



Espoo Consultation report Thor Offshore Wind Farm

Office/department
Offshore Wind

Date
29-08-2024

J no. 2022 - 7319

/embdp

Introduction

The Danish Energy Agency has in the period from 23 April 2024 to the 30 of September 2024 consulted Great Britain, The Netherlands, Germany and Norway on the Environmental Impact Assessment of Thor Offshore Wind Farm located in the Danish part of the North Sea. The Netherlands, Germany and Norway has responded in the consultation and this report presents these consultations.

The Netherlands

Espoo response from The Netherlands:

Dear sir / madam, Thank you very much for the opportunity to react on the Environmental Impact Assessment (EIA) of the Thor offshore wind farm project. Please find below the comments from the Netherlands at this stage of the consultation process, with inputs provided by Rijkswaterstaat and the Ministry of Agriculture, Nature and Food Quality.

- The assessment states that effects on commercial fisheries are “not significant” and thus considered negligible. In the Netherlands, we give attention to every level of social-economic effect on the commercial fisheries, and we consider the cumulative effects of the growing number of offshore wind farms as well. Considering that project Thor is one of various offshore wind farms planned in the coming years, we recommend that studies also consider the cumulative social-economic effects on the fisheries and associated fishing communities.
- No substantiation/calculation has been provided for the expectation of a non-significant number of bird casualties due to collisions.
- Several times throughout the documents, it is stated that there are low densities of species in and around the wind farm site. However, no source is provided for this, which makes it impossible to verify the assumption. We very much appreciate the systematic approach and the stakeholder process, and we would welcome the opportunity to stay involved in the remainder of the process on a regular basis.

Respond from The Danish Energy Agency:

The Danish Energy Agency would like to thank you for the comments on the Espoo consultation of Thor Offshore Wind Farm. We have read and processed your comments. If you have any further comments or questions, please let us know as soon as possible. It is possible to receive updates on the ongoing permitting processes of Thor Offshore Wind Farm through our newsletter or ENS.dk.

Please note that the attached EIA documents are a machine generated translation and therefore there can be mistranslations of species etc.

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Commercial fisheries

The material provided as part of the Espoo hearing contains a high-level description of the assessments in the EIA report. The effect and impact on fisheries is described in further detail in the attached chapter 17 of the EIA report. This assessment also covers the cumulative impact with other existing wind farms and, to the extent, it is possible, planned offshore wind farms.

NIRAS - the environmental adviser on the EIA - has previously, and in relation to other projects in the North Sea, received VMS and log data from the Dutch authorities regarding the presence of Dutch fishermen in the area for the Thor Offshore Wind Farm. These data show that the project area for Thor falls in the lowest fishing catch category in terms of fishing activity. This information is also part of the assessment in the EIA.

It is per Danish legislation not required to make a socio-economic analysis of specific subjects in regards to the EIA. Nevertheless, The Danish Energy Agency will take the recommendation of cumulative social-economic studies effects on fisheries and local fishing communities into account.

Bird collisions

The method and specific calculation for bird collisions is described in further detail in the attached chapter 16 and annex 4.

Species in and around the wind farm area

The relevant sources of data used to document the densities of species in and around the project area is described in the EIA report. The relevant chapters and underlying sections in the EIA contain a thorough description of the method and data used for the assessments for the different species. In addition, the sections also list relevant sources and any survey programmes carried out to document the densities of that specific species.

As for marine mammals, please see the attached chapter 15. For more information on the method and data, see section 15.1. For more information on the survey programme, see section 15.2.1.

As for birds, please see the attached chapter 16. Section 16.1 provides an overall description of the method and data used to document and model bird densities. In addition, this chapter provides descriptions of the relevant bird species and modelling of densities of the present species in and around the project area. Modelling and density maps are available in section 16.2.



As for bats, please see the attached chapter 24 on Annex IV species. Section 24.5.1. provides a description of the method, data and survey programmes undergone for bats.

Second response from The Netherlands:

Thank you for your consideration of our standpoints. I had to confirm with my colleagues who provided the response, which is why my reply to you took a bit longer. My colleagues are very pleased to read that their comment about cumulative social-economic studies effects on fisheries and local fishing communities will be taken into account. In addition, they are very interested to know its use will be perceived and – if possible – would like to be kept informed about the social-economic studies and the project in general.

Besides this, there are no further comments regarding this Espoo-process.

Germany

Espoo response from Germany:

I would like to thank you for sending us the Espoo report and the opportunity to comment on the planned offshore wind farm "Thor". I comment below on individual protected interests.

Migratory birds

According to the current assessment, the TdV assumes that the single OWP "Thor" will not have any significant negative transboundary impacts on the German EEZ. Referring to the Danish authorities' environmental impact assessment of the Marine Spatial Plan, it also states that significant cumulative impacts on migratory birds cannot be ruled out as a result of the continuous expansion of offshore wind energy in the North Sea.

Over the German exclusive economic zone (EEZ), bird migration was mainly observed to the northeast (spring) and southwest (fall). It can therefore be assumed that birds migrating northeast in spring will encounter the Offshore Windfarms in the Danish EEZ after flying over the German EEZ. In the view of the federal maritime agency (BSH), there are general uncertainties within the assessment of cumulative impacts, particularly for nocturnal migratory songbirds, which make up the majority of bird migration and are not considered in the available Espoo documents. The BSH therefore recommends that monitoring of bird collisions, as is carried out for wind farms in the German EEZ, should also be included in the monitoring program for the Thor OWP. This would be an important measure to be able to better assess the cross-border cumulative effects in the future. The BSH requests further information in this regard and would welcome further involvement with regard to the level of technical knowledge on possible monitoring of migratory birds.

