

Norfolk Boreas Offshore Wind Farm Outline Fisheries Liaison and Co- Existence Plan

DCO Document 8.19

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Glossary of Acronyms

DCO	Development Consent Order
DML	Deemed Marine Licence
ES	Environmental Statement
FLCP	Fisheries Liaison and Co-Existence Plan
FLO	Fisheries Liaison Officer
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FIR	Fisheries Industry Representative
HDD	Horizontal Directional Drilling
IFCA	Inshore Fisheries and Conservation Authority
LIDAR	Light Detection and Ranging
MF	Medium Frequency
MMO	Marine Management Organisation
NtM	Notice to Mariners
OFLO	Offshore Fisheries Liaison Officer
VHF	Very High Frequency
VWPL	Vattenfall Wind Power Limited

Glossary of Terminology

Array cables	Cables which link wind turbine to wind turbine, and wind turbine to offshore electrical platforms.
Interconnector cables	Offshore cables which link offshore electrical platforms within the Norfolk Boreas site.
Landfall	Where the offshore cables come ashore at Happisburgh South
Norfolk Boreas site	The Norfolk Boreas wind farm boundary. Located offshore, this will contain all the windfarm array.
Offshore cable corridor	The corridor of seabed from the Norfolk Boreas site to the landfall site within which the offshore export cables will be located.
Offshore electrical platform	A fixed structure located within the Norfolk Boreas site, containing electrical equipment to aggregate the power from the wind turbines and convert it into a suitable form for export to shore.
Offshore export cables	The cables which transmit power from the offshore electrical platform to the landfall.
Offshore service platform	A platform to house workers offshore and/or provide helicopter refuelling facilities. An accommodation vessel may be used as an alternative for housing workers.
Offshore project area	The area including the Norfolk Boreas site, project interconnector search area and offshore cable corridor.
Onshore cable route	The up to 35m working width within a 45m wide corridor which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.

Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.
Project interconnector cables	Offshore cables which would link either turbines or an offshore electrical platform in the Norfolk Boreas site with an offshore electrical platform in one of the Norfolk Vanguard sites.
Project interconnector search area	The area within which project interconnector cables would be installed.
Safety zones	An area around a vessel which should be avoided during offshore construction.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations as a result of the flow of water.
The Applicant	Norfolk Boreas Limited
The project	Norfolk Boreas Wind Farm including the onshore and offshore infrastructure.

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1 INTRODUCTION

1.1 Purpose of this Document

1. This document provides an outline of the Fisheries Liaison and Co-Existence Plan (FLCP) proposed for Norfolk Boreas. It sets out Norfolk Boreas Limited's strategy to facilitate co-existence between Norfolk Boreas and commercial fishing interests and an outline of the approach to fisheries liaison during the construction, operational and decommissioning phases. The aim of this outline FLCP is to provide an overview of sections that will be included in the final FLCP such as details on fisheries liaison, engagement, safety issues and mitigation strategies.
2. A FLCP is required under Condition 14(1)(d)(v) of Schedules 9 and 10 (the Generation Deemed Marine licence (DML)); Condition 9(1)(d)(v) of Schedules 11 and 12 (the Transmission DMLs) and Condition 7(1)(d)(v) of Schedule 13 (the Project interconnector DML) contained in the draft Development Consent Order (DCO) (document reference 3.1), which states that the licensed activities must not commence until certain plans have been approved, including:

“(v)a fisheries liaison and coexistence plan (which accords with the outline fisheries liaison and co-existence plan) to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 9 [or condition 4 of Schedules 11 and 12, or condition 3 of Schedule 13] and to address the interaction of the licensed activities with fishing activities.”

3. The final FLCP will be produced post-consent based on this outline document, and will be intended to satisfy the DML conditions outlined above.

1.2 Project Background

4. Norfolk Boreas Limited ('the Applicant', an affiliate company of Vattenfall Wind Power Limited (VWPL)) is seeking a Development Consent Order (DCO) for Norfolk Boreas, an offshore wind farm in the southern North Sea.
5. The offshore project area comprises:
 - The Norfolk Boreas site within which the array would be installed. This is located in the southern North Sea, approximately 73km off the Norfolk coast;
 - The offshore cable corridor within which export cables would be located to transmit power from the Norfolk Boreas site to shore; and
 - The project interconnector search area within which cables would be located that connect Norfolk Boreas with the adjacent Norfolk Vanguard offshore wind farm project.

