

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

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EXECUTIVE SUMMARY

This outline Fisheries Liaison and Co-Existence Plan (FLCP) has been prepared on behalf of Norfolk Vanguard Ltd.

The aim of this document is to provide an outline of the approach to fisheries liaison during the construction, operation and decommissioning phases of Norfolk Vanguard Offshore Wind Farm and an overview of sections that will be included in the FLCP, to be submitted post-consent for approval to the Marine Management Organisation, such as details on fisheries liaison, engagement, safety issues and mitigation strategies.

The outline FLCP document summarises the different fishing liaison roles proposed for Norfolk Vanguard and their responsibilities in ensuring effective lines of communication are maintained with fisheries stakeholders.

Potential mitigation to facilitate co-existence and avoid and reduce impacts to fisheries stakeholders is also outlined in this document.

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Glossary

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
NV East	Norfolk Vanguard East
NV West	Norfolk Vanguard West
OFLO	Offshore Fisheries Liaison Officer
OWF	Offshore Wind Farm
VHF	Very High Frequency

Terminology

Array cables	Cables which link the wind turbines and the offshore electrical platform.
Landfall	Where the offshore cables come ashore at Happisburgh South.
Mobilisation area	Areas approx. 100 x 100 m used as access points to the running track for duct installation. Required to store equipment and provide welfare facilities. Located adjacent to the onshore cable route, accessible from local highways network suitable for the delivery of heavy and oversized materials and equipment.
National Grid overhead line modifications	The works to be undertaken to complete the necessary modification to the existing 400 kV overhead lines.
Necton National Grid substation	The existing 400 kV substation at Necton, which will be the grid connection location for Norfolk Vanguard.
Offshore accommodation platform	A fixed structure (if required) providing accommodation for offshore personnel. An accommodation vessel may be used instead.
Offshore cable corridor	The area where the offshore export cables would be located.
Offshore electrical platform	A fixed structure located within the wind farm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which bring electricity from the offshore electrical platform to the landfall.
Onshore cable route	The 45m easement 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 400 kV (grid voltage). This also contains equipment to help maintain stable grid voltage.

1 INTRODUCTION

1.1 Project Background

1. Norfolk Vanguard Ltd ('the Applicant', an affiliate company of Vattenfall Wind Power Limited (VWPL)) is seeking a Development Consent Order (DCO) for Norfolk Vanguard, an offshore wind farm (OWF) in the southern North Sea.
2. The OWF comprises two distinct areas, Norfolk Vanguard (NV) East and NV West ('the OWF sites'), which are located in the southern North Sea, approximately 70 km and 47 km from the nearest point of the Norfolk coast respectively. The location of the OWF sites is shown in Chapter 5 Project Description Figure 5.1 of the Application. The OWF would be connected to the shore by offshore export cables installed within the offshore cable corridor from the OWF sites to a landfall point at Happisburgh South, Norfolk. From there, onshore cables would transport power over approximately 60 km to the onshore project substation and grid connection point near Necton, Norfolk.
3. Once built, Norfolk Vanguard would have an export capacity of up to 1800 MW, with the offshore components comprising:
 - Wind turbines;
 - Offshore electrical platforms;
 - Accommodation platforms;
 - Met masts;
 - Measuring equipment (Light Detection and Ranging (LiDAR) and wave buoys);
 - Array cables;
 - Interconnector cables; and
 - Export cables.
4. 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.

1.2 Purpose of this Document

5. This document provides an outline of Norfolk Vanguard's Fisheries Liaison and Co-Existence Plan (FLCP). It sets out Norfolk Vanguard Ltd's strategy to facilitate co-existence between Norfolk Vanguard 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 FLCP such as details on fisheries liaison, engagement, safety issues and mitigation strategies.

6. The FLCP will be produced post-consent, based on this outline document, and developed and updated through the lifetime of the project. This will also help to form an audit trail documenting the communication and engagement with commercial fishery stakeholders.
7. A FLCP is required under Condition 14(1)(d)(v) of Part 4 of Schedules 9 and 10 and Condition 9(1)(d)(v) of Part 4 of Schedules 11 and 12 of the Deemed Marine Licences (DML) set out in the draft Development Consent Order (DCO) (document reference 3.1) , which reads as follows:

“The licensed activities or any part of those activities must not commence until the following (as relevant to that part) have been submitted to and approved in writing by the MMO: (d) A project environmental management plan covering the period of construction and operation to include details of: (v)a fisheries liaison and coexistence plan (which must accord 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 and to address the interaction of the licensed activities with fishing activities.”

8. The FLCP will be intended to satisfy the DML conditions outlined above.

1.3 Guidance and Information

9. The FLCP, as outlined in this document, 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

10. 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 FLCP will include details on the fishing liaison roles proposed for Norfolk Vanguard and their responsibilities.
11. The appointment of a Fisheries Liaison Officer (FLO) is required under Condition 14(d)(iv) of Part 4 of Schedules 9 and 10 and Condition 9(d)(iv) of Part 4 of Schedule 11 and 12 of the DMLs.
12. 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 Vanguard Ltd

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

2.1.2 Fisheries Liaison Officer

14. 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 Vanguard;
 - 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 Vanguard related activities on fishing; and
 - To communicate clearly and accurately with the fishing industry on behalf of Norfolk Vanguard Ltd.

15. The key duties of the FLO include:

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

2.1.3 Offshore Fisheries Liaison Officer

16. An OFLO would be maintained onboard survey and construction vessels for Norfolk Vanguard 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

17. 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 Vanguard Ltd 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.

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

2.2 Information Exchange

19. Disseminating information to all parties as early as possible and ensuring that effective lines of communication in relation to Norfolk Vanguard are maintained is key to fostering an ongoing productive working relationship with fisheries stakeholders.
20. 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 Vanguard 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 Vanguard and of the location of project infrastructure.
21. An outline schedule for the distribution of information to fishing stakeholders during the construction, operation and maintenance of Norfolk Vanguard 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 2 weeks prior to the commencement of offshore construction activities.
Pre and post construction surveys	Notices and information distribution not less than 2 weeks prior to survey mobilisation.
Construction activities	Notices and information distribution not less than 2 weeks prior to the commencement of specific construction phases.
Meetings	Consultation meetings as required throughout the project development.

Activity	Timing
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

22. Norfolk Vanguard Ltd regards co-existence as the joint presences of both Norfolk Vanguard and commercial fishing activities within and around Norfolk Vanguard. 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

23. Suitable procedures to facilitate co-existence will evolve through discussions with fisheries stakeholders and as construction plans for Norfolk Vanguard 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).
24. It is the intention of Norfolk Vanguard Ltd 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 works associated with Norfolk Vanguard, disruption payments will be considered in line with FLOWW guidance.
25. 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).