

Norfolk Vanguard Offshore Wind Farm

Statement of Common Ground

National Federation of Fishermen's
Organisations (NFFO) and National
Association of Producer Organisations
in Dutch Demersal Fisheries (VisNED)

Applicant: Norfolk Vanguard Limited
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Photo: Kentish Flats Offshore Wind Farm



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		Fifth draft including NFFO updates following ISH2			

Table of Contents

1	Introduction	6
1.1	The Development	6
1.2	Consultation with NFFO and VisNed.....	7
2	Statement of Common Ground	9
2.1	Commercial Fisheries	9

Glossary

DCO	Development Consent Order
DML	Deemed Marine Licence
ES	Environmental Statement
FLO	Fisheries Liaison Officer
FLOWW	Fisheries Liaison Offshore Wind and Wet
HDD	Horizontal Directional Drilling
LiDAR	Light Detection and Ranging
NFFO	National Federation of Fishermen's Organisations
NV East	Norfolk Vanguard East
NV West	Norfolk Vanguard West
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
SoCG	Statement of Common Ground
VisNed	National Association of Producer Organisations in Dutch Demersal Fisheries

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. This Statement of Common Ground (SoCG) has been prepared with the National Federation of Fishermen's Organisations (NFFO) and VisNed and Norfolk Vanguard Limited (hereafter 'the Applicant') to set out the areas of agreement and disagreement in relation to the Development Consent Order (DCO) application for the Norfolk Vanguard Offshore Wind Farm (hereafter 'the project').
2. This SoCG comprises an agreement log which has been structured to reflect topics of interest to the NFFO and VisNED on the Norfolk Vanguard DCO application (hereafter 'the Application'). Topic specific matters agreed, not agreed and actions to resolve between the NFFO and VisNED and the Applicant are included. Points that are not agreed will be the subject of ongoing discussion wherever possible to resolve, or refine, the extent of disagreement between the parties.

1.1 The Development

3. The Application is for the development of the Norfolk Vanguard Offshore Wind Farm (OWF) and associated infrastructure. 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 60km to the onshore project substation and grid connection point at Necton, Norfolk.
4. 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 (LiDAR and wave buoys);
 - Array cables;
 - Interconnector cables; and
 - Export cables.
5. 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 Consultation with NFFO and VisNed

6. This section briefly summarises the consultation that the Applicant has had with the NFFO and VisNed. For further information on the consultation process please see the Consultation Report (document reference 5.1 of the Application).

1.2.1 Pre-Application

7. The Applicant has engaged with the NFFO and VisNed on the project during the pre-Application process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to Section 42 of the Planning Act 2008.
8. During formal (Section 42) consultation, the NFFO provided comments on the Preliminary Environmental Information Report (PEIR) by way of a letter dated 11th December 2017. No comments in relation to the PEIR were received from VisNed.
9. Further to the statutory Section 42 consultation, several meetings were held with the NFFO and VisNed.
10. Table 1 and Table 2 provide an overview of meetings and correspondence undertaken with the NFFO and VisNED, respectively. Minutes of the meetings are provided in Appendices 9.15 – 9.26 (pre-Section 42) and Appendices 25.1 – 25.9 (post-Section 42) of the Consultation Report (document reference 5.1 of the Application).

1.2.2 Post-Application

11. This is a live document that is being updated as the Examination process progresses. The first draft was submitted by the Applicant for Deadline 1. This updated draft takes into account NFFO's Written Representation submitted at Deadline 1, on-going consultation with NFFO/VisNed (via conference call on 25th and 31st January, 2019) and the positions presented by both parties at the Issue Specific Hearing for Norfolk Vanguard on 6th February 2019. Version 2 of the SoCG is submitted for Deadline 5.

1.2.2.1 NFFO

12. As noted in the relevant representation sent by the NFFO on 10th August 2018, the NFFO intends to pursue a statement of common ground with the Applicant, which

together with the Applicant's documentation will then inform any detailed representation they wish to make.

13. A meeting was held on 16th November 2018 between the Applicant and the NFFO to discuss the draft SoCG.
14. In addition, following the submission of Written Representations by NFFO at Deadline 1, as outlined in Table 1, conference calls were held between the Applicant and NFFO on 25th January 2019 and between the Applicant, NFFO and VisNed on 31st January 2019, to discuss outstanding areas of disagreement and the implications of updates to the Project design, particularly the removal of floating foundations from the Design Envelope.

1.2.2.2 VisNed

15. Relevant representations were not submitted by VisNed.
16. VisNed's intention to pursue a SoCG, jointly with NFFO, was confirmed to the Applicant via email on 31st October 2018.
17. In addition, following the submission of Written Representations by NFFO (on behalf of both NFFO and VisNed) at Deadline 1, as outlined in Table 2, a conference call was held between the Applicant, VisNed and NFFO on 31st January 2019, to discuss outstanding areas of disagreement and the implications of updates to the Project design, particularly the removal of floating foundations from the Design Envelope.

2 STATEMENT OF COMMON GROUND

18. Within the sections and tables below, the different topics and areas of agreement and disagreement between the NFFO and VisNed and the Applicant are set out.

