to the information and give a final positive commitment to the works, cf. the consultation response from the Ministry of Defence's Property Board.

Condition 6: The Danish Energy Agency also considers that it is important as a supervisory authority that the agency can ensure that the applied for work has been carried out in accordance with what has been applied for as described in the application, which is why the agency sets conditions for the submission of survey data and results, cf. condition 6. Data and results from the work and the final as-left survey must, among other things, contain information about the location of the cut and disconnected pipe sections.

Condition 7: In order for the Danish Energy Agency to monitor the project and fulfil the Agency's environmental and safety obligations in connection with the project, the Danish Energy Agency stipulates condition 7 that Nord Stream 2 AG must submit a plan for the Nord Stream 2 pipeline facility to the Danish Energy Agency annually. The plan must contain the company's specific future plans for the pipeline facility, including the company's plans for the cut pipe sections that are expected to be laid on the seabed in connection with the applied works. In order to ensure the Danish Energy Agency's ongoing insight into the project, it is considered appropriate that the plan be submitted to the Danish Energy Agency no later than the end of each calendar year. The plan may be included in the company's other annual reporting to the Danish Energy Agency.

Assessment of the activity in relation to the offshore habitat executive order The Danish Energy Agency has reviewed the application material and assesses that Nord Stream 2 AG's explanation of potential impacts on international nature conservation areas and the animal species listed in Annex IV of the Habitats Directive, specifically porpoises, is adequate, cf. Section 3(2) and Section 5(3) of the Offshore Habitats Executive Order.

The Danish Energy Agency assesses that the applied works, neither in themselves nor in connection with other projects, can be assumed to have a significant impact on international nature conservation areas. The Danish Energy Agency has placed particular emphasis on the works taking place at a distance of at least 25 km from the nearest marine Natura 2000 area Adler Grund and Rønne Banke (DK00VA261). In addition, the Agency has placed emphasis on the impact on the seabed and water column being both temporary, short-term, and of limited extent.

The Danish Energy Agency therefore finds that an impact assessment of the applied activities is not required, cf. section 3(3) of the Executive Order, as it can be ruled out that the activities will have a significant negative impact on Natura 2000 areas.



Danish Energy Agency evaluates furthermore, on background of the information in the application materials that the applied for works will not result in intentional disturbance of Annex IV species, including porpoises, in their natural range and also that the works will not result in damage or destruction of breeding or resting areas in the range of Annex IV species, cf. section 5(1) of the Executive Order.

With regard to noise impacts, the Danish Energy Agency has, when assessing the impacts on Annex IV species, emphasised that the works are carried out from a dynamic positioning vessel and that the impact distances for TTS and PTS when using USBL are conditional on the marine mammals staying within the relevant impact radius for 4 hours. The Agency thus assesses that the underwater noise from the vessel displaces marine mammals to the other side of the relatively short impact zone for TTS and PTS before they are exposed to noise that could potentially cause PTS and TTS. The Danish Energy Agency has also emphasised that other noisy activities and equipment from the works do not exceed either the PTS or TTS threshold values for porpoises and other marine mammals, as the equipment operates in frequencies outside the animals' hearing range or uses source strengths below the PTS and TTS thresholds. In its assessment, the Danish Energy Agency has particularly taken into account the vulnerable Baltic Sea population of porpoises and assesses that the applied works can be carried out without risk of harmful impact on these populations.

With regard to impacts related to the excavation works and rock placement, the Danish Energy Agency has emphasized that the works include minor excavation and rock placement works, all of which take place below the breakwater, which is why the increased turbidity in the area will be temporary, very limited and of local extent. The turbidity of the water column is therefore expected to return to background levels a few hours after the works are carried out. Furthermore, the Agency emphasizes that Nord Stream 2 AG uses an ROV-based pump, which moves the excavated sediment backwards at a controlled pace to reduce sediment dispersion in the water column. Furthermore, the Agency assumes that seabed sediments from measuring stations closest to the project area contain lower values of munitions (CWA) than seabed sediments at other measuring stations in Danish waters in the so-called HELCOM high-risk area for munitions. The Agency finds that Nord Stream 2 has sufficiently demonstrated through modeling results that any pollutants do not dissolve in the seawater, but instead settle locally on the seabed again within a few hours.

Condition 2 In order to reduce the impact on the surroundings and take into account the marine environment and any marine mammals, the Danish Energy Agency sets conditions that Nord Stream 2 AG must follow the attached standard conditions for the offshore feasibility studies, cf. condition 2.



Condition 3: In order to ensure and verify that Nord Stream 2 AG complies with the standard conditions attached to condition 2 of the decision, the Danish Energy Agency sets additional conditions that Nord Stream 2 AG must account for and document compliance with the stipulated conditions in the attached form, cf. condition 3. The account of compliance with the stipulated conditions must be returned to the Danish Energy Agency no later than 4 weeks after the end of the investigation program.

