

**Supplementary summary  
environmental statement for the  
suitability determination of sites  
N.3.5, N-3.6 and N-7 .2\***

**Hamburg, February 2022**

\*This statement has been translated into English. In case of any differences between the German and the English version the German version is binding.

The **comprehensive summary statement** can be found in the document "Suitability Assessment for sites N-3.5, N-3.6 and N-7.2". This document contains information on the procedure, the assessment of suitability with regard to all relevant issues, including the marine environment, and the determination of the power to be installed. It also deals specifically with comments and statements on various issues within the framework of public and authority participation. In addition, reference is made to the justification of the suitability determination (2nd WindSeeV) and the environmental reports. In addition, the following explanations briefly describe the basis of the assessment and the consideration of comments and statements with regard to environmental concerns.

The Federal Maritime and Hydrographic Agency, which is responsible for the preliminary investigation of areas, shall examine the suitability of an area for tender in accordance with section 12(4) sentence 1 in conjunction with section 10(2) of the Wind Energy at Sea Act. In conjunction with Article 10(2) of the Offshore Wind Energy Act (WindSeeG), the Federal Maritime and Hydrographic Agency shall examine the **suitability of an area** for tender. It is examined whether the erection and operation of offshore wind energy turbines on the

(1) the criteria for the inadmissibility of the designation of an area in the area development plan in accordance with section 5(3) of the Wind Energy at Sea Act and (2) in the case of areas in the exclusive economic zone, the relevant concerns for the plan approval in accordance with section 48(4) sentence 1 of the WindSea Act, insofar as these can be assessed independently of the subsequent design of the project. Pursuant to section 12(5) WindSeeG, the result of the suitability test and the capacity to be installed shall be determined by statutory instrument if the suitability test shows that the site is suitable for tender.

Within the framework of the suitability test, **various concerns** are **examined in accordance** with section 10(2) in conjunction with section 5(3) and section 48(4) sentence 1 of the WindSeeG: the requirements of regional planning, the safety and ease of traffic, the security of national and alliance defence, the location in protected areas, priority mining activities, existing and planned cable, offshore connection, pipeline and other lines, existing and planned locations of converter platforms or transformer stations, as well as other requirements under the WindSeeG and other provisions of public law.

Pursuant to Section 10(2) in conjunction with Section 5(3) No. 2 and Section 48(4), first sentence, No. 1 of the WindSeeG, a site is only suitable if the construction and operation of wind turbines at sea do **not endanger the marine environment**, in particular if there is no concern of pollution of the marine environment within the meaning of Article 1(1) No. 4 of UNCLOS and if bird migration is not endangered. Pursuant to Article 35(1), first sentence, UVPG in conjunction with No. 1.8, Appendix 5, UVPG, a strategic environmental assessment must be carried out when determining the suitability of a site and the installable capacity on the site pursuant to Article 12(5) of the WindSeeG. This assessment shall identify, describe and evaluate the likely significant environmental impacts of implementing the plan for this site.

Pursuant to section 12(5) sentence 1 of the WindSeeG, the determination of suitability may include specifications for the subsequent project if the erection and operation of offshore wind energy turbines on this site might otherwise impair the criteria and concerns pursuant to section 10(2) of the WindSeeG.

As part of the assessment and determination of the suitability of sites N-3.5, N-3.6 and N-7.2 in the Exclusive Economic Zone of the North Sea, a **Strategic Environmental Assessment** was carried out. For each of the three sites, this showed that there is no risk to the marine environment if the requirements listed in the suitability determination (2. WindSeeV) are met. For the assessment of the suitability of the sites with regard to the risk to the marine environment, reference is made to Chapter 3.2 of the suitability assessment of sites N-3.5, N-3.6 and N-7.2. Chapter 2, Section 1, Subsection 1 of the Suitability Assessment (2nd WindSeeV) contains requirements for subsequent offshore wind farm projects that must be met with regard to the marine environment. These include emissions, noise protection and monitoring.

Within the framework of participation pursuant to Sections 41, 42, 60 (1) and 61 (1) UVPG, **statements and comments were received on the environmental assessment**, in particular on the topics of cultural assets, benthos and fish, seabirds, bird migration and harbour porpoises. In particular, these were taken into account as follows:

In the course of the consultation process, an increased collision risk from offshore wind farms operated close to the coast was derived for sites N-3.5 and N-3.6 from the high densities of migrating birds near the coast, which should be countered with temporary shutdowns during very high migration intensities (so-called mass migration events). Mass migration events are limited to a few days per migratory season, whereby many bird collisions could be avoided with comparatively short downtimes. The statement therefore suggests temporary shutdown and turning into the wind in spin mode as soon as 250 radar signals/km/h in the height range of 0-200 m are registered at night or a regular occurrence of day-migrating species at risk of collision in the danger zone of the offshore wind farm is registered during the day with visibility below 500 metres. This would require targeted monitoring during migration periods and effective shutdown criteria. In the view of the Federal Maritime and Hydrographic Agency, at the time of the suitability assessment of sites N-3.5 and N-3.6, there is no changed knowledge of bird migration or a significantly increased risk of killing pursuant to Article 44(1)(1) of the Federal Nature Conservation Act compared to the suitability assessment of the neighbouring site N-3.8, which would justify a different species protection assessment at the level of the suitability assessments of sites N-3.5 and N-3.6 at the present time. A corresponding reference was included in Chapter 6.3.1 of the environmental reports.

