**Authority Services** 

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Swedish Environmental Protection Agency registrator@naturvardsverket.se

**Reference:** Bothnia Offshore Kappa, NV-05059-23

Finland's response to the supplementary notification in accordance with Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) for the planned offshore wind farm "Bothnia Offshore Kappa" in Sweden's exclusive economic zone

The Finnish Environment Institute acknowledges that Finland has received the supplementary notification dated 29 July 2024 and the consultation document from Sweden. The notification is based on Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), and it concerns an environmental impact assessment (EIA) procedure of the planned offshore windfarm Bothnia Offshore Kappa, in the Baltic Sea in Sweden's exclusive economic zone (EEZ).

Originally, the notification concerning the project was dated 9 August 2023, and Finnish Environment Institute received the consultation documents from Sweden regarding the environmental impact assessment (EIA) procedure of the planned offshore windfarm Bothnia Offshore Kappa in Sweden's exclusive economic zone (EEZ) in the Gulf of Bothnia. The developer, Njordr Offshore Wind AB, investigated the possibility to establish the planned project in the Swedish EEZ, located approximately 30 kilometers from the Finnish island Björkön and 23 kilometers southwest from Stora Fjärderägg, part of the Holmöarna island chain. The project area covered 210 square kilometers with a varying sea depth of 45–80 meters. The planned project was estimated to consist of a maximum of 74 wind turbines with a maximum height of 330 meters. The planned installed capacity varied between 15-20 megawatts (MW) and the expected installed capacity was estimated to be 1 240 MW with an expected annual production of approximately 4.86 terawatt hours (TWh). The individual turbines within the wind farm were planned to be coupled via an internal cable network that transmits the produced energy to one or more offshore substations (OSS) where the electricity will be converted and transmitted to shore through one or more connecting cables.

As a response to the notification, the Finnish Environment Institute stated on 29<sup>th</sup> September 2023 in accordance with Article 3(3) of the Espoo Convention that Finland intends to participate in the EIA procedure of the planned project Bothnia Offshore Kappa.

The original developer of the project, Njordr Offshore Wind, who conducted the previous consultations, was acquired by Statskraft Sverige AB who has announced changes to the project in terms of both the extent of the project area and a reduction in the number of wind turbines. Due to these changes, Sweden issued a supplementary notification and sent it to Finland for consideration. The current project area covers 205 square kilometers, and the planned project is estimated to consist of a maximum of 64 wind turbines with a maximum height of 330 meters and the expected installed capacity is now estimated to be 1 400 megawatts (MW) with an expected annual production of approximately 5.6 terawatt hours (TWh).

#### Consultation in Finland

According to the Finnish Act on Environmental Impact Assessment (252/2017), the Finnish Environment Institute is the competent authority and responsible for information and consultation tasks under the Espoo Convention. The Swedish Environmental Protection Agency requested potential additional statements concerning the scope of the assessment of the environmental impacts of the project in Finland, and comments from the public in Finland. The public and the authorities were given the opportunity to comment on the consultation document from 31 July to 16 September 2024, which was available on the website of Finland's environmental administration and on the website of lausuntopalvelu.fi. Statements were also asked from relevant stakeholders. The Finnish Environment Institute received ten statements.

## Remarks received during the consultation

Based on the information presented in Kappa's supplementary consultation, the project area of the Bothnia Kappa offshore windfarm has changed in such a way that the distance from Finland's exclusive economic water zone has decreased. Thus, it is important to assess the combined effects with offshore windfarms located on the Finnish side, especially the impacts on the valuable bird areas (SPAs) of the Finnish Natura 2000 network and on the marine ecosystem. All planned wind power projects on the Baltic Sea area may also have combined and cumulative impacts on the migratory fish stocks which need to be investigated carefully.

The Finnish Environment Institute has prepared a summary of the original statements in English below. However, the original statements which are enclosed to this letter, include important and detailed remarks which need to be taken into consideration in its entirety.

