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Case number:
NV-05552-24

To the Point of Contact in:
Germany
Poland
Lithuania
Latvia
Estonia

Notification pursuant to Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) regarding marine seismic surveys and marine geological investigations throughout the Baltic Sea

According to Article 3 point 1 of the Espoo Convention, affected countries shall be notified and consulted on projects that are likely to cause transboundary environmental impacts. As a party of origin, Sweden hereby notifies your countries of the Swedish plans to conduct marine seismic surveys and marine geological investigations throughout the Baltic Sea.

About the project

The Geological Survey of Sweden (SGU) is seeking to apply for an environmental permit to carry out surveys of the seabed in the Central Baltic, the South-Eastern Baltic and the Southern Baltic Sea and within the Natura 2000 area SE0330308 *Hoburgs Bank* and the *Midsjö Banks* using various marine survey methods including multibeam echo sounder (MBES) and sub-bottom profilers (SBP) and perform seismic surveys. The investigations are part of a government assignment that SGU shall assess the possibilities for Sweden to store carbon dioxide (CCS) under the sea floor. SGU's investigations at sea are conducted using various acoustic methods aboard their own vessel, the *Ocean Surveyor*. Acoustic methods involve sending sound from instruments down towards the seafloor where it bounces off the various geological layers. In the upcoming sea surveys, echo sounders (sediment echo sounder and multibeam echo sounder) are used to map the seafloor and sediment over the bedrock. However, potential carbon dioxide storage must occur at least 800 metres below the seafloor, and to determine the appearance of the bedrock at that depth, reflection seismic surveys are also conducted. The seismic surveys are carried out in collaboration with the *Danish Geological Survey* (GEUS) and *Aarhus University*. During a seismic survey, sound waves are used to create detailed

sections (two-dimensional images) of the bedrock structure. At sea, the powerful sound pulses can be created, for example, by an air gun, a water gun, or a so-called sparkers system (which uses electricity). The sound waves are shot down towards the bottom and reflected back from the various layers of the seabed and bedrock. The reflected sound waves are captured and recorded by hundreds of interconnected pressure sensors (hydrophones) dragged in the water behind the vessel in a hose-like system (streamer). Depending on the depth to be investigated, the streamer can be between 100 metres and 3,000 metres long. Geophysical and seismic surveys give rise to sounds that can be disturbing or in some cases harmful to marine life. Safeguards are planned to be taken to minimize disturbance and potential harm to marine life. Protection measures mainly focus on porpoises, but they also provide protection for, for example, fish and other species of marine mammals.

The planned survey area stretches from approximately 8 km south of the island *Gotland* and 20 km east of the island *Öland* and extends about 90 km south of the island *Öland*, where it borders the Polish economic zone in the southern part. The central location of the Natura 2000 area in the Baltic Sea means that almost all maritime traffic to Finland, Russia, the Baltic States, and northern Sweden passes through the area.

Application process

For the examination of permits referred to in Chapter 7. Section 28a of the Swedish Environmental Code (1998:808), a specific environmental assessment must always be made. The environmental impact assessment will only be prepared for an assessment in accordance with Chapter 7. 28 b § of the Environmental Code and the content can therefore be limited to the information needed for that assessment. The upcoming EIA is therefore set to focus on effects and consequences linked to the impact on porpoises and fish, as the examination only covers 7 Ch. Section 28 (a) of the Swedish Environmental Code within *Hoburgs bank* and *Midsjöbankarna* where porpoises and seabirds are designated species. Seabirds themselves are not considered to be affected by the nature of the surveys, but some have fish as their primary prey, which is why they may be affected indirectly if the recruitment of fishers is affected.

According to chapter 6 § 30 of the Swedish Environmental Code (1998:808), scope of works consultations must take place with the county administrative board, the supervisory authority and the individuals who can be assumed to be particularly affected by the investigations, as well as the other government authorities, the municipalities and the public who can be assumed to be affected by the investigations.

SGU holds a sea survey permit and since the surveys are carried out by SGU, no further permit is required according to the Continental Shelf Act (1966:314).

Comments received during the consultation process will be compiled and included in a consultation report. The consultation report is a basis for the Environmental Impact Assessment (EIA) and is to be added as an attachment when the applications are submitted.

Participating in the transboundary EIA-procedure

Referring to Article 3.3 of the Espoo Convention, Sweden kindly requests that potential comments are to be forwarded **no later than the 20th of August 2024** at the latest and:

1. acknowledge the receipt of the notification,
2. indicate, whether your country intends to participate in the EIA procedure,
3. provide comments concerning the scope for the assessment of the environmental impacts of the project on your territory, and
4. submit any comments you might receive from the public in your country.

Kindly send the answer to this notification by e-mail to:

registrator@naturvardsverket.se and espoo@swedishepa.se

Please indicate case number NV-05552-24 in your answer.

This decision has been made digitally and therefore lacks signatures

For the Swedish Environmental Protection Agency

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Point of Contact, Espoo Convention

For information only

The Swedish Ministry of Climate and Enterprise: Bastian Ljunggren and Eleonora Rönström

Attachments

Consultation document of SGU's marine seismic surveys and marine geological investigations in the Central, Southeastern and Southern Baltic Sea