



SWEDISH
ENVIRONMENTAL
PROTECTION
AGENCY

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Case number:
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The Swedish reply to the notification pursuant of Art. 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) regarding the planned offshore wind farm “Navakka” within Finland’s exclusive economic zone

The Environment Institute (SYKE) notified the Swedish Environmental Protection Agency (SEPA) on the 6th of April 2023 about the planned development and operation of the offshore wind farm (OWF) *Navakka*, located in the Bothnian Sea within Finland’s exclusive economic zone.

The developer, *Eolus Finland Oy*, states that the proposed OWF *Navakka* will include 70 – 100 wind turbines with a maximum height of 330 meters and a total annual effect of 15 – 25 TWh, spanning a project area of 670 square kilometers.

Consultation in Sweden

SEPA is the responsible authority for submitting and receiving notifications and otherwise fulfilling obligations for environmental impact assessments in a transboundary context (Espoo Convention) in Sweden, according to the Environmental Assessment Regulation (SFS 2017:966). The notification and the consultation documents have been circulated for consideration by SEPA to 17 relevant government agencies, including but not limited to the County Administrative Boards of Gävleborg County and the County Administrative Boards of *Hudiksvall*, *Nordanstig* and *Söderhamn* municipalities as well as environmental organizations and effected interest organizations.

The consultation period lasted from April 12, 2023 until May 17, 2023.

SEPA hereby acknowledges having received the notification and would like to inform Finland that Sweden intends to participate in the upcoming Espoo process.

Remarks received during the consultation

Svenska kraftnät and the *Swedish Energy Agency* have informed SEPA that they have no substantive comments to add at this time.

A summary of the statements received is included below, please note that the summary is written on behalf of the SEPA and not for the body to which the proposal is referred for consideration.

All statements are enclosed in full to this letter.

BirdLife Sweden makes several substantive points, notably that:

- Inventory efforts should map the importance of the area as a foraging/resting zone during different parts of the year. The inventory should also include a description of what birds are present and what movements of birds that take place in the project area of OWF *Navakka*.
- The evaluation should additionally include a description of the estimated overall displacement effect, with accompanying functional habitat loss of the OWF in question and other planned OWFs in the Bothnian Sea. The description should include radar studies as well as expected (general) collision statistics for migrating birds.

Nordanstig municipality has previously expressed a positive outlook on the development of the planned wind farm at *Eystrasalt* and therefore takes a favorable view of the development of OWF *Navakka* as well.

The *Geological Survey of Sweden (SGU)* stresses the importance of assessing the environmental-geotechnical risks such as sediment transport, turbidity, aggradation and the formation and dispersion of contaminated sediments at an early stage.

With regard to sediment dispersion, underwater noise, bottom environment, and electromagnetic fields, the *Swedish Agency for Marine and Water Management (SwAM)* estimates that the distance between OWF *Navakka* and Sweden is sufficient enough for no significant environmental impact to occur. A negative influence on fish stocks in Finland could potentially lead to a transboundary impact on Sweden since the fish stocks in the Bothnian Sea are shared between the two countries. However, SwAM assesses that OWF *Navakka* is planned in an area that does not overlap with important fishing areas, fish migration routes or Swedish fisheries.

Overall, the *SwAM* considers that the OWF in question does not risk entailing significant environmental impacts for Sweden based on SwAM's areas of responsibility.

The *Swedish Geotechnical Institute (SGI)* stresses that environmental-geotechnical risks such as sediment transport, turbidity, aggradation and the formation and dispersion of contaminated sediments should be assessed at an early stage.

The *Swedish Maritime Administration* highlights that wind farms generally contribute to an increased risk profile for maritime traffic. In the event of an accident, the consequences for people, the environment and property can be severe. If OWF *Navakka* is constructed, the space for maritime traffic will be

restricted and concentrated which increases the risks further. Extended routes also lead to added carbon emissions as the fuel consumption increases.

The forthcoming EIA should therefore include a maritime traffic and risk analysis, investigating the impact on the safety and accessibility of maritime traffic and how this impact can be minimized. Given that many OWFs are planned on both the Swedish and Finnish side of the Bothnian Sea, the cumulative effects and OWF *Navakkas* impact on ice formation and thus winter shipping and tactical icebreaking in Sweden and Finland should also be investigated.

The *Swedish Meteorological and Hydrological Institute (SMHI)* emphasizes that a large number of OWFs are considered for development in the Bothnian Sea and that the impact on the marine environment of each individual OWF is considered limited while the combined impact could prove to be significant. The institute therefore raises several observations on likely transboundary environmental impacts that are to be investigated in the EIA:

1. During the construction and decommissioning of wind turbines, the abiotic factors in the marine environment are impacted in terms of water turbidity, increased amounts of nutrients, dispersion of potential toxins from the seabed material, and a higher frequency of ship movements.
2. In addition, the effect of wind turbines on wind, waves and ocean currents must also be considered. As an example, the redistribution of the ocean's top layer and its impact on near-surface biological production could affect larger areas throughout the entire operational phase of a wind farm.

The County Administrative Board of Gävleborg provides only general views and refrains from providing views on the specific case. The County Administrative Board believes that Sweden should participate in the environmental impact assessment. This is above all with regard to the cumulative overall impact that a large-scale expansion of offshore wind power can bring in the Bothnian Sea, above all for fish, birds and bats, but also other cumulative aspects.

The *Swedish Pelagic Federation (SPF)* claims that the available knowledge on how fish stocks and the greater environment is impacted by various factors such as underwater noise, vibrations, shifts in currents or electromagnetic fields around high voltage cables are insufficient and that these factors and their respective cumulative impact needs to be investigated further.

The federation therefore requests that the EIA describes the expected impacts on fish stocks and fisheries during both the construction, operation, and decommissioning phases of the OWF. Regarding fishing activities, a reference period of at least 10-15 years should be applied. Furthermore, SPF believes that climate change should be considered in the EIA and that adjusted fisheries management may result in changes to historical fishing patterns in the future. Rising temperatures and the division of quota areas into more sub-areas may cause fishing to move further north than has been the case so far.

This decision has been made digitally and therefore lacks signatures.

For the Swedish Environmental Protection Agency

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Point of Contact for the
Espoo Convention

Cc

Sandra Jalalian and Astrid Öfverholm at the Swedish Ministry of Climate and Enterprise

Enclosed, statements made in Swedish by:

BirdLife Sweden
Nordanstig Municipality
The Geological Survey of Sweden (SGU)
The Swedish Agency for Marine and Water Management (SwAM)
The Swedish Geotechnical Institute (SGI)
The Swedish Maritime Administration
The Swedish Meteorological and Hydrological Institute (SMHI)
The Swedish Pelagic Federation (SPF)
The County Administrative Board of Gävle