#### Statements received in Finland

#### **Finnish Transport and Communications Agency Traficom**

Traficom has issued a statement on the planned Bothnia Offshore Kappa offshore wind farm on 20.9.2023 (dno: TRAFICOM/476810/04.04.05.03/2023). Traficom does not see the need to issue a new statement due to the planned changes in the area delimitation and the increase in the capacity of the offshore wind farm, as from the maritime perspective the changes to the



previous plan are relatively small and the comments related to shipping have already been comprehensively highlighted earlier.

However, Traficom considers it important to highlight the situation of offshore wind power projects located in Finland's exclusive economic zone, as the supplementary notification concerning the project mentions that offshore wind power projects in Finland's exclusive economic zone have been abandoned due to changing legislation and practices. Traficom specifies that the Government has made a negative decision on 16 applications for exploitation rights concerning offshore wind power in the exclusive economic zone, but the decision does not prohibit the development of offshore wind power projects in these sea areas. For example, the EIA process of the project bordering the Bothnia Offshore Kappa offshore wind farm in Finland's exclusive economic zone is still ongoing. The practices of offshore wind power construction in Finland's exclusive economic zone will be clarified through a legislative project. The pending legislative project defines, among other things: Legislation, permit processes and practices concerning waters in Finland's exclusive economic zone. Traficom considers that when assessing the cumulative impacts of offshore wind power projects, one option should still be to assess a situation where an offshore wind farm would be built east of the Bothnia Offshore Kappa offshore wind farm.

# Centre for Economic Development, Transport, and the Environment of South Ostrobothnia

In the view of the ELY Centre, Finland should participate in the EIA procedure of the Kappa offshore wind power project in the future due to possible cross-border impacts. The ELY Centre requests that the issues raised in its earlier statement (22.9.2023) on the consultation of the project be considered.

Based on the information presented in Kappa's supplementary consultation, the project area of the Kappa offshore windfarm has changed in such a way that the distance from Finland's exclusive economic water zone has decreased. In the previous project delimitation, the distance to Finland's exclusive economic water zone was approximately 1 kilometre, but in the current project delimitation, the Kappa project area is bordered by the domestic water zones between Finland and Sweden and is thus located closer to the planned offshore wind power projects on the Finnish side.

In Kappa's EIA procedure, it is important to assess the combined effects with offshore windfarms located on the Finnish side. Offshore wind power projects are planned for Finland's exclusive economic water zone, which would be bordered by the exclusive economic water zone of Finland and Sweden at the Kappa project area. Combined effects with these projects are very likely. It is important, among other things, to assess the combined effects, especially regarding the impacts on nature, and to consider the valuable bird areas (SPA) of the Finnish Natura 2000 network in the assessment of the combined effects.

Two offshore wind power projects (Laine and Reimari) located in the vicinity of the Kappa project area on the Finnish side are currently subject to EIA procedures. Environmental impact assessment programmes have been drawn up for the projects, and the South Ostrobothnia ELY Centre has issued a statement from the contact authority on 21.12.2022 on the Laine assessment programme and on 11.1.2023 on the Reimari assessment programme. Therefore,



more detailed information on the projects is available than is presented in the consultation document (19.6.2022) attached to Kappa's request for opinion. The materials concerning the EIA project of the Laine offshore wind farm can be found in Swedish <a href="https://www.miljo.fi/lainehavsvindkraftMKB">www.miljo.fi/lainehavsvindkraftMKB</a> and the materials concerning the EIA project of the Reimari offshore wind farm can be found in Swedish <a href="https://www.miljo.fi/reimarihavsvindkraftMKB">www.miljo.fi/reimarihavsvindkraftMKB</a>.

On 2 May 2024, the Finnish Government made a negative decision on 16 applications for exploitation rights concerning offshore wind power in the exclusive economic zone. However, the decision taken does not prohibit the development of offshore wind farm projects in the sea areas under consideration.

Finland is preparing the act on offshore wind power in Finland's exclusive economic water zones, based on which areas suitable for offshore windfarms located in Finland's exclusive economic water zone will be put out to tender in the future.

