

Norfolk Vanguard Offshore Wind Farm

Statement of Common Ground

Highways England

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



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Table of Contents

List of Tables	ii
1 Introduction	1
1.1 The Development	1
1.2 Consultation with Highways England	2
2 Statement of Common Ground	4
2.1 Traffic and Transport	4

List of Tables

Table 1 Summary of Consultation with Highways England regarding traffic and transport	4
Table 2 Statement of Common Ground - Traffic and Transport	6

Glossary

AMP	Access Management Plan
CIA	Cumulative Impact Assessment
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
ETG	Expert Topic Group
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LIDAR	Light Detection and Ranging
MW	MegaWatt
NV	Norfolk Vanguard
OWF	Offshore Wind Farm
PEI	Preliminary Environmental Information
PEIR	Preliminary Environmental Information Report
RWCS	Realistic worst-case scenario
SoCG	Statement of Common Ground
TMP	Traffic Management Plan
TP	Travel Plan

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 100m 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 400kV overhead lines
Necton National Grid substation	The existing 400kV substation near 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 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.
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	A compound containing electrical equipment to enable connection to the

substation	National Grid. The substation will convert the exported power from High Voltage Direct Current (HVDC) to High Voltage Alternating Current (HVAC), to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.
The OWF sites	The two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West.
Trenchless crossing zone	Temporary areas required for trenchless crossing works (e.g. HDD).

1 INTRODUCTION

1. This Statement of Common Ground (SoCG) has been prepared between Highways England (HE) 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 Highways England on the Norfolk Vanguard DCO application (hereafter ‘the Application’). Topic specific matters agreed, not agreed and actions to resolve between Highways England and the Applicant are included.
3. The Applicant has had regard to the Guidance for the examination of applications for development consent (Department for Communities and Local Government, 2015) when compiling this SoCG. 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

4. 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 70km and 47km 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 near Necton, Norfolk.
5. Once built, Norfolk Vanguard would have an export capacity of up to 1800MW, 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.

6. 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 Highways England

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

1.2.1 Pre-Application

8. The Applicant has engaged with Highways England 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.
9. During formal (Section 42) consultation, Highways England provided comments on the Preliminary Environmental Information Report (PEIR) by way of a letter dated 7th December 2017.
10. Further to the statutory Section 42 consultation, several meetings were held with Highways England through the Evidence Plan Process. These are detailed throughout the SoCG and 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. Since the submission of the application the Norfolk Vanguard transport team has been in contact with Highways England to continue discussions regarding the strategy for accessing the works from the A47. An A47 Substation Access Clarifications Technical Note (SACTN) has been produced by the Applicant and issued to Highways England at Deadline 4, dated 12 March 2019 and an A47 Cable Crossing Access Technical Note (CCATN), issued to Highways England before Deadline 7, dated 17 April 2019. Highways England acknowledged and agreed those two Technical Notes (SACTN & CCATN) as acceptable to move forward and has issued technical briefing notes BN07 and BN08 in response. The final Briefing Note 08 was issued to the project team on 9 May 2019.

12. A meeting was also held between Highways England and the Applicant on 22 May 2019 to discuss and resolve the remaining items of concern. Following that meeting all issues are now in agreement between the two parties and this is reflected in this final version of the SOCG.

2 STATEMENT OF COMMON GROUND

13. Within the sections and tables below the different topics for areas of agreement and disagreement between Highways England and the Applicant are set out.

2.1 Traffic and Transport

14. The project has the potential to impact upon traffic and transport. Chapter 24 of the Environmental Statement (ES), (document reference 6.1.24 of the Application), provides an assessment of the significance of these impacts.

15. Table 1 provides an overview of meetings and correspondence undertaken with Highways England regarding traffic and transport.

16. Table 2 provides areas of agreement and disagreement regarding traffic and transport. In order to easily identify whether a matter is “agreed”, “under discussion” or “not agreed”, a colour coding system of green, yellow and orange, respectively, is used in the “final position” column to represent the respective status of discussions.