2.1 Commercial Fisheries

19. The project has the potential to impact upon Commercial Fisheries. Chapter 14 of the Norfolk Vanguard Environmental Statement (ES) (document reference 6.1 of the Application) provides an assessment of the significance of these impacts.
20. Table 1 and Table 2 provide an overview of meetings and correspondence undertaken with the NFFO and VisNed regarding Commercial Fisheries.
21. Table 3 provides areas of agreement (common ground) and disagreement regarding Commercial Fisheries.

Table 1 Summary of Consultation with the NFFO

Date	Contact Type	Topic
Pre-Application		
22 nd June 2016	Meeting	Introduction to the project.
5 th April 2017	Meeting	Fishing activity of Anglo-Dutch vessels in areas relevant to the project.
11 th December 2017	PEIR response	Response from the NFFO to the PEIR.
Post-Application		
10 th August 2018	Relevant representation	NFFO intention to pursue a statement of common ground with the Applicant.
16 th November 2018	Meeting	Meeting to discuss key NFFO/VisNed concerns and key areas of agreement/disagreement to help inform the SoCG.
25 th January 2019	Conference call	Call to discuss areas of disagreement and the NFFO's outstanding concerns following the removal of the floating foundation option from the Project Design Envelope.
31 st January 2019	Conference call	Call to discuss issues regarding minimum spacing under a worst case scenario without floating foundations and the potential for fishing to resume within the operational site.

Date	Contact Type	Topic
November 2019 – March 2019	Email	Various communications with regards to potential fisheries closures within Marine Protected Areas (MPAs)

Table 2 Summary of Consultation with VisNed

Date	Contact Type	Topic
Pre-Application		
14 th February 2017	Meeting	Dutch fishing activity in the Southern North Sea and specifically in areas relevant to the project.
22 nd May 2017	Email	Request for details of German registered but Dutch owned beam trawlers which may work in the Southern North Sea.
Post-Application		
31 st October 2018	Email	VisNed confirmation that they are happy for the NFFO to speak on their behalf with regards to the SoCGs.
31 st January 2019	Conference call	Call to discuss issues regarding minimum spacing under a worst case scenario without floating foundations and the potential for fishing to resume within the operational site.

Table 3 Commercial Fisheries

Topic	Norfolk Vanguard Limited position	NFFO and VisNed position	Final position
Environmental Impact Assessment			
Existing Environment	The commercial fisheries baseline identified in relation to Dutch fishermen has been derived from available sources and this provides a reasonable representation of fishing activity by both UK and Dutch owned and operated commercial fishing vessels in areas relevant to the project.	NFFO and VisNed are not in a position to confirm whether sufficient data has been collated in order to characterise the baseline environment. However, we acknowledge that the baseline characterisation provides a practical basis for undertaking the EIA.	Both parties agree that the baseline characterisation provides a practical basis for undertaking the EIA.
Assessment methodology	<p>The general methodologies used are suitable and appropriate to undertake the commercial fisheries EIA.</p> <p>The assessment on commercial fisheries presented in ES Chapter 14 Commercial Fisheries follows an impact significance matrix approach taking account of receptor sensitivity and impact magnitude. This is in line with standard environmental impact assessment methodologies (as outlined in ES Chapter 6 EIA Methodology).</p> <p>The identification of sensitivity is based on parameters such as the operational range, versatility (i.e. ability to deploy various gears/target various species) and availability of grounds. The evaluation of sensitivity levels using the parameters above is informed by information gathered during consultation with fisheries stakeholders (i.e. vessel specifications, gear used, extent of grounds) as well as fisheries data (landings, Vessel Monitoring System (VMS) data, etc.).</p>	<p>While the assessment undertaken is typical of a fisheries EIA, the NFFO and VisNed consider that the methodology does not provide a transparent assessment of compatibility of fishing activities taking place within the vicinity of the wind farm as noted in our response to the PEIR consultation.</p> <p>In addition, the definitions used under sensitivity lack specificity over what constitutes limited, moderate and extensive operational range and dependence upon the number of fishing grounds. This reduces the confidence we can have in the assessment findings.</p>	Not agreed.

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	<p>In defining impact magnitude consideration is given to the area affected by the potential impact and the duration of the impact. The Applicant notes, however, that the extent of area affected needs to be put into context; the level of fishing activity that the area of the project sustains needs to be considered but also the relative importance of this area in the context of the overall extent of the grounds that the fleet is able to exploit and the levels of fishing that these grounds sustain.</p>		
	<p>The list of potential impacts on Commercial Fisheries assessed is appropriate.</p>	<p>Agreed.</p>	<p>Both parties agree that the list of impacts included in the assessment on commercial fisheries is appropriate.</p>
	<p>The approach to the assessment of safety issues presented in Chapter 14, Section 14.7.4.3 and Section 14.7.5.3 is appropriate and takes account of relevant risks for fishing vessels, including interactions between fishing vessels and gear and project infrastructure including cables.</p> <p>For assessment of safety issues the standard sensitivity/magnitude matrix approach is not considered appropriate. In this instance, the assessment is instead undertaken taking account of potential risks, in line with the parameters used in Chapter 15 Shipping and Navigation (see Chapter 14, Table 14.9).</p>	<p>Disagree. It is not clear what assumptions have been adopted regarding fishing in the vicinity of the project turbine arrays for the safety assessment.</p> <p>There is presently insufficient evidence that the risk to fishing vessels under the worst case scenario has been appropriately assessed. The worst case scenario is not sufficiently defined to assess the risk to fishing activities and therefore determine the appropriateness of mitigation measures.</p> <p>The removal of floating wind options from the design envelope removes our main</p>	<p>Not agreed.</p>

