



Gas Transmission Operator GAZ-SYSTEM S.A.
Ul. Mszczonowska 4
02-337 Warszawa
Poland

Att. Bo Mikael Klinke

Office/department
Centre for Subsoil
Resources and Risk
Preparedness

Date
21. July 2022

J no. 2022 - 4351

/krpd/mklh

Permission to operate the Baltic Pipe natural gas pipeline in the Baltic Sea

By letter dated 6 May 2022, Gaz-System S.A. (hereinafter Gaz-System) has applied to the Danish Energy Agency for permission to commence the operation of two sections of the Baltic Pipe natural gas pipeline on Danish territorial waters and the continental shelf area in the Baltic Sea. The two sections run respectively from the coastline at Faxe Bay to Swedish waters and again from Swedish waters through Danish waters at Bornholm and to Polish waters, cf. Figure 1 in Annex 1 to the permit.

The application has been made on the basis of the Danish Energy Agency's permit of 25 October 2019 for the establishment of the pipeline through the above - mentioned waters and decision of 19 October 2021 regarding amendment to the establishment permit of 25 October 2019 (hereinafter collectively referred to as the permit of 25 October 2019).

1 Permission

1.1 Decision

The Danish Energy Agency hereby grants permission to commence the operation of the Baltic Pipe pipeline respectively the two sections of the pipeline on Danish maritime territory and the continental shelf in the Baltic Sea. The permit is granted in accordance with section 2 of the Executive Order on certain pipeline installations in the territorial sea and on the continental shelf¹.

The permit does not include necessary permits, approvals, etc. pursuant to other legislation.

¹) Executive Order no. 1520 of 15 December 2017 on certain pipeline installations in the territorial sea and on the continental shelf as amended by Executive Order no. 1431 of 25 June 2021.



1.2 Conditions

The permit is issued subject to the following conditions, cf. section 4, subsection 1, cf. section 2, of the Executive Order on certain pipeline installations in territorial waters and on the continental shelf:

1. Gaz-System must submit an updated schedule for the commissioning of the pipeline. The schedule must be submitted to the Danish Energy Agency before the pipeline is put into operation.
2. Gaz-System must take out insurance to compensate for damage caused by the activity carried out under the permit, even if the damage is accidental. Documentation that Gaz-System has taken out insurance to compensate for damages must be submitted to the Danish Energy Agency before the pipeline is put into operation. Changes and updates to the insurance must be sent to the Danish Energy Agency when they are available.
3. Gaz-System must operate the pipeline according to a management system and maintain an operating organization that at all times possesses the right and sufficient competencies and resources to handle the safe operation of the pipeline. The management system must monitor and manage internal and external risks to the integrity of the pipeline and minimize them as much as is reasonable and practicable.
4. Gaz-System must ensure that the operation of the pipeline takes place within the parameters on which the design is based, including the composition of the natural gas flow as well as pressure and temperature conditions. This means, among other things, that the pressure in the pipeline must not exceed the maximum design pressure of the pipeline, and that no other gases may be supplied than the one for which the pipeline is designed.
5. Gaz-System shall develop and maintain a monitoring and safety system to ensure that the pipeline is not overloaded so that integrity can be maintained. The system must maintain a monitoring, control and inspection program for conditions that may contribute to reducing the integrity of the pipeline and thus safety.
6. Gaz-System must revise the monitoring and inspection program for the operational phase on an ongoing basis based on a risk-based approach of partly the observations made and partly the current operating conditions. The Danish Energy Agency must be notified of updates and changes to the monitoring and inspection program when they are available.
7. The pipeline shall be continuously maintained to the extent required to ensure that the integrity of the installation is maintained.