17. Further details on the Evidence Plan for traffic and transport can be found in Appendix 9.21 and Appendix 25.5 of the Consultation Report (document reference 5.1 of the Application).

Table 1 Summary of Consultation with Highways England regarding traffic and transport

Date	Contact Type	Topic
Pre-Application		
14 th January 2017	Email from the Applicant	Provision of the Traffic and Transport, Air Quality and Noise Method Statements (Appendix 9.4 of the Consultation Report).
27 th February 2017	Traffic and Transport Expert Topic Group (ETG) Meeting	Discussion of Scoping responses and approach to Environmental Impact Assessment (EIA) (minutes provided in Appendix 9.21 of the Consultation Report).
7 th March 2017	Email from Highways England	Traffic and Transport Method Statement Response: Raised a potential impact on the A47 at the substation site near to Necton, requiring detailed analysis of traffic generation and a review of historic collisions.
17 th July 2017	Onshore Traffic and Transport pre-Preliminary Environmental Information (PEI) ETG Meeting	Project update and overview of results to date (minutes provided in Appendix 9.21 of the Consultation Report).
7 th December 2017	Email from Highways England	PEIR response

Date	Contact Type	Topic
25 th January 2018	Onshore Traffic and Transport ETG meeting – PEI Responses	Access options from the A47 discussed, and conversation regarding junction sensitivity tests (minutes provided in Appendix 25.5 of the Consultation Report).
12 th April 2018	Email from the Applicant	Provision of A47 Access Technical Note (provided in Appendix 25.12 of the Consultation Report).
Post-Application		
16 th August 2018	Email from Highways England	Provision of a Briefing Note (AECOM BN03) covering A47 access requirements as set out in the application.
24 th August 2018	Email from Highways England	Request for clarification on aspects of the proposed A47 accesses.
10 th December 2018	Email from the Applicant	Provision of an A47 Substation Access Briefing Note (the SABN).
17 th December 2018	Meeting with Highways England	To discuss the submitted application with specific reference to interaction with the strategic road network.
17 th January 2019	Email from Highways England	Provision of two Briefing Notes (AECOM BN04 & BN06) setting out Highways England's response to the SABN.
12 th February 2019	Email from Highways England	Provision of a briefing note (AECOM BN05) detailing Highways England's junction assessment based on the information provided in the application.
13 th March 2019	Email from the Applicant	Provision of an A47 Substation Access Clarification Technical Note (the SACTN).
3 & 4 April 2019	Email from the Applicant	A47 Substation Access A and D1; In support to the SACTN report, Highways England received a few additional drawings and clarifications of various points added later, on 3 & 5 April.
After 5 April 2019	Email from Highways England	Provision of a briefing note (AECOM BN07) setting out Highways England's response to the SACTN.
17 April 2019	Email from the Applicant	Provision of an A47 Cable Crossing Access (North-West of Scarning) Technical Note (the CCATN)
9 May 2019	Email from Highways England	Provision of a briefing note (AECOM BN08) setting out Highways England's response to the CCATN.
22 May 2019	Meeting with Highways England	Discussed specific reference with BN05, Garton Hall and A47 Great Yarmouth's 3 Junctions, BN08 and any other issues left for the post DCO consent.