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	<p>The assessment identifies potential risks and proposes a number of measures to minimise them so that they remain within acceptable limits.</p> <p>These measures are aimed at ensuring that skippers which intend to fish within the offshore project area are provided with adequate information to allow them to make an informed judgement of the risks associated with fishing in areas relevant to the Project at a given time.</p> <p>In the context of the assessment of safety issues, it should be noted that, as advised during the conference call held between the Applicant and the NFFO on 25th January 2019, the design options for the Project have been further refined and floating foundations have now been removed from the Project Design Envelope.</p> <p>In addition, following the Issue Specific Hearing 2 (ISH2) (6th February 2019), the Project Design Envelope has been further refined and the 9 MW wind turbine generator option is no longer included in the Project Design Envelope. This results in a decrease in the maximum number of turbines (from 200 to 180) and in an increase in the minimum spacing between turbines from 680m to 760 m.</p>	<p>concerns over the assessment of safety risk associated with the snagging of gears.</p> <p>We maintain, however, that the safety assessment for snagging gears should follow the same approach as the navigation impact assessment, which uses traffic survey data to provide a probabilistic assessment of risk that relates frequency with severity of occurrence in order to define whether the risk remains within acceptable limits or further mitigation is required. No evidence of the details of such an assessment is currently presented.</p>	
	<p>The worst case scenario presented in Chapter 14 Commercial Fisheries, Table 14.16. considered, amongst other factors, the minimum spacing between turbines (680 m) and the use of floating</p>	<p>NFFO and VisNed agrees that the project design parameters identified for assessment in Chapter 14, Commercial Fisheries, Table 14.16 are those with the</p>	<p>The two parties agree that taking account of the reviewed Project Design Envelope, the worst case</p>

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	<p>foundations (tension leg platforms with up to 12 anchor lines and an angle of mooring up to 30 degrees).</p> <p>The identified worst case scenario was considered appropriate as it took account of the project design parameters with the greatest potential to have an impact on commercial fisheries. Under the worst case parameters identified, and taking account of concerns expressed by stakeholders with regards to issues associated with floating foundations, for assessment of loss of grounds it was considered that towed gear skippers would elect not to fish within the operational wind farm.</p> <p>It should be noted that as advised during the conference call held between the Applicant and the NFFO on 25th January 2019, the design options for the Project have been further refined and floating foundations have now been removed from the Project Design Envelope.</p> <p>In addition, following the Issue Specific Hearing 2 (ISH2) (6th February 2019), the design envelope has been further refined and the 9 MW wind turbine generator option is no longer included in the Project Design Envelope. This results in a decrease in the maximum number of turbines (from 200 to 180) and in an increase in the minimum spacing between turbines from 680 m to 760 m.</p> <p>With the removal of floating foundations the potential minimum “fishable” distance between</p>	<p>greatest potential to result in impacts on commercial fisheries.</p> <p>However, the identified worst case scenario is insufficiently defined as, for a given water depth, it does not identify how far anchor lines will extend beyond the floating platforms. It is not clear, therefore, what the safe fishable distance from a turbine is in the worst case scenario in order to ensure no fishing gear interaction with the project infrastructure. This is critical to assessing Impact 2: Access to fishing grounds and Impact 3: Safety issues for fishing vessels.</p> <p>Based on the information provide we estimate that the worst case scenario using 200 x 9MW turbines on tension leg platforms with 12 anchor lines (or 20m in length) and mooring up to 30 degrees and 45m floating structures based on a minimum turbine distance of 680m and applying a 50m safety zone from the anchors will translate to a theoretical fishable clearance of 500m between turbines.</p> <p>We note that the Ch 14 of ES does not specify how safety zones would be applied</p>	<p>presented in Chapter 14 is no longer relevant.</p> <p>The two parties agree that with the removal of floating foundations and of the 9MW wind turbine generators option from the Project Design Envelope and considering the resulting minimum spacing between wind turbine generators (760 m) the worst case scenario has improved compared to that considered in the commercial fisheries assessment in Chapter 14.</p>