8. Gaz-System must maintain an emergency preparedness system that can be approved by relevant authorities. The emergency system must be able to handle, and to the greatest possible extent avert, the consequences of an emergency, provide notification to relevant authorities and provide information in an emergency. Gaz-System must notify the Danish Energy Agency without undue delay in the event of an emergency. The notification must at least contain a description of the incident and what remedial measures have been initiated. In addition, the risk of escalation must be described in such a way that both the "worst-case" and the most probable scenarios are clear to the Danish Energy Agency.
9. If free spans develop on the pipeline that are detrimental to the fishery or endanger the integrity of the pipeline, this must be remedied as soon as technically possible.
10. Hydrocarbon emissions from the pipeline as well as damage(s) to the safety of the pipeline of significance, including "near miss" incidents, must be reported to the Danish Energy Agency as soon as possible and without undue delay.
11. Changes and updates of data of the pipeline's position must be submitted to the Danish Energy Agency when they are available. This includes sending "as-built" coordinates, which must be sent to the Danish Energy Agency before the pipeline is put into operation.
12. Gaz-System must on an annual basis report and document to the Danish Energy Agency how conditions 2 - 10 in the permit have been met. The report must be made to the Danish Energy Agency no later than the end of each calendar year. The reporting must i.e., include operating status, insurance conditions, overview of maintenance and integrity, inspection results, inspection plan, changes to the organization and any incidents and damage(s) to the pipeline.
13. The Danish authorities supervise compliance with the conditions of this permit. Gaz-System must at regular status meetings or in prepared reports inform the Danish Energy Agency of the condition, maintenance, inspections and operation of the pipeline.

It is noted that the conditions of the construction permit of the Baltic Pipe pipeline in the Baltic Sea of 25 October 2019 are still valid to the extent that they are relevant in relation to the operating permit or have not yet been met.

Legal basis

Establishment and operation of pipeline systems for use in the transport of hydrocarbons on Danish maritime territory and the Danish continental shelf may only take place with the permission of the Minister of Climate, Energy and Supply, cf. The Baltic Pipe pipeline in the Baltic Sea is covered by section 1 (1) of the Executive



Order. 1. The right to grant a permit is delegated to the Danish Energy Agency, cf. section 3, subsection 2, in Executive Order no. 2573 of 22 December 2021 on the tasks and powers of the Danish Energy Agency.

Case presentation

By letter dated 6 May 2022, Gaz-System has applied to the Danish Energy Agency for permission to put two sections of the Baltic Pipe natural gas pipeline into operation on Danish maritime territory and the continental shelf area in the Baltic Sea. The two sections run respectively. from the coastline at Faxe Bay to Swedish waters and again from Swedish waters through Danish waters at Bornholm and further into Polish waters. On June 3, 2022, Gaz-System submitted additional application materials that completed the application materials.

For further elaboration of the application, please refer to Appendix 1 of this permit.

The Danish Energy Agency's assessment

The Danish Energy Agency has assessed that the application material for the part of the pipeline that is applied for commissioning on Danish maritime territory and the continental shelf area in the Baltic Sea is complete and satisfactory.

The permit to put the Baltic Pipe pipeline into operation, with regard to the two sections of the pipeline on Danish maritime territory and the continental shelf in the Baltic Sea, is granted on the basis of a satisfactory assessment of the application for commissioning, which has been completed in accordance with § 2 of the Executive Order on certain pipelines in the territorial sea and on the continental shelf.

The permit is also granted on the basis of the Danish Energy Agency's assessment of the project's technical documentation and the safety impacts in Denmark. The project's environmental impacts from both the construction and operation phases are dealt with in the construction permit of 25 October 2019 and are therefore not dealt with in the current permit.

On the basis of Gaz-System's submitted risk assessment report, the Danish Energy Agency has assessed that Gaz-System has minimized all risks to an acceptable level (ALARP) and that there is no need for further protection measures of the pipeline, as the risk to people, the environment and assets is within acceptable levels. The risk assessment also forms the basis of the company's submitted inspection and monitoring program.

As the Baltic Pipe pipeline, at the time of granting permission to operate the pipeline in the Baltic Sea, is yet not completed, and a number of conditions of the construction permit of 25 October 2019 are relevant for the operating phase, conditions from the permit of 25 October 2019 continue to apply.to the extent they are relevant for the operating permit or have not yet been met.



The Danish Energy Agency also finds that there is evidence to grant permission to put the pipeline into operation on a number of conditions, the purpose of which is to support considerations of:

- 1) sufficient documentation that the applied project is carried out as planned (conditions 1, 4, 9, 11 and 13);
- 2) safety conditions (conditions 3, 5, 6, 7, 8, 10 and 12); and
- 3) insurance conditions (condition 2).

These conditions are elaborated below.