6. The location of the Norfolk Boreas offshore project area is shown in Figure 5.1 of the Environmental Statement (document reference 6.2). The export cables would make landfall at Happisburgh South, from where onshore cables would transport power approximately 60km to the onshore project substation and grid connection point near to Necton, Norfolk.
7. Norfolk Boreas Limited have included two scenarios within the DCO application; Scenario 1 where Norfolk Vanguard and Norfolk Boreas proceed to construction and Scenario 2 where Norfolk Vanguard does not. These two scenarios are presented in Chapter 5 Project Description of the ES (document reference 6.1.5). The two scenarios have not materially affected the drafting of this document as the principles being proposed would be the same regardless of which ever scenario is taken forward. However, it should be noted that if Norfolk Vanguard does not proceed then cables to connect Norfolk Boreas with Norfolk Vanguard (the “project interconnector” cables) would not be required. Therefore, under this scenario Schedule 13 (the Project Interconnector DML) of the DCO would not be required.
8. This document has sought to take account of developments throughout the Norfolk Vanguard examination and is consistent with a version of the Norfolk Vanguard Outline Fisheries liaison and coexistence plan that was submitted at Deadline 2 (02 May 2019).
9. Once built, Norfolk Boreas would have an export capacity of up to 1,800MW, with the offshore components comprising:
 - Wind turbines;
 - Offshore electrical platforms;
 - A service platform;
 - Meteorological masts (met masts);
 - Measuring equipment (Light Detection and Ranging (LiDAR) and wave buoys);
 - Array cables;
 - Interconnector cables or Project interconnector cables¹; and
 - Export cables.

¹ There may be a requirement for cables to be placed within the project interconnector search area (Figure 5.1 of the ES) which would link the Norfolk Boreas project to the Norfolk Vanguard project (Section 5.4.12 of ES Chapter 5 Project Description). Either “Interconnector cables” which would link platforms within the Norfolk Boreas site would be installed or “project interconnector cables” would be installed. Under no scenario would both be required.

10. The key onshore components of the project are as follows:

- Landfall;
- Onshore cable route, accesses, trenchless crossing technique (e.g. Horizontal Directional Drilling (HDD)) zones and mobilisation areas;
- Onshore project substation; and
- Extension to the existing Necton National Grid substation and overhead line modifications.

1.3 Guidance and Information

11. The final FLCP will be developed with reference to the following key guidance and information:

- Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) Best Practice Guidance for Offshore Renewables Developments. Recommendations for Fisheries Liaison. FLOWW 2014;
- FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds. FLOWW 2015;
- Information gathered through direct liaison with fishermen organisations (UK and transboundary), individual fishermen and other relevant fisheries stakeholders; and
- Consultation with the Marine Management Organisation (MMO) and Eastern Inshore Fisheries and Conservation Authority (IFCA).

2 FISHERIES LIAISON

2.1 Roles and Responsibilities

12. The benefits of early and ongoing consultation between developers and the fishing industry is recognised by both parties. In line with FLOWW guidance (FLOWW, 2014) the final FLCP will include details on the fishing liaison roles proposed for Norfolk Boreas and their responsibilities.
13. The appointment of a Fisheries Liaison Officer (FLO) is required under Condition 14(d)(iv) of Schedules 9 and 10; Condition 9(d)(iv) of Schedule 11 and 12; and Condition 7(d)(iv) of Schedule 13 of the draft DCO (document reference 3.1).
14. Additional fishing liaison roles may include an Offshore Fisheries Liaison Officer (OFLO) and a Fisheries Industry Representative (FIR). In the appointment of an OFLO and FIR it is recognised that local fishermen's knowledge of fishing practices and vessels in the area can reduce interactions between fishing activity and construction works. An outline of the possible fishing liaison roles and responsibilities is given in the following sections.

2.1.1 Norfolk Boreas Limited

15. The primary responsibilities of Norfolk Boreas Limited are:
 - To use current best industry practice to construct, operate and decommission Norfolk Boreas in co-existence with fishing activities;
 - To maintain employment of a FLO throughout the construction and decommissioning of Norfolk Boreas and as necessary through its lifetime; and
 - To provide information to the FLO and fisheries stakeholders to assist with co-existence with Norfolk Boreas.

2.1.2 Fisheries Liaison Officer

16. The primary responsibilities of the FLO are:
 - To be the key point of contact for fisheries stakeholders;
 - To identify individual commercial vessels and skippers operating in areas relevant to Norfolk Boreas;
 - To establish and maintain a strong working relationship with the fishing industry;
 - To have a detailed understanding and awareness of the fishing industry;
 - To understand the potential impact of Norfolk Boreas related activities on fishing; and
 - To communicate clearly and accurately with the fishing industry on behalf of Norfolk Boreas Limited.

17. The key duties of the FLO include:

- To maintain the fisheries stakeholder database;
- To organise and minute meetings with local fisheries stakeholders;
- To maintain regular liaison with local fisheries stakeholders as required;
- To prepare and distribute the required information and notices of Norfolk Boreas related activities that could potentially interact with fisheries stakeholders;
- To inform Norfolk Boreas Limited of the fishing activities, vessels and gear types that could be present within or around Norfolk Boreas;
- To obtain and transmit to Norfolk Boreas Limited all relevant fishermen's concerns and sensitivities in respect of the various activities associated with Norfolk Boreas; and
- To monitor fishing activities within and around Norfolk Boreas.