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	<p>wind turbine generators is therefore no longer affected by the presence of anchor lines and moorings associated with these foundations. Similarly, the safety of fishing vessels is no longer affected by the presence of anchor lines and moorings associated with floating foundations.</p> <p>With regards to safety zones, the Applicant would like to clarify that it is not proposing to apply for operational safety zones for any of the wind turbine foundation types. As stated in Section 4.6 of the ES Chapter 15 Shipping and Navigation, an application will be made for the standard safety zones (to be submitted post consent and as detailed in the Safety Zone Statement (document reference 7.2)) which may comprise the following:</p> <ul style="list-style-type: none"> • A 500 metre radius around individual Offshore Renewable Energy Installation and their foundations whilst work is being performed as indicated by the presence of construction vessels; • A 500 metre radius around all major maintenance works being undertaken around the wind turbines and their foundations, and • A 50 metre radius around individual OREI and associated foundation structures whether they be installed and operational, or complete or incomplete but awaiting commissioning. 	<p>to the infrastructure. We have assumed in our calculation that it would be applied to each of the anchor foundations as well as the turbine structure itself which would be significantly larger than a 50m safety zone around the centre point of the structure. If the latter is applied (as indicated in chapter 15 p 36 where the safety zone is applied to surface infrastructure) we note that it would barely cover the extent of the mooring anchors. We question therefore whether in both assessments (Navigation and impacts to fishing activities) the appropriate application of safety zones have been applied.</p> <p>It is highly unlikely that under such circumstances described above that any existing commercial fishing activities would take places within the array area.</p> <p>We note that following the PEIR consultation an assumption of exclusion has been incorporated into the assessment.</p> <p>We note that under these circumstances the relevance of measures to reduce safety risk and promote coexistence will vary depending upon the actual project plan</p>	

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	<p>The Applicant may also include provision within the safety zone application for 500 m operational safety zones around accommodation platforms.</p> <p>No other operational safety zones are being considered once the wind farm is operational.</p> <p>The Applicant acknowledges the preference expressed by the National Federation of Fishermen’s Organisations (NFFO) and VisNed in relation to minimum spacing between turbines to allow fishing activity to resume during the operational phase for Norfolk Vanguard (1 km for beam trawlers and 2 km for seine netters). However, the Applicant notes that given that floating foundations and the 9MW wind turbine generator option have now been removed from the Project Design Envelope, and taking account of the resulting increased minimum spacing between wind turbine generators (760 m), there is potential for some level of fishing activity by vessels operating towed gear (with the exception of seine netters) to resume within the operational wind farm. The Applicant acknowledges that modifications to existing operating patterns due to the presence of the infrastructure would likely be required. The Applicant’s view is supported by previous feedback provided by the NFFO and VisNed in the Statement of Common Grounds (SoCGs) for other offshore wind farm projects in the area, including East Anglia ONE and East Anglia THREE.</p>	<p>selected within the Rochdale envelope provisions.</p>	

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	<p>For East Anglia ONE, it was agreed in the SoCG with VisNed and NFFO that fishing would be able to resume in safe conditions assuming a spacing of at least 675m and a linear arrangement of turbines. Similarly, for East Anglia THREE, it was noted in the SoCG with NFFO and VisNed that Dutch fishermen would be able to fish within the turbine corridors in safe conditions for a minimum spacing of 675m within rows and 900 m between rows.</p> <p>The Applicant also highlights that there is currently no legislation in the UK preventing fishing from occurring in operational wind farms and that the level of activity that resumes within the project would ultimately depend on the varying perception of risk of individual skippers.</p>		
Assessment findings	<p>The impact significance conclusions for Norfolk Vanguard alone in respect of loss of fishing grounds and, displacement is appropriate.</p> <p>In respect of loss of fishing grounds and displacement, the assessment concluded that the significance of the impact on Dutch beam trawlers (for both Dutch and UK registered vessels) is of minor significance for the construction, operation and maintenance and decommissioning phase of the project.</p> <p>In respect of safety issues the assessment concluded impacts would be within acceptable limits.</p>	<p>NFFO and VisNed do not agree that the significance of the impact would be minor in respect of loss of grounds and displacement during the operation and maintenance phase if the current worst case scenario is considered (fixed foundations and 760 m minimum spacing) as NFFO/VisNed's view is that beam trawlers would not be able to fish safely within the OWF sites and therefore the operational phase would result in a long terms loss of fishing grounds.</p> <p>We are not in a position to agree with the assessment conclusions on fishing gear</p>	<p>NFFO/VisNed do not agree that the impact of loss of grounds and displacement on beam trawlers during operation is of minor significance.</p> <p>NFFO/VisNed consider further mitigation is required to address safety issues and reach ALARP status (see responses under mitigation and management below)</p>

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	<p>It should be noted that as advised during the conference call held between the Applicant and the NFFO on 25th January 2019, the design options for the project have been further refined and floating foundations have now been removed from the Project Design Envelope.</p> <p>In addition, following the ISH2, the Project Design Envelope has been further refined and the 9 MW wind turbine generator option is no longer being considered. This results in a decrease in the maximum number of turbines (from 200 to 180) and in an increase in the minimum spacing between turbines from 680 m to 760 m.</p> <p>With the removal of floating foundations the potential minimum “fishable” distance between turbines is therefore no longer affected by the presence of anchor lines and moorings associated with these foundations. Similarly, the safety of fishing vessels is no longer affected by the presence of anchor lines and moorings associated with floating foundations.</p> <p>The Applicant acknowledges the preference expressed by the NFFO and VisNed (call on 31st January 2019) in relation to minimum spacing between turbines to allow fishing activity to resume during the operational phase for Norfolk Vanguard (1 km for beam trawlers and 2 km for seine netters). However, the Applicant notes that given that floating foundations and the 9 MW wind turbine generators</p>	<p>snagging risks due to limited evidencing of the findings.</p> <p>We consider, however, that addition mitigation is necessary to improve safety management with respect to fishing activities as detailed below under mitigation and management.</p> <p>The removal of floating wind options from the design envelope removes a key concern over the assessment of safety risk associated with the snagging of gears.</p> <p>NFFO and VisNed note the removal of floating wind options and the 9 MW wind turbine generators option from the design envelope giving a minimum turbine spacing of 760 m. We consider that under a fixed foundation scenarios and a minimum spacing of 1 km+ is needed for beam trawlers and 2km for seine netters is required for some level of fishing activity would co-exist in the vicinity of the array.</p>	