Condition 1

The pipeline is expected to be commissioned after the pre-commissioning has been completed. Additional submitted information states that the operation of the pipeline is planned starting from 1 October 2022, where part of the pipeline's full capacity will be available. On January 1, 2023, the pipeline is expected to operate at full capacity.

In order to ensure that the Danish Energy Agency, as the supervisory authority, can adequately monitor the project, it is deemed appropriate that Gaz-System, as a condition of the permit, must submit an updated schedule for commissioning of the pipeline to the Danish Energy Agency before the pipeline is put into operation, cf. 1.

Condition 2:

For i.e., to ensure the Danish state and third parties against significant costs resulting from any damage caused by the operation carried out under the permit, the Danish Energy Agency considers that it is appropriate to stipulate conditions in the permit that Gaz-System must take out insurance to replace damages caused by the activity carried out under the permit, even if the damage is accidental. Documentation that Gaz-System has taken out insurance to compensate for damages must be submitted to the Danish Energy Agency before the pipeline is put into operation. Changes and updates to the insurance must be submitted to the Danish Energy Agency when they are available, cf. condition 2.

Conditions 3 - 7:

Gaz-System will be responsible for the operation of the pipeline in the Baltic Sea and has in the application material explained how the operation will take place, including the management system, responsibilities and functions in the organization. The Danish Energy Agency has noted that Gaz-System has built up a management system and an emergency preparedness system for the operational phase.

The Danish Energy Agency considers that it is important that the operating organization has the necessary competencies and resources to manage the operation, and that the division of responsibilities is unambiguous. Gaz-System must



therefore operate the pipeline according to a management system and maintain an operating organization that always possesses the right and sufficient competencies and resources to handle the safe operation of the pipeline, cf. condition 3.

The Danish Energy Agency considers that it is necessary to help maintain the integrity of the pipeline and to make it a condition that Gaz-System continuously identifies internal and external risks to the integrity of the pipeline and uses their management system to monitor and manage these risks and minimizes them as much as it is reasonably practicable, cf. conditions 3 and 4.

The Danish Energy Agency has noted that Gaz-System has:

- planned how operations will be managed,
- built a maintenance system,
- and prepared an inspection and monitoring program for the pipeline.

The Danish Energy Agency assesses that the monitoring and management of risks in connection with the preservation of the pipeline's integrity is essential for the maintenance of the pipeline's integrity. In this context, it is essential that a monitoring, control and inspection program is maintained for conditions that may contribute to reducing the integrity of the pipeline and thus safety. Conditions are therefore set in this regard, cf. conditions 5 and 6.

The Danish Energy Agency has also assessed that the pipeline must be maintained on an ongoing basis as required to ensure that the facility's integrity is maintained, which is why conditions are set in this regard, cf. condition 7.

Condition 8:

Gaz-System has developed and submitted documentation for an emergency preparedness system for the operational phase. The Danish Energy Agency considers it important that Gaz-System maintains a system for emergency preparedness that can handle and avert the consequences of an emergency situation, provide notification to relevant authorities, including the Danish Energy Agency, and provide information in an emergency situation. The Danish Energy Agency also finds that it is appropriate to set conditions that Gaz-System must notify the Danish Energy Agency without undue delay in the event of an emergency, cf. condition 8. To ensure that the Danish Energy Agency has the necessary information, the notification must at least contain a description of the incident and what remedial measures have been initiated. In addition, the risk of escalation must be described so that both the "worst-case" and the most probable scenarios are obvious to the Danish Energy Agency.

Condition 9:

In order to secure the fishery against nuisances from the pipeline during the operational phase and for the sake of the integrity of the pipeline, the Danish Energy



Agency considers it appropriate that conditions are set if free spans of the pipeline are developed during the operational phase, which is detrimental to fishing or posing a danger to the integrity of the pipeline, shall be remedied as soon as technically possible, cf. condition 9.

Condition 10:

For safety reasons and considerations of effective preparedness, it is considered appropriate to set conditions for hydrocarbon emissions from the pipeline or damage to the pipeline, including “near miss” incidents, to be reported to the Danish Energy Agency without undue delay, cf. condition 10.

