

Authority Services

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Swedish Environmental Protection Agency
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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 "Herkules" in Sweden's exclusive economic zone

The Finnish Environment Institute acknowledges that Finland has received the notification dated 5 December 2023 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 wind farm, "Herkules", in the Baltic Sea in Sweden's exclusive economic zone (EEZ).

The supplementary notification received informed about changes regarding the first notification about the same project dated on 5 April 2023. In the first notification, the developer, Simply Blue Energy, presented plans to investigate the possibility to establish an OWF in the SEZ approximately 60 kilometres southeast of the island Gotska sandön, Sweden.

Now, Simply Blue Energy would like to supplement prior scoping document, with an increased number of turbines. Further, the developer would like to present new example layouts based on the adjustment. No changes to the project area are planned. In the previously prepared scoping document, it was stated that the wind farm will consist of a maximum of 121 wind turbines. The number has now been adjusted to a maximum of 160 wind turbines, with an unchanged maximum total height of 360 m. A design with 160 wind turbines of 15 MW gives a total installed capacity of approx. 2.4 GW with an expected annual production of about 13 TWh.

This notification under consultation only regards the changes presented in the amendment to the scoping document of the project. Earlier comments submitted regarding the prior notification are considered valid and will be used in the development of the Environmental Impact Assessment (EIA).



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 public and the authorities were given the opportunity to comment on the amendment to the consultation document from 14 December 2023 to 23 January 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 five statements.

Remarks received during the consultation

Based on the received statements and reflecting its own views, the Finnish Environment Institute states that Finland will continue participating in the EIA procedure. The Finnish Environment Institute has made a summary of the received statements in Finland. However, the original statements enclosed to this letter needs to be considered fully in the EIA including the earlier response from Finland to Sweden dated 16 May 2023 and its attachments.

The Finnish Meteorological Institute (FMI) has studied the proposal containing the changes and states the following: As stated in an earlier opinion dated on 10 May 2023, the Hercules wind farm will have an impact on marine observations in the wind farm area. The Finnish Meteorological Institute has free-floating Argo buoys in the Gotland basin. The use of them and other autonomous marine measuring instruments in and around the park area will become more difficult when the park is built.

In the view of the Finnish Meteorological Institute, Finland should participate in the environmental impact assessment procedure of the planned project. The planned wind farm will also have an impact on windiness and, consequently, waves, currents, and sea mixing. The extent of these impacts and their potential consequences for the marine ecosystem should be investigated as part of the environmental impact assessment.

Regarding the weather radar network, the Finnish Meteorological Institute has no comment on the proposed changes to the planned Hercules offshore wind farm in Sweden's exclusive economic zone, as the area is more than 20 km away from the nearest weather radar of the institute.

Finnish Transport and Communications Agency (Traficom) wish to note that they issued an earlier statement on the project to the Finnish Environment Institute on 11 May 2023. In addition to what was stated earlier, Traficom states that the use of radar as the main means of navigation and collision prevention for vessels and its central role in winter shipping and traffic control must be considered when planning the area allocated to wind turbines and individual wind turbine structures. When assessing the impacts, the abnormal use of ships' radars in ice conditions must also be considered. Wind turbines can cause either shading or spillover effects on marine radars, which at worst make it difficult to interpret radar signals. Wind turbines can also affect the satellite positioning of vessels, i.e. the Global Navigation Satellite System (GNSS), in such a way that satellite signals are reflected through wind turbines, causing incorrect positioning of the vessel using the system.

The location planning of the area allocated to wind turbines — and of individual wind turbines — must also take into account the potential impact of wind turbines on marine and coastal radio systems. The



reliable operation of radar and radio systems is an essential part of maintaining maritime and public safety. Effects of wind turbines on radars, radio navigation equipment, etc. The operation of radio equipment important for shipping and traffic control should be considered and ensured.

The operation of radio links operating in the sea area also requires a completely unobstructed area between the transmitter and receiver. Since electronic communications services in coastal and maritime areas depend on radio systems, it is important to ensure that mobile services, radars and radio links operate sufficiently undisturbed, including in maritime areas. Even small changes in the placement of wind turbines can have a decisive impact on the operation of radio systems in an area.

Traficom considers it important that above mentioned factors are also taken into account when assessing the project's impacts in the EIA procedure.

Ministry of Transport and Communications issued a statement on Finland's participation in the EIA procedure for the Hercules offshore wind farm on 12 May 2023. The Ministry reaffirms this opinion and further states that when constructing offshore wind farms, the impacts on maritime transport infrastructure must be considered. Smooth and safe maritime traffic on fairways and in sea areas outside fairways throughout the year is important, as the majority of Finland's foreign trade goods are transported by sea. Taking shipping into account is important to secure the operating conditions of Finnish merchant shipping and to ensure safe and smooth shipping. The design of offshore wind power plants must consider the unhindered use of fairways. Offshore wind farms can change traffic areas and routes, extend travel times, and increase vessel emissions as fuel consumption increases. When delimiting the area of planned offshore wind power projects, it is important to consider the traffic routes used by shipping also outside the reinforced fairways and routing systems, so that the operating conditions and safety of shipping are taken into account in the planned project area.

In addition, wind turbines have an impact on the field strength and signal quality of mobile networks. The operation of radio links operating in the sea area also requires a completely unobstructed area between the transmitter and receiver. Since electronic communications services in coastal and maritime areas depend on radio systems, it is important to ensure that mobile services, radars and radio links operate sufficiently undisturbed, including in maritime areas. Even the smallest changes in the placement of wind turbines can have a decisive impact on the operation of radio systems in an area.

ELY Centre of Southwest Finland (Fisheries Authority) has not previously issued an opinion on this project, but states that the project directly and indirectly affects the interests of the Finnish fishing industry. Finland has fishing rights in the project area, Sweden's exclusive economic zone. The Fisheries Authority notes that Finnish trawl vessels have been fishing in and around the project area in recent years. These sea areas are of strategic importance for Finnish fisheries.

Regarding the proposed amendment, the sealing of turbines is likely to make trawling in the area more difficult compared to the previous plan. In the view of the Fisheries Authority, the technical conditions for safe trawling do not exist when the distance between power stations is less than 3 km. In addition, there are trawling areas for Finnish vessels to the east and west of the project area, between which the vessels must be able to travel freely. The large north-south length of the area may have a negative impact on the economy of fishing and the emission burden if vessels cannot safely pass through the area, for example, due to a transit ban or ice throwing.

The Authority requires that any fixed trawl corridors be identified at least by means of VMS data and



queries and that fishing on fixed corridors will be made possible. The transit possibilities of fishing vessels must be investigated (e.g. the effect of ice throwing) and east-west transit must be possible in all circumstances.

Finnish Professional Fishermen's Association (SAKL) refers to their statement on the project dated 12 May 2023 and state that the proposed changes do not affect their previous statement. SAKL still considers it essential that Finland participates in the EIA procedure of the project planned in Sweden and monitors its progress.

Finnish Transport Infrastructure Agency would like to thank for the opportunity to comment on the changes to the offshore wind farm Hercules in Sweden, however had no comment on the matter.

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This document has been electronically signed.



Appendices	Received statements in Finland
Distribution	Swedish Environmental Protection Agency
For information	Swedish Environmental Protection Agency, Richard Kristoffersson Ministry of the Foreign Affairs Ministry of the Environment Ministry of Transport and Communications Finnish Meteorological Institute (FMI) Finnish Transport and Communications Agency (Traficom) Finnish Transport Infrastructure Agency ELY Centre of Southwest Finland (Fisheries Authority) Finnish Professional Fishermen's Association (SAKL)