In addition, within the framework of the transboundary participation, it was pointed out that there are gaps in knowledge regarding the resting and migratory behaviour of

starry (*Gavia stellata*) and black-throated (*Gavia arctica*) divers in particular, but also of other bird species listed in Annex I of the Birds Directive. From the point of view of the commenting body, further investigations seemed necessary in this respect. Furthermore, a lack of specific mitigation measures to minimise the collision risk of birds and bats was noted. Based on extensive studies on the avoidance behaviour of loons towards wind turbines during resting, the outstanding importance of the main concentration area as a resting area in the German Bight and the flight behaviour during migration on all three sites, the Federal Maritime and Hydrographic Agency is of the opinion that significant impacts can be excluded with the necessary certainty. For measures to avoid possible collisions of birds and bats, see previous paragraph.

The transboundary participation also indicated that construction noise should be minimised by double bubble curtains to protect marine mammals. The suitability determination (2nd WindSeeV) contains a requirement according to which the noise emissions caused by pile driving may not exceed 160 decibels for the sound pressure and 190 decibels for the peak sound pressure level at a distance of 750 metres. In the subsequent procedure, the use of a combination of a bubble curtain (e.g. HydroSoundDamper) far from the pile and close to the pile is regularly ordered to reduce noise to the required extent. In this respect, the 2nd WindSeeV is kept open for further technical developments.

In order to be able to determine possible changes in the habitat use patterns of harbour porpoises before and during construction and operation of the offshore wind farms, it was suggested in the consultation that, in addition to large-scale permanent monitoring with POD (Porpoise Detector) stations, three click detectors, so-called PODs, should be deployed in site N-7.2 two years before the start of construction activities. Whether area-specific POD detections are required as a measure in addition to

other surveys prior to the start of construction will be examined. In the subsequent procedure, the competent approval authority has the possibility, within the scope of its competences under the WindSeeG, to order corresponding additional measures, should they be necessary.

On the subject of fish, it was noted in the transboundary participation that the construction of offshore wind turbines affects the currents and possibly also the species composition of fish on a small scale. So far, there has been a lack of reliable findings on the effects of wind turbines on shoals of fish such as sprat, which may react to shadows from the rotating rotors. Other research needs were described, including the effects of offshore wind farms on the food web and the effects of noise and magnetic fields. The Federal Maritime and Hydrographic Agency notes that pelagic fish are not representatively covered by standard survey methods. However, there is no evidence to date of a negative impact of offshore wind farms on fish. The so-called reef effect apparently has a neutral or positive effect on fish abundance and biodiversity. Since the entire fish community and not individual species are the subject of the assessment, studies of individual species are considered disproportionate. Magnetic fields of the individual cable systems largely cancel each other out in the planned bipolar (outward and return conductors) or three-conductor cable configurations, remaining magnetic fields are weaker than the natural earth magnetic field. Cumulative effects and interactions are the subject of the assessment, but can only be described very imprecisely due to the variability of the habitat and the complexity of the food web and material cycles.

In the course of the participation of the authorities and the public, it was also noted that it would be inadmissible to consider fishing as the sole prior impact on the benthic and fish resources. From the Federal Maritime and Hydrographic Agency's point of view, it is well documented in the relevant literature that bottom-dwelling fisheries are

the most effective direct disturbance factor for bottom-dwelling species. Nevertheless, in addition to fisheries, eutrophication is also used as a criterion for prior impact in the Strategic Environmental Assessment. With regard to the consideration of further comments and statements in the national and transboundary participation on the subject of fisheries, reference is made to Chapter 3.8.3 of the suitability assessment of sites N-3.5, N-3.6 and N-7.2, in which specific comments and statements are addressed.

One comment received in the course of public and authority participation demands that the project sponsor be obliged to identify cultural and material assets in the planning approval procedure with the involvement of an external archaeological survey or an underwater archaeologist. The statement demands investigations to determine ground features on the basis of generally accepted testing methods (archaeological evaluation of sidescan sonar data, bathymetric data and magnetometer data, if necessary investigation of anomalies with ROV or by archaeological divers), a cartographic representation of ground features for all areas affected by construction and construction-related impacts, as well as a description of avoidance measures and, in the case of unavoidable interventions, measures for salvage and documentation. The suitability determination (2nd Wind-SeeV) contains, on the one hand, a specification according to which existing cultural and material assets on the site must be identified, documented, reported and any resulting protective measures must be taken before the planning and realisation of the installations begins. In addition, there is a stipulation that, upon request of the planning approval authority, an evaluation of the data on suspected cultural assets obtained in the preliminary investigation must be submitted as a basis for the approval decision. Within the framework of the suitability test and determination, in particular the area preliminary investigations of the

bathymetry as well as the side scan sonar and the magnetometer are compared and, if necessary, verified by means of ROV. These results are evaluated with regard to the soil as an object of protection. Cultural assets identified in this evaluation process, such as shipwrecks, are included in the suitability assessment. No separate examination of the area for cultural assets is carried out as part of the preliminary investigation.