#### Finnish-Swedish Transboundary River Commission

Although the project area is located outside the geographical scope of the application of the Transboundary River Agreement between Finland and Sweden (91/2010), the project may have impacts on the Torne River through the impact on migratory fish. Salmon in the Torne River will migrate even to the southern Baltic Sea, probably through the project area or over submarine cables that lead the generated electricity to land. For the Transboundary River Agreement, particular attention must be paid to the conservation and sustainable use of fish stocks (Art. 2.2.d). The Commission underlines that the Commission is interested in this area, as marine activities such as large-scale offshore wind power projects may have a potential impact on migratory fish stocks.

The Finnish-Swedish Transboundary River Commission considers Finland's participation in the Bothnia Offshore Kappa consultation on the offshore wind power project important. The Commission stresses that transboundary effects cannot be excluded, especially regarding migratory fish stocks.

At the time of writing, there is still limited information on the potential impact of marine wind power on migratory fish stocks. In view of the large amount of planned offshore wind power in the Baltic Sea and the Gulf of Bothnia, the Commission stresses the importance of acting according to the precautionary principle. It is important to thoroughly investigate the potential combined and cumulative impacts on migratory fish stocks from all planned wind power projects in the entire Baltic Sea region.

#### Finnish-Swedish Transboundary River Commission (original in Swedish)

Although the location of the project is outside the geographical scope of the Transboundary River Agreement between Sweden and Finland (Prop 2009/10:212), the project may have an impact that extends to the Torne River through the impact on migratory fish. The salmon of the Torne River migrate all the way to the Southern Baltic Sea and thus probably cross the project area or submarine cables that carry the produced electricity to land. The purpose of the Transboundary River Agreement states that special attention must be paid to the protection and sustainable exploitation of fish stocks (Article 2.2.d). The Commission emphasizes that it should



be counted as a stakeholder in the matter as marine activities such as large-scale offshore wind power can possibly affect migratory fish stocks.

The Finnish-Swedish Transboundary River Commission considers it important that Finland participates in the consultation on the Bothnia Offshore Kappa offshore wind power project. The Commission highlights that cross-border impacts cannot be excluded regarding migratory fish stocks.

At the time of writing, there is still limited knowledge about the possible impact of offshore wind power on migratory fish stocks. In view of the large amount of planned offshore wind power in the Baltic Sea and the Gulf of Bothnia, the Border River Commission considers it important to act according to the precautionary principle and thoroughly investigate the possible combined and cumulative impacts on migratory fish stocks from all planned wind power projects in the entire Baltic Sea region.

# Centre for Economic Development, Transport and the Environment of Southwest Finland – Fisheries Authority

The Authority considers that the notified change in the project area does not alter the environmental impact assessment given in its previous opinion (SYKE/2023/1467, submitted to Sweden on 29.9.2023).

However, the new boundaries of the project area extend all the way to the border of Finland's exclusive economic zone. In this case, the project's power plants, and infrastructure can be located so close to the border that they can theoretically prevent fishing, shipping, or other activities in Finland's domestic waters, for example through bottom modification, safety distances between foundations and submarine cables, and ice throwing. When planning the exact location of power plants, Finland's right to utilise its own exclusive economic zone should be considered.

#### Centre for Economic Development, Transport and the Environment of Southwest Finland

The Centre for Economic Development, Transport and the Environment of Southwest Finland considers that the announced change in the project area does not change the assessment of the key environmental impacts given in its previous statement (VARELY/5045/2023, submitted to Syke on 22.9.2023). The new boundaries of the project area extend all the way to the border of Finland's exclusive economic zone, so the Bothnia Offshore Kappa project and the nearest offshore wind power projects planned for Finland's exclusive economic zone are likely to have combined effects on bird and marine ecosystem in the Baltic Sea region through both construction and operational activities.

The effects of the project on sediment transport, flows, wave formation, temperature stratification and underwater noise during construction and operation shall be assessed through appropriate modelling, both for the Bothnia Offshore Kappa project and in synergy with other nearby offshore wind projects. The multiplier effects of these factors on the marine ecosystem should be assessed. The combined effects of the project extensively with other offshore wind projects planned for the Bothnian Sea, the Kvarken Strait and the Bay of Bothnia and their electricity transmission solutions must be identified and assessed.