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	<p>option have now been removed from the Project Design Envelope, and taking account of the resulting minimum spacing between wind turbine generators (760 m), there is potential for some level of fishing activity by vessels operating towed gear (with the exception of seine netters) to resume within the operational wind farm. The Applicant acknowledges that modifications to existing operating patterns due to the presence of the infrastructure would likely be required. The Applicant's view is supported by previous feedback provided by the NFFO and VisNed in the Statement of Common Ground for other offshore wind farm projects in the area, including East Anglia ONE and East Anglia THREE.</p> <p>For East Anglia ONE, it was agreed in the SoCG with VisNed and NFFO that fishing would be able to resume in safe conditions assuming a spacing of at least 675 m and a linear arrangement of turbines. Similarly, for East Anglia THREE, it was noted in the SoCG with NFFO and VisNed that Dutch fishermen would be able to fish within the wind turbine corridors in safe conditions for a minimum spacing of 675 m within rows and 900 m between rows.</p> <p>The Applicant also highlights that there is currently no legislation in the UK preventing fishing from occurring in operational wind farms and that the level of activity that resumes within the project would</p>		

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	<p>ultimately depend on the varying perception of risk of individual skippers.</p> <p>In addition, the Applicant notes their commitment to promote co-existence with the fishing industry. As requested by the NFFO and VisNed, and agreed in the SoCG (Rep1 - SOCG - 26.1), an outline FLCP was submitted as part of the Applicant's Deadline 2 submissions (Document 8.19). Further detail with regards to the approach to liaison and co-existence strategies will be provided within the final FLCP to be produced post-consent.</p>		
Cumulative Impact Assessment (CIA)	<p>The cumulative methodology is considered appropriate.</p> <p>The methodology used for assessment of cumulative impacts on commercial fisheries is in line with that used for assessment of impacts as a result of the Project alone. In line with standard EIA methodology, it follows a significance matrix approach, taking account of receptor sensitivity and impact magnitude.</p> <p>Existing proposals and developments are considered to represent part of the existing environment within which commercial fishing activity currently occurs and to which commercial fishing interests have already adapted. Including existing projects in the assessment would therefore represent double counting of their effect.</p>	<p>Existing plans and projects are not factored into the assessment and are assumed to form part of the baseline. We consider this will disguise impacts already being carried by impacted parts of the fleet as the assessment assumes fishing businesses have perfectly adapted to previous impacts without cost. This results in a "shifting baseline syndrome" similar to that which is attributed to environmental change as reference points change from one project application to the next; there is no "review mirror" in the assessment.</p> <p>The CIA lacks transparent data analysis to support its conclusions. There is also no evidence that proposed fisheries measures associated with the marine protected areas have been included in the CIA.</p>	<p>Not agreed.</p> <p>NFFO/VisNed do not agree that assuming that existing plans and projects are only relevant to forming the baseline environment takes actual account of impacts that the affected fishing fleet may already be experiencing.</p> <p>NFFO/VisNed do not agree with the methodology used in the cumulative assessment is sufficiently transparent, in line with their view in relation to the</p>

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	<p>The assessment considers a comprehensive range of offshore wind farm developments at different stages in the planning process, as well as dredging areas and Marine Protected Areas (MPAs). Consideration is given in the cumulative assessment to the increased number of plans and projects that may have an impact on the various commercial fisheries receptors, including the potential for restrictions to towed gear fishing to be implemented within MPAs. This is taken account of in defining the magnitude of the cumulative impact.</p> <p>NFFO provided the Applicant with information on proposals for potential closures to towed gear fishing in various MPAs in UK, Dutch and German waters. The Applicant reviewed the information provided and requested further detail from the NFFO/VisNed with regards to the current status of these proposals. From the clarifications provided by NFFO on 09/03/2019, it is understood that potential closures are progressed at various stages and there is no final confirmation on whether and under what time scales closures would be implemented. It is therefore considered that there is not sufficient certainty to consider them in detail in the CIA assessment.</p> <p>The Applicant notes that information included in the CIA presented in the ES was based on best available information at the time of writing.</p>	<p>Management measures for many sites in the southern North Sea are now sufficiently progressed to be included in the CIA in our view.</p> <p>We have requested that the applicant evidences its findings with the publication of map outputs that include projects and plans in the CIA overlaid with fishing activity data. We note that this is the only practical way to carry out the assessment and therefore it should not be an onerous request.</p> <p>In a response to a request from the applicant we have sought details on the proposed MPA fisheries management measures in the Southern North Sea, covering the UK, Netherlands and Germany and provided them to the applicant including spatial boundaries, gear types effected and there current status of introduction. We have confirmed that the measures are highly unlikely to materially change and are subject now only to high level procedural confirmation. The German measures were submitted by the German government to the Commission on 1st February 2019. The Commission has 3 months to adopt the measures following a completed submission. Following that all that is left is for Germany to implement the measures under delegated act. The</p>	<p>methodology for assessment of the project alone.</p> <p>NFFO/VisNed do not agree that the proposals for fisheries management associated with MPAs measures should not be included in the cumulative impact assessment. They consider that the proposed fisheries management measures are highly advanced and provide a comprehensive set of proposals that are now only subject to procedural adoption and are highly unlikely to materially change.</p>