Condition 4: For the purpose of monitoring noise from the applied works, Nord Stream 2 AG must complete the attached form (NoiseRegisterTemplate) and submit the form to the Danish Environmental Protection Agency, cf. condition 4. Documentation that the report has been submitted to the Danish Environmental Protection Agency must be submitted to the Danish Energy Agency at indvindingsekr@ens.dk no later than 3 months after the completion of the work.

Assessment of activity in relation to Denmark's Marine Strategy II and the Marine Strategy Act When exercising its powers pursuant to the Continental Shelf Act, the Danish Energy Agency is bound by the environmental objectives and action programmes set pursuant to sections 12 and 13 of the Marine Strategy Act, cf. section 18 of the Marine Strategy Act.

The Danish Energy Agency is thus obliged to promote the environmental objectives of the marine strategies when exercising the authority within the framework of the applicable legislation. This means that the authority must base its powers under the Continental Shelf Act, including permits under section 4(1), on the marine strategy.

Based on the information in the application material, the Danish Energy Agency assesses that the applied works will not cause significant impacts on the marine environment, and that the applied works will not affect the load, criteria or targets for the 11 descriptors in Annex 2 of the Marine Strategy Act, and that the applied works are otherwise not in conflict with the guidelines in the action programme in Denmark's Marine Strategy II.

In the assessment, the Danish Energy Agency has emphasized that the applied works will have no (no) or negligible impact on descriptor 1 on biodiversity, including birds and marine mammals, descriptor 2 on non-native species, descriptor 3 on commercially exploited fish stocks, descriptor 5 on eutrophication, descriptor 6 on seabed integrity, descriptor 7 on hydrographic changes, descriptor 8 on pollutants, descriptor 10 on waste and descriptor 11 on underwater noise, and that the applied works will not prevent or delay the achievement of good environmental status for each individual descriptor.

It is against this background that the Danish Energy Agency assesses that the applied for study will not be incompatible with the achievement of the set environmental objectives or otherwise in conflict with the guidelines in the action programme in Denmark's Marine Strategy II.



Assessment of the activity in relation to the Water Planning Act

The Danish Energy Agency assesses that the planned works will not have a direct or indirect impact on surface water bodies that would cause the current state of the individual quality elements to deteriorate or prevent the established environmental objectives.

In the above assessment, the Agency has placed particular emphasis on the fact that the works involve minor excavation and rock placement work below the breakwater and that the resulting increased turbidity in the area will be both short-term and local. The Agency finds that Nord Stream 2 has sufficiently demonstrated through modelling results that the sediment spread will not affect Danish territorial waters and that any pollutants will not dissolve in the seawater, but instead settle locally on the seabed again within a few hours.

Other comments

This permit does not exempt Nord Stream 2 AG from obtaining any other permits and approvals required by law.

It is further noted that if the work is not completed before the specified date, the Danish Energy Agency must be informed of this.

This permit and the terms and conditions set forth herein do not replace the establishment permit of October 30, 2019 or the operating permit of October 1, 2020.

If other authorities are contacted regarding the activities for this permit, the Danish Energy Agency would like to be informed and placed in copy (cc) on the correspondence. The briefing and correspondence should be sent to: mklh@ens.dk.

Complaints guide

Anyone with a significant and individual interest in this decision may appeal the decision to the Energy Complaints Board, Nævnenes Hus, Toldboden 2, 8800 Viborg, (ekn@naevneneshus.dk), cf. Section 6 a, subsection of the Continental Shelf Act. 1.

Local and national associations and organisations whose main purpose is the protection of nature and the environment, or whose purpose is to safeguard significant recreational interests, when a decision affects such interests, are entitled to appeal in respect of the environmental aspects of the decision, if the decisions are also covered by regulations issued pursuant to section 4 a, cf. section 6 a, subsection 2 of the Continental Shelf Act. These associations or organisations must, at the latest at the same time as the appeal, submit their articles of association to the Energy Complaints Board as documentation that they are local or national and that their purpose meets the specified requirements, cf. section 6 a, subsection 3 of the Continental Shelf Act.



The appeal must be submitted in writing to the Energy Appeals Board within 4 weeks from the time the decision is publicly announced. If the appeal deadline expires on a Saturday or a public holiday, the deadline is extended to the following weekday, cf. Section 6 a, subsection 4 of the Continental Shelf Act.

The Danish Energy Agency draws attention to the fact that the complaint can be submitted to the Energy Complaints Board in four different ways:

- The complaints portal for the House of Appeals on the Energy Complaints Board's website
- digital mail (e-box),
- email to ekn@naevneneshus.dk or
- regular mail to the Energy Complaints Board, Nævnenes Hus, Toldboden 2, 8800 Viborg.

Kind regards

Mads Kløve Hallstrøm



Energistyrelsen

Attachment:

Appendix 1 – Standard conditions for offshore surveys

Appendix 2 – Statement of compliance with conditions

Appendix 3 – NoiseRegisterTemplate

Appendix 4 – Consultation response from the Danish Agency for Palaces and Culture Appendix 5 –

Consultation response from the Danish Environmental Protection Agency