#### **Finnish Transport and Infrastructure Agency**

The Finnish Transport Infrastructure Agency does not see the need to comment on the planned changes to the reduction limits or the planned increase in the capacity of the offshore wind farm, as the changes are relatively small for shipping.

Regarding the status of offshore wind power projects planned for Finland's exclusive economic zone and their consideration in the assessment of cumulative impacts in the case of the Bothnia Offshore Kappa offshore wind farm, the Finnish Transport Infrastructure Agency refers to the statement of the Finnish Transport and Communications Agency Traficom dated 11.9.2024 (TRAFICOM/476810/04.04.05.03/2023).

#### **Finnish Meteorological Institute**

Regarding marine research, the Finnish Meteorological Institute has nothing to add to the opinion already issued (480/03.00.02/2024).

Regarding the weather radar network, the Finnish Meteorological Institute has no comment to make, as the area is more than 20 kilometres away from the nearest weather radar of the institute.

# Ministry of Foreign Affairs of Finland

No comment on the matter.

# **Ministry of Transport and Communications**

No comment on the matter.

#### Conclusion

All the previously given statements and opinions on the Bothnia Offshore wind farm project need to be considered during the environmental impact assessment of the project. Moreover, since the new location given in the supplementary notification is so close to the border of Finland, it may theoretically prevent fishing, shipping, or other activities in Finland's domestic waters, for example through bottom modification, safety distances between foundations and submarine cables, and ice throwing. When planning the exact location of power plants, Finland's right to utilise its own exclusive economic zone should be considered.

Finland is preparing an offshore wind power act concerning Finland's exclusive economic water zones. The supplementary notification concerning the project mentions that offshore wind power projects in Finland's exclusive economic zone have been abandoned due to changing legislation and practices. The Finnish Government has made a negative decision on 16 applications for exploitation rights concerning offshore wind power in the exclusive economic zone of Finland, but the decision does not prohibit the development of offshore wind power projects in these sea areas. For example, the EIA process of the project bordering the Bothnia Offshore Kappa offshore wind farm in Finland's exclusive economic zone is still ongoing. More

detailed information on the ongoing projects is available than what is presented in the consultation document, dated 19<sup>th</sup> June 2022 and attached to Kappa's request for opinion. There are information available in Swedish for example for Laine offshore wind farm and its EIA <a href="https://www.miljo.fi/lainehavsvindkraftMKB">www.miljo.fi/lainehavsvindkraftMKB</a> and Reimari offshore wind farm and its EIA <a href="https://www.miljo.fi/reimarihavsvindkraftMKB">www.miljo.fi/reimarihavsvindkraftMKB</a>.

Finland considers that it is important to examine and assess all the impacts mentioned in the comments. The combined and cumulative effects on the marine ecosystem and migratory birds shall be assessed. The combined effects of the project extensively with other offshore wind projects planned for the Bothnian Sea, the Kvarken Strait and the Bay of Bothnia and their electricity transmission solutions should also be identified and assessed.

The Finnish Environment Institute wishes that the EIA documentation includes a separate chapter for transboundary impact assessments from Finland's perspective with a specific regard given to the provided remarks. Finland considers it as a high priority to examine and assess cumulative impacts to the extend as possible in the EIA. Although impact can be minor or ecologically non-significant for an individual windfarm, cumulative impacts of several windfarms in the region can be ecologically significant.

Head of Services Jenni Juslén

Senior Officer, Point of Contact to the Espoo Convention and its Protocol on SEA Hanne Rajanen

This document has been electronically signed.



**Appendices** Statements received in Finland in Finnish and Swedish

**Distribution** Swedish Environmental Protection Agency

For information Ministry of the Foreign Affairs

Ministry of the Environment

Ministry of Transport and Communications

Finnish Transport and Communications Agency Traficom

Centre for Economic Development, Transport and the Environment

of South Ostrobothnia

Finnish-Swedish Transboundary River Commission

Centre for Economic Development, Transport and the Environment

of Southwest Finland - Fisheries Authority

Centre for Economic Development, Transport and the Environment

of Southwest Finland

Finnish Transport and Infrastructure Agency

Finnish Meteorological Institute