2.1.3 Offshore Fisheries Liaison Officer

18. An OFLO would be maintained onboard survey and construction vessels for Norfolk Boreas as required. The primary responsibilities of the OFLO are:

- To regularly broadcast survey and construction vessel locations, operations, schedules, safety zones and health and safety requirements on relevant Very High Frequency (VHF) and Medium Frequency (MF) radio frequencies during operations;
- To maintain daily contact with fishing vessels observed to be within the vicinity of the work areas of survey and construction vessels and provide sufficient notice to enable the relocation of any static fishing gears present within the project vessels defined safety zones; and
- To keep the masters and watch officers of survey and construction vessels informed of fishing vessels in the vicinity of their vessels working area and the gears and modes of operation of such vessels.

2.1.4 Fisheries Industry Representative

19. The FIR is an onshore contact with wide ranging fishing experience and/or strong ties to the fishing industry who can provide a balanced fishing industry view. The primary responsibilities of the FIR are:

- To liaise with fishing skippers with the objective of providing details of fishing activities in the area and particular sensitivities;
- To liaise with the FLO and OFLO to assist Norfolk Boreas Limited to identify areas of concern and/or potential conflict at a sufficiently early stage to enable, as far as practicable, appropriate measures to be implemented to address these; and

- To assist in the distribution of notices and relevant project information to local fisheries stakeholders and updating the contacts database.

20. The FIR may also act as an OFLO or assist in the selection of OFLOs as required.

2.2 Information Exchange

21. Disseminating information to all parties as early as possible and ensuring that effective lines of communication in relation to Norfolk Boreas are maintained is key to fostering an ongoing productive working relationship with fisheries stakeholders.

22. Appropriate communication channels will be established with fisheries stakeholders to ensure they are informed of the position of offshore activities and infrastructure, submarine cable routes, areas of cable protection (should these be required) and vessel movements associated with Norfolk -Boreas through construction, operations and maintenance and decommissioning. Communications are anticipated to include:

- Consultation, project updates and regular liaison with individual fishing stakeholders through port visits, meetings, emails, letters and calls;
- Notice to Mariners (NtM), Kingfisher Bulletins and other navigational warnings of the position and nature of the works will be issued to the fishing industry; and
- The UK Hydrographic Office will be informed of both the progress and completion of Norfolk Boreas and of the location of project infrastructure.

23. An outline schedule for the distribution of information to fishing stakeholders during the construction, operation and maintenance of Norfolk Boreas is given in Table 1. The schedule will be updated and modified through the project planning and development phases.

Table 1 Timeframes for the distribution of project information

Activity	Timing
Construction plan	Notices and information distribution not less than 10 days prior to the commencement of offshore construction activities.
Pre and post construction surveys	Notices and information distribution not less than 10 days prior prior to survey mobilisation.
Construction activities	Notices and information distribution not less than 10 days prior prior to the commencement of specific construction phases.
Meetings	Consultation meetings as required throughout the project development.
Unscheduled liaison	Additional unscheduled liaison and consultation will be undertaken by either the FLO or the FIR as required to address issues or fishermen's concerns as they arise.

3 CO-EXISTENCE AND MITIGATION

24. Norfolk Boreas Limited regards co-existence as the joint presence of both Norfolk Boreas and commercial fishing activities within and around Norfolk Boreas. An approach of avoiding and reducing impacts to both the commercial fishing and offshore wind farm industries is considered to be the most sustainable approach to co-existence.

3.1 Co-Existence Procedures

25. Suitable procedures to facilitate co-existence will evolve through discussions with fisheries stakeholders and as construction plans for Norfolk Boreas become better defined but are expected to include:
- Regular and routine communications to provide reasonable time to enable decisions around operating practices to be made;
 - Early provision of construction and cable laying plans, including location and methods for cable protection if required;
 - Minimising fishing clearance areas during construction where safe and practicable;
 - Consideration for the use of guard vessels;
 - Development of a Code of Good Practice for contracted vessels;
 - Development of a fisheries guidance document to reduce interactions with fishing activity and provide response procedures;
 - Cable monitoring throughout construction and operation;
 - Provision of procedures for the safe recovery of lost or snagged fishing gear;
 - Developing a procedure for claims for loss or damage of fishing gear; and
 - Appropriate communication with the fishing industry in the event that cables become unburied during the operational phase (i.e. through the FLO and appropriate channels such as the Kingfisher Information Service).
26. It is the intention of Norfolk Boreas Limited to promote co-existence, and mitigate for potential disruption to commercial fishing activity. However, where there is a requirement to temporarily relocate legitimate local fishing effort as a result of survey and construction works, disruption payments will be considered in line with FLOWW guidance.
27. As recognised in FLOWW guidance (FLOWW, 2014): *“Commercial compensation should only be used as a last resort when there are significant residual impacts that cannot otherwise be mitigated. Compensation should only be paid on the basis of factually accurate and justifiable claims. There is therefore an obligation upon affected fishermen to provide evidence (such as three years’ worth of catch records and VMS data) to corroborate any such claims”*.

4 REFERENCES

FLOWW (Fisheries Liaison with Offshore Wind and Wet Renewables Group) Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison: FLOWW (2014).

FLOWW (Fisheries Liaison with Offshore Wind and Wet Renewables Group) Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds: FLOWW (2015).