Condition 11:

Gaz-System has conducted an as-laid survey. To i.e., ensure sufficient documentation of the project, the Danish Energy Agency finds it appropriate to set conditions of the results obtained from subsequent surveys, including the *as-built survey* that give rise to changes, must be submitted to the Danish Energy Agency for its assessment and as documentation of the pipeline's final location before the pipeline is taken into operation. cf. conditions 11.

Condition 12:

To allow the Danish Energy Agency to monitor the project and check that the relevant regulation and terms of the permit are complied with, it is also considered appropriate to make it a condition that Gaz-System must report and document on an annual basis to the Danish Energy Agency how conditions 2 - 10 in the permit are met. To ensure sufficient ongoing insight of the Danish Energy Agency into the operations, it is deemed appropriate to stipulate as a condition that reporting to the Danish Energy Agency must take place no later than the end of each calendar year, cf. condition 12.

The annual report must at least include:

- Operating status since last annual report (flow, volume delivered, rates, etc.)
- Description of organization and changes to this
- Updates and changes to insurance conditions
- Overview of maintenance and integrity and outstanding work
- Status of pigging and inspections
- Latest inspection plan with an overview of both internal and external inspections
- Description of incidents and near misses.

Condition 13:

The Danish authorities supervise compliance with the conditions of this permit. To be able to check that the relevant regulation and the framework of the permit have been complied with, it is considered appropriate to make it a condition that Gaz-System informs the Danish Energy Agency of the condition, maintenance,



inspections and operation of the pipeline at regular status meetings or prepared reports, cf. condition 14.

1.3 Complaints

The decision can be appealed in writing to the Energy Appeals Board, Toldboden 2, 8800 Viborg within 4 weeks after the decision has been published, cf. section 6 a of the Continental Shelf Act. The decision is published on the Danish Energy Agency's website www.ens.dk.

Eligible to appeal in accordance with the Continental Shelf Act, section 6 a, subsection 1, is anyone with a significant and individual interest in the decision as well as local and nationwide associations and organizations whose main purpose is the protection of nature and the environment. The same applies to local and nationwide associations which, according to their purpose, pursue significant recreational interests if the decision affects such interests.

With regards

Trine Tougaard



Annex No. 1

1 Information from the application material

Gaz-System has submitted application material by e-mail of 6 May 2022. The final application material was sent by e-mail of 3 June 2022. The application material describes the operational conditions for the operation of the pipeline and includes:

- Application for operations permit
- Operations Emergency Response Plan Offshore (Maintenance)
- Operations Emergency Response Plan Offshore (Pipeline Damage)
- Asset Management System Manual
- Integrity Management Manual
- Pipeline Inspection Plan
- Operational Environmental Monitoring Manual, Denmark
- As-laid Pipeline Coordinates in WGS84UTM33N_1
- As-laid Pipeline Coordinates in WGS84UTM33N_2
- The Danish Working Environment Authority's Approval to take the landing of the offshore gas pipeline at Faxe Bay into use.
- As-Laid Acceptance Engineering Summary
- As-Laid Lateral Buckling Assessment
- Commissioning Procedure for Offshore Pipeline
- Commissioning Strategy
- Email for confirmation of start dates: FW: Baltic Pipe Offshore Interconnector: Commercial Operation.eml
- QRA Report - Baltic Pipe offshore pipeline - permitting and design - QRA Report
- Operating Manual
- DFI Summary Report
- Design, Fabrication & installation (DFI) Résumé (Execution Phase)

1.1 Status and schedule

The Danish part of the pipeline's two sections in the Baltic Sea runs resp. from kilometer point (KP) 0 at the coastline at Faxe Bay and into Swedish waters at approx. KP 47, and again from Danish waters off Bornholm from approx. KP 132 and further into Polish waters around KP 218, cf. Fig. 1.