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		<p>expectation therefore is that the measures will be in place in a matter of months rather than years. The Netherlands measures are at a similar stage and are expected to come into force in December 2019. The timing of the introduction of the measures in the UK is less certain due to Brexit but can reasonably be expected to be introduced in the next few years. We therefore consider that these proposals are comprehensive, are at an advanced stage, are highly relevant to the Cumulative Impact Assessment, and can be readily incorporated into the assessment.</p> <p>In not considering these measures the applicant has failed to clarify what assumptions on restrictions to fishing activities it has therefore applied in considering MPAs in the CIA.</p> <p>We also observe that if indeed the applicant will not consider the proposals as it has stated, then under what circumstances will it since once the measures do come into effect it presumably would then discount them and claim they form part of the baseline and assume that the fishing fleet has perfectly adapted to these measures. The applicant's position on these matters therefore undermines the integrity of the CIA process.</p>	

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	<p>The cumulative assessment conclusions of minor significance or less in respect of loss of grounds displacement are appropriate.</p> <p>As noted above, the methodology used for assessment of cumulative impacts on commercial fisheries is in line with that used for assessment of impacts as a result of the Project alone. In line with standard EIA methodology, it follows a significance matrix approach, taking account of receptor sensitivity and impact magnitude.</p> <p>Consideration is given in the cumulative assessment to the increased number of plans and projects that may have an impact on the various commercial fisheries receptors, including the potential for restrictions to towed gear fishing to be implemented within MPAs. This is taken account of in defining the magnitude of the cumulative impact.</p> <p>With regards to safety risks in a cumulative context, as outlined in ES Chapter 14, it is considered that the same factors and obligations applied for the Project would apply to other projects/activities. Safety risks in a cumulative context would therefore remain as assessed for the Project alone (i.e. within acceptable limits).</p> <p>In the context of the cumulative assessment on towed gear vessels, except for seine netting, the Applicant notes that with the removal of floating foundations and of the 9 MW wind turbine generators and the increased potential fishing</p>	<p>The qualitative nature of the sensitivity and magnitude criteria means that the CIA needs to clearly evidence its analysis in order to draw conclusions on the significance of impacts to fleets so that we are able to consider the validity of the conclusions in more detail.</p> <p>Other projects proposal in the East Anglia Zone represent a significant overlay with one of the most heavily fished areas for the Dutch beam trawl fleet. The Norfolk Boreas project also proposes to include floating wind within its design envelope which we anticipate would exclude all types of fishing activity from the area of the array. On this basis, and without further evidence, we cannot recognise a conclusion that the significance of impact due to loss or restricted access applying to the project operational phase represents minor-adverse for the Dutch beam trawl and seine net fisheries, UK beam trawl, and minor local inshore vessels. Indeed, the equivalent CIA recently completed for the Hornsea 3 offshore wind farm project classifies impact significance as moderate adverse which is significant in EIA terms.</p> <p>There is the potential for displacement due to construction works and once operational for the displacement of the offshore fleets onto fishing grounds</p>	<p>Not agreed.</p> <p>NFFO/VisNed do not agree that the cumulative impact of loss of grounds and associated displacement during operation on beam trawlers and seine netters is of minor significance.</p>

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	<p>activity to resume within the operational site, the contribution of the project to cumulative impacts would be lower than that identified in the ES Chapter (as the assessment in the ES assumed that towed gear skippers would elect not to fish within the operational site).</p>	<p>targeted by the inshore fleet which is considered not to be likely in the assessment Ch 14, para 327). The fact that the fishing industry has endeavoured to agree seasonal spatial restrictions for the Dutch demersal fleet on inshore grounds is evidence that there would be a real risk of pressure on those grounds increasing which may be compounded by closures resulting from conservation measures and restrictions from other wind farms.</p>	
Mitigation and Management			
<p>Mitigation and Management</p>	<p>A Fisheries Liaison and Co-Existence Plan will be produced post-consent in consultation with stakeholders and in accordance with the Fisheries Liaison Offshore Wind and Wet (FLOWW) best practice guidance.</p> <p>An Outline Fisheries Liaison and Co-existence Plan has been prepared, following the request from the NFFO, and has been submitted at Deadline 2 (Document 8.19).</p>	<p>NFFO and VisNed welcome the production of Fisheries Liaison and Coexistence plan that is secured via the DCO/DML. In our view this plan should be developed in outline pre consent in order to provide clarity over its provisions.</p> <p>In addition to measures outlined elsewhere in this SoCG it should include other operational management arrangements such as provisions for gear clearance and disruption settlements, navigation corridors and protocols, gear snagging protocols and processes for attributable claims, and retrieval of displaced static gears from safety zones.</p>	<p>Both parties agree that the Fisheries Liaison and Co-existence Plan will be further developed post-consent.</p>
	<p>Fishing vessels will not be able operate within construction safety zones. The Applicant will endeavour to minimise exclusion of fishing during the construction phase where practicable and safe</p>	<p>NFFO and VisNed expect that appropriate communication will be made to the fishing industry well in advance of initiating construction safety zones. Any areas</p>	<p>Both parties agree that appropriate communication will be made to the</p>