Seabirds and resting birds



According to the current assessment based on the information available, the main transboundary impact factors are taken into account. The statements on transboundary impacts on seabirds and resting birds are largely comprehensible, according to which there are currently no transboundary impacts on seabirds and resting birds in the German EEZ according to the documents.

According to the current assessment, the developer assumes that the offshore wind farm "Thor" and the existing wind farms (Horns Rev 1-3 and Vesterhav Nord and Syd) have not cumulatively reached a level that would have a significant negative impact on the biogeographical populations of resting birds and their conservation status. Referring to the Danish authorities' environmental impact assessment of the Marine Spatial Plan, it is nevertheless stated that significant cumulative impacts on coastal and seabirds cannot be ruled out as a result of the continuous expansion of offshore wind energy in the southern North Sea.

From this point of view, ongoing technical involvement would therefore be desirable.

Marine mammals

It is not clear from the consultation documents on what data basis the assessments made. I request information on the framework in which the data was collected (e.g. project-specific preliminary study).

Furthermore, noise reduction measures are mentioned in the documents. However, it is not clear whether these are optional or mandatory. The BSH requests specific feedback on this.

A noise forecast (NIRAS 2023b) is mentioned in the consultation documents. The BSH would like to check whether this could be made available.

Fish

No comments.

Respond from The Danish Energy Agency:

The Danish Energy Agency would like to thank you for the comments on the Espoo consultation of Thor Offshore Wind farm. We have read and processed your comments. If you have any further comments or questions, please let us know as soon as possible.

Please note that the attached EIA documents are a machine generated translation and therefore there can be mistranslations of species etc.

Migratory Birds



The attached chapter 16 describes the occurrence of birds in and around the Thor Offshore Wind Farm project area, and assesses the potential impacts of the project on birds.

Section 16.2.3 of the EIA assesses which species or species groups of migratory birds that are relevant for the Thor Offshore Wind Farm project.

In relation to north-south bird migration, the section describes that Thor Offshore Wind Farm will be located approx. 22 km from the coast and that studies from the area Horns Rev in connection with the existing offshore wind farms Horns Rev 1 and 2 show very limited bird migration at a comparable distance from the coast (20-30 km). Thor Offshore Wind Farm is located further north along the west coast of Jutland. Therefore, there are fewer land birds migrating across the project area of Thor Offshore Wind Farm compared to the wind farms at Horns Rev. This is because migrating land birds usually follow land and usually only fly over water when the land they follow ceases. Along the west coast of Jutland, this is only the case at Blåvandshuk and Skagen, where the Horns Rev wind farms are located off the coast of Blåvandshuk. Against this background, the EIA has assessed that there is very limited bird migration within the project area for Thor Offshore Wind Farm, and that this migration will largely consist of ducks and geese migrating along the coast.

The nocturnal migration of songbirds is briefly discussed in the EIA report in section 16.4.1 under the assessments of impacts during the operational phase. The section describes that nocturnal migration under good weather conditions takes place at an altitude (1000-1500 metres) that far exceeds the height of the wind turbines, and that it is therefore especially at the beginning or end of the nocturnal migration that there will be a risk of collisions for these species. Based on section 16.4.1 of the EIA, the project area for Thor Offshore Wind Farm is not considered an area for either the beginning or the end of nocturnal migration. It is further described in section 16.4.1 that the assessment of the impact on migratory birds due to collisions only includes the species assessed as relevant in section 16.2.3 (ducks and geese).

We understand that your consultation response addresses the potential (collision) impact on migratory songbirds crossing the German Bay in spring and autumn. Based on the available knowledge, which is partially reproduced above, it is assessed that the nocturnal migration of songbirds partly takes place at an altitude that will be above the height of the turbines and partly takes place in relation to the topography of the landscape. This means that songbirds crossing the German Bay will follow the coastline of Jutland from Blåvandshuk and northwards and thus do not migrate across the project area for Thor Offshore Wind Farm.

We therefore assess that there will be no need for bird monitoring while Thor Offshore Wind Farm is in operation.



Seabirds and resting birds

According to the Espoo Convention Denmark will consult neighboring countries in the environmental impacts assessments of the upcoming offshore wind farms in Danish territory. Future ongoing technical involvement will therefore occur between Denmark and Germany.

Marine mammals

In connection with the strategic environmental assessment of Thor Offshore Wind Farm, baseline studies were carried out in the project area using passive acoustic monitoring and aerial survey data. The results from these studies, together with existing knowledge, form the basis for the assessments of the area's importance for marine mammals. The report is published [here](#).

The Danish Energy Agency has published a [Guideline for underwater noise](#) in relation to the construction of offshore wind farms. The guideline presents standard measurement methods, criteria and procedures for the constructions, and considers the behavior of marine animals. All construction licenses for offshore wind farms in Denmark include terms in regards to the underwater noise from construction that the concessionaire are obligated to abide to.

The underwater noise prognosis/noise forecast is already part of the EIA-report and is published [here](#).

Norway

Espoo response from Norway (translated via Google Translate):

The area lies to the west of Jutland and to the south and east of the dominant shipping traffic in and out of the Baltic Sea. The park is well within sight of the shipping routes that are drawn up in Denmark's sea plan (picture 1 next page). In light of this, the Norwegian Coastal Administration considers that this wind farm will not have consequences for route selection for ships sailing between the Danish and Norwegian economic zones.

The Norwegian Coastal Administration has no input into the impact assessment, nor do we need to be kept informed about the further process for this wind farm.

The Norwegian Coastal Administration will respond via the mentioned solution for consultation statements, after first normal approval in its own archive systems.