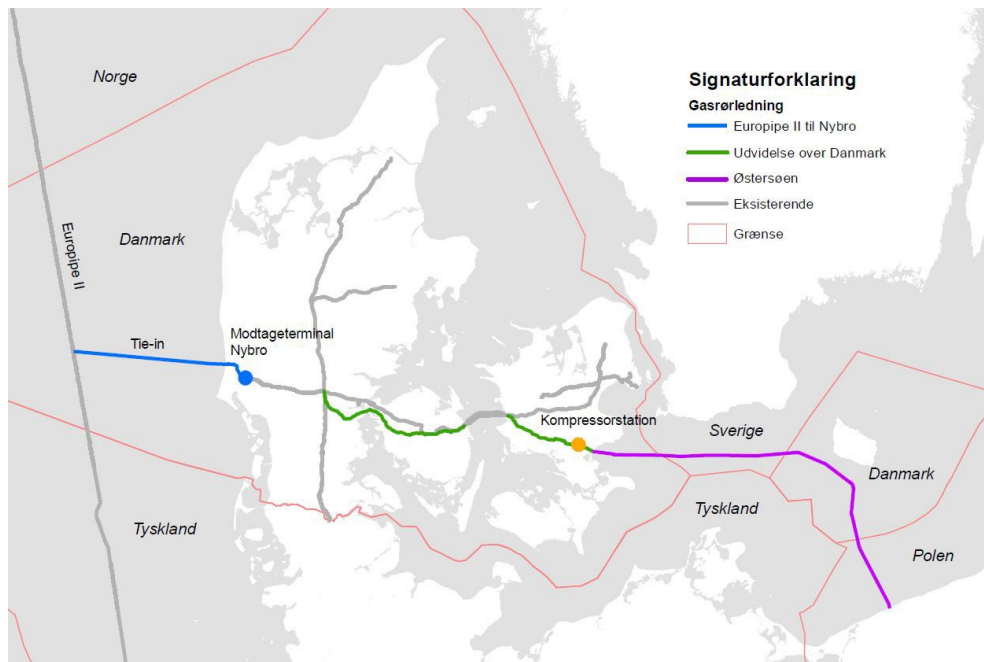


Fig. 1: Overview map of the Baltic Pipe in Denmark.

The pipeline is expected to be commissioned after the pre-commissioning has been completed. Additional information states that the operation of the pipeline is planned starting from 1 October 2022, where part of the pipeline's full capacity will be available. On January 1, 2023, the pipeline is expected to operate at full capacity.

1.2 Management system

Gaz-System will be responsible for the operation of the pipeline in the Baltic Sea and has explained in the application material how the operation will take place, including the management system, responsibilities and functions in the organization.

The main control room is located in Warsaw, Poland and the back-up control room is located in Poznan, Poland. Contact has been described to Energinet's control room in Egtved in the event of serious operational disruptions.

The monitoring of the operation will take place through the Gaz-Systems Offshore Operations Management Team, including control of the pressure in the pipeline, gas temperature and composition of the gas. This will be the case both during normal operation, for unplanned events and emergencies. Process parameters for the control have been agreed with the supplier and buyers of the gas.



Gaz-System has set up an emergency preparedness system for operating the pipeline. This system will be adapted to the conditions of the individual countries, including Denmark.

1.3 Operation, maintenance, inspection and monitoring

The document "Operating Manual" describes the pressure control system and the maximum allowable operating pressure (MAOP). The pipeline system is equipped with a maximum permissible operating pressure of 120 bar, which also corresponds to the design pressure of the pipeline.

As part of the application material, Gaz-System has submitted an Integrity Management Manual, in which the risk assessment system is described.

In connection with the Baltic Pipe project, Gaz-System has prepared a quantitative risk assessment (QRA Report) based on the identified relevant hazards within third-party impacts and structural damage, including in particular ship-related and generic incidents during the pipeline's operational phase.

The risk assessment shows that the main risks are related to shipping and the report concludes that all risks are minimized to an acceptable level (ALARP) and that no further protection measures are needed for the pipeline, as the risk to people, the environment and assets is within the acceptable level. This forms the basis of the company's inspection and monitoring program.

Gaz-System has submitted an inspection plan describing how and how often the company will inspect the pipeline during the operational phase. The inspection plan is based on an updated risk assessment and the inspections are intended to monitor the condition of the pipeline. The initial inspection of the pipeline will form the basis of all subsequent inspections and the frequency of these.

1.4 Final location of pipeline

Gaz-System has provided *as-laid* coordinates for the pipeline. The final location (*as-built* coordinates) will be reported to the Danish Energy Agency, the Ministry of Defense and the Geodata Agency as soon as they are available after the establishment of the pipeline has been completed.