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	<p>to do so and would ensure appropriate communication channels are established with the fisheries stakeholders.</p> <p>In addition, adequate protocols for the relocation of static gear will be included in the Fisheries Liaison and Co-Existence Plan.</p>	<p>where static gear fisheries take place should have appropriate protocols established and laid down the fisheries coexistence plan (and evidenced pre-consent) in order to facilitate any necessary relocation of gear.</p>	<p>fishing industry in advance of initiating construction safety zones.</p> <p>Provisions for this will be made in the Fisheries Liaison and Co-Existence Plan, including protocols for the relocation of static gear.</p>
	<p>The Applicant considers that the DML conditions and the provisions made in the outline FLCP (noted below) are appropriate to minimise potential snagging risks.</p> <p>In order to minimise potential interference with fishing activity (e.g. snagging risk) to as far as reasonably practicable, cables will be buried where possible to at least 1 m and protected where cable burial is not feasible.</p> <p>It should be noted that it is the Applicant's preference to use surface protection only where necessary at crossings and at locations where cable burial is not possible due to the presence of hard substrate close to the surface.</p> <p>The Scour Protection and Cable Protection Plan required under the draft DCO Schedules 9 and 10 (Part 4 Condition 14(1)(e)) of the Generation Assets Deemed Marine Licences (DMLs) and Schedules 11 and 12 (Part 4 Condition 9(1)(e) of the Transmission DMLs, in accordance with the Outline Scour Protection and Cable Protection Plan (document reference 8.16), must be approved by the MMO prior to construction. This document will be updated</p>	<p>Reburial approaches or back filling where appropriate should be considered before electing to apply cable protection measures. Where cable protection is necessary the approach should be considered so that it minimises the potential for snagging risks. The approach should be consulted on with the fishing industry.</p> <p>Any cable protection measures should be designed so as not to present a snagging risk.</p> <p>Additional measures to mitigate gear snagging risk should include:</p> <ul style="list-style-type: none"> • The cable burial plan should be consulted on with the fishing industry. • The results of post burial inspection surveys should be communicated to the regulator/fishing industry. • The cable burial risk assessment should comprise an assessment of 	<p>Not agreed. NFFO/VisNed do not agree that the outline FLCP presently takes full account of the additional measures they have listed that will help to minimise snagging risks.</p>

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	<p>as the final design of the Project develops and will include justification of the location, type, volume and area of cable protection, based on crossing agreements and pre-construction survey data to ensure only essential cable protection can be installed.</p> <p>Furthermore Condition 14(1)(e) of Schedule 9 and 10 and Condition 9(1)(e) of Schedule 11 and 12 require that prior to commencement of licensed activities "<i>...details of the need, type, sources, quantity and installation methods for scour protection and cable (including fibre optic cable) protection...</i>" must be approved by the MMO. The Condition also requires the plan to be updated and resubmitted for approval if changes to it are proposed following cable laying operations. Therefore, to the extent that there are any changes to the details of the as built cable protection and scour protection, this will be provided in the updated plan.</p>	<p>cable exposure risk as well as risk to other marine users. It should be reappraised at appropriate intervals during the operational phase of the project.</p> <ul style="list-style-type: none"> • The cable burial risk assessment should be linked to an appropriate cables survey/monitoring regime. • Burial status results from monitoring should be communicated to the fishing industry. • Reporting of dropped objects (secured by DCO/DML) • Exposed cables should be protected by guard vessel until appropriate remedial measures can be completed. • Remedial approaches should consider reburial in the first instance as a way of avoiding the needed for cable protection. Where cable protection is necessary the approach should be considered so that it minimises the potential for snagging risks. The approach should be consulted on with the fishing industry • Post remediation surveys should be undertaken and communicated to the fishing industry to provide 	

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	<p>The Cable Specification, Installation, and Monitoring Plan (to be agreed with the MMO pursuant to Condition 14(1)(g) (Schedules 9 and 10) and Condition 9 (1) (g) (Schedules 11 and 12) must include:</p> <p><i>(ii) a detailed cable (including fibre optic cable) laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable landfall and cable protection measures...;</i></p> <p><i>(iii) proposals for monitoring offshore cables including cable (including fibre optic cable) protection during the operational lifetime of the authorised scheme which includes a risk based approach to the management of unburied or shallow buried cables; and</i></p> <p><i>(iv) appropriate methods such as a trawl or drift net to be deployed along Work No. 4A and 4B (export cables and fibre optic cables), following the survey referred to in condition 15(2)(b) to assess any seabed obstructions resulting from burial of the export cables and fibre optic cables. "</i></p> <p>In addition to the above, dropped objects will be reported to the MMO using the Dropped Object Procedures Form outlined in Schedules 9 and 10, Part 4, Condition 12 (10) and Schedules 11 and 12, Part 4, Condition 7 (11).</p> <p>Additional co-existence procedures noted in the Outline Fisheries Liaison and Co-Existence Plan submitted at Deadline 2 (Document 8.19) include</p>	<p>best assurance post works that no residual snagging risks remain.</p>	