Table 2 Statement of Common Ground - Traffic and Transport

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
Policy and Legislation			
Legislation	The legislation adopted for Norfolk Vanguard is relevant and interpreted appropriately.	Agreed	It is agreed by both parties that the legislation is relevant and has been interpreted appropriately.
Renewable Energy	<p>The principle of offshore wind is supported, as Norfolk Vanguard accords with national renewable energy targets and objectives.</p> <p>This was noted in Highways England's PEIR response in November 2017.</p>	Agreed	It is agreed by both parties that Norfolk Vanguard accords with national renewable energy targets and objectives
Environmental Impact Assessment			
Existing Environment	Sufficient survey data (extent/duration) has been collected to inform the characterisation of the baseline environment.	Agreed	It is agreed by both parties that with the additional data contained in the CCATN and SACTN referred to below, sufficient survey data has been collected to inform the assessment
Assessment methodology	The impact assessment methodologies used for the assessment represent an appropriate approach to assessing potential impacts.	Agreed	It is agreed by both parties that the transport impact assessment methodologies are appropriate.
	The methodology adopted for the Great Yarmouth port assessment (onshore construction traffic derived from the port) is acceptable. This was discussed and agreed in communications following the ETG meeting in July 2017.	Agreed	Both parties agree the assessment of onshore construction traffic derived from Great Yarmouth port is acceptable.

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
	The assessment adequately defines the realistic worst case scenario (RWCS) for traffic demand. This was discussed and agreed (in principle) during the ETG meeting in July 2017.	Agreed	It is agreed by both parties that the RWCS in the ES is appropriate.
	The assessment adequately defines the realistic worst case scenario for employee distribution.	Agreed	It is agreed by both parties that the employee distribution in the ES is appropriate.
	The assessment adequately characterises the baseline environment in terms of traffic and transport.	Agreed	It is agreed by both parties that following the provision of the CCATN and SACTN, the assessment adequately characterises the traffic and transport environment.
Assessment findings	The assessment of impacts for construction, operation and decommissioning presented are appropriate and adhere to the agreed assessment methodology.	Agreed.	It is agreed by both parties that the assessment of impacts for construction, operation and decommissioning presented adhere to the agreed assessment methodology.

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
Approach to mitigation	The commitment to produce final a Traffic Management Plan (TMP), Travel Plan (TP) and Access Management Plan (AMP) (based on the outline documents submitted with the DCO application, document reference 8.8, 8.9 and 8.10), which will require approval by the relevant planning authority in consultation with the highway authority, provides a sufficient control mechanism to mitigate for potential impacts on traffic and transport. This is secured through DCO Requirement 21. This was discussed and agreed (in principle) during the ETG meeting in July 2017.	Agreed	It is agreed by both parties that the production of a final TMP, TP and AMP will provide sufficient mitigation.

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
A47 sensitive junctions 1 - 4 in the Great Yarmouth and Acle areas.	<p>AECOM, on behalf of Highways England, reviewed the A47 junctions identified as 'sensitive to increases in traffic' in relation to the proposed construction traffic assessed within the Applicant's Environmental Statement (Chapter 24 Traffic and Transport). The findings of this review are set out in AECOM's Briefing Note BN 05.</p> <p>Two critical recommendations were identified by AECOM:</p> <ol style="list-style-type: none"> 1. The impact of construction for the Project on both Junction 1 (A47 Gapton Hall) and Junction 2 (A47 Vauxhall) should be controlled through the TMP, which should aim to minimise the number of additional vehicles using this junction during peak periods, for example through the use of an hours of working restriction. 2. At Junction 4 (A47 Acle), consideration should be given to the use of a variable message sign aimed at alerting westbound drivers on the A47 of the risk of excessive queues at this junction whilst they are still on the Acle Straight. <p>The Applicant and Highways England had a further discussion on these matters on 22 May 2019.</p> <p>For item 1, after further consideration of the proposed construction traffic, the following points were agreed: the increase in traffic is very low relative to the observed day-to-day variability in traffic flows; it is temporary in nature; the contractor may in any case decide to avoid moving vehicles into and out of the Port during times of congested traffic conditions; in Great Yarmouth, traffic congestion does not always coincide with the conventional peak hours. It was therefore agreed that it is not necessary to impose the suggested working restrictions, and Highways England withdraw this request.</p> <p>For item 2, the Applicant has agreed to deliver this recommendation through the TMP. This has been captured in the updated OTMP submitted to the examination at Deadline 7 and is secured through Requirement 21.</p>	Agreed.	<p>Both parties agree that critical recommendation 1 (related to the timing restrictions at Gapton Hall roundabout and