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	<ul style="list-style-type: none"> • 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). <p>Further detailed information on co-existence procedures will be included in the Fisheries Liaison and Co-Existence Plan which will be produced post-consent in consultation with stakeholders and in</p>		


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	accordance with the Fisheries Liaison Offshore Wind and Wet (FLOWW) best practice guidance.		
	Suitable arrangements will be established for attributable gear damages and losses in line with standard procedures as outlined in FLOWW guidance.	Agreed.	Both parties agree that standard procedures as outlined in FLOWW guidance will be used to establish suitable arrangements for attributable gear damage.
	Where cable protection options are necessary the location of these areas will be recorded via the Kingfisher Information Service of Seafish.	Agreed	Both parties agree that where cable protection is necessary the location of these areas will be recorded via the Kingfisher Information Service of Seafish.
	A protocol will be established for the safe recovery of any fishing gears lost or snagged within the Project area and has been noted in the Outline Fisheries Liaison and Co-Existence Plan. Further detail is expected to be captured at a later stage within the Fisheries Liaison and Co-existence Plan which will be produced post-consent.	Agreed	Both parties agree that a protocol should be established for the safe recovery of fishing gears lost or snagged.
	In the event that cables become unburied during the operational phase, this would be communicated to the fishing industry through the use of a dedicated Fisheries Liaison Officer (FLO) and appropriate channels such as the Kingfisher Information Service of Seafish.	Identified cable exposures should be communicated to the fishing industry via NTM and Kingfisher and secured appropriately via the DML. As part of the written representation we have submitted suggested wording to be	Both parties agree that in the event of cables becoming unburied during the operational phase, fisheries stakeholders would be informed through the FLO and appropriate channels such as the Kingfisher Information Services of Seafish.

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	<p>This has been reflected in the updated draft DCO under Schedule 9 and 10, Part 4, condition 9 (11) and Schedule 11 -12, Part 4 condition 4 (11) as follows:</p> <p><i>(11) In case of damage to, or destruction or decay of the authorised scheme seaward of MHWS or any part thereof the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MMO, MCA, Trinity House, and the UK Hydrographic Office. In case of exposure of cables on or above the seabed, the undertaker must within five days following the receipt by the undertaker of the final survey report from the periodic burial survey, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure.</i></p>	<p>included in the notifications sections of the respective DMLs.</p>	<p>NFFO/VisNed recognise that the measures as reflected in the updated draft DCO under Schedule 9 and 10, Part 4, condition 9 (11) and Schedule 11 -12, Part 4 condition 4 (11) provide adequately secures this requirement..</p>
	<p>The Applicant notes that the potential for a community benefit fund is outwith the DCO consenting regime and therefore wider community benefits should not be taken into account when determining the Application. Notwithstanding this, the Applicant has and will continue to engage in relevant wider industry initiatives as appropriate. For example Vattenfall is a member of European Subsea Cables Association (ESCA).</p>	<p>We encourage the use of funding arrangements like the West of Morecombe Fisheries Fund as a mechanism to support fishing industry stakeholders affected by the project and provisioning of work opportunities (e.g. guard vessels or surveys for example) available to affected fisheries stakeholders as far as practically possible.</p> <p>We encourage to support the adoption of the Fish Safe device by fishing vessels operating in the area – see http://www.fishsafe.eu/en/fishsafe-</p>	<p>Both parties agree that community funding arrangements are outwith the DCO consenting regime. Consultation with the fishing industry is ongoing and will continue post-consent. This may include engagement with regards to potential funding opportunities or wider industry initiatives which</p>

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		<p>unit.aspx. This technology, which combined with other safety elements above, provides automated means of integrating safety information into the navigational systems on fishing vessels that in turn provide a real-time warning of safety hazards in the wheel house. This will greatly promote safe working regime around the vicinity of the project and minimise the likelihood of incidents occurring in an area where there exists high levels of fishing activity.</p>	<p>the Applicant may support in the future.</p>
	<p>The Applicant is not able to provide detailed information on decommissioning at this stage. Decommissioning will be undertaken in accordance with the decommissioning programme to be submitted and approved by the Secretary of State under Requirement 14 of the draft DCO. Decommissioning will, take account of the latest scientific understanding and available guidance at that time.</p>	<p>We take the view that there should be no in-situ seabed hazards left in place following decommissioning and any infrastructure that remains buried in the seabed following an adequate assessment of the options should be subject to an ongoing monitoring regime with retained liability to address any emergent hazards.</p>	<p>Both parties acknowledge one another's positions.</p>

The undersigned agree to the provisions within this SOCG

Signed	
Printed Name	Dale Rodmell
Position	Assistant Chief Executive
On behalf of	NFFO
Date	20/03/2019

Signed	
Printed Name	Pim Visser
Position	Chief Executive
On behalf of	VisNed
Date	March 20, 2019

Signed	R Sherwood
Printed Name	Rebecca Sherwood
Position	Norfolk Vanguard Consents Manager
On behalf of	Norfolk Vanguard Ltd (the Applicant)
Date	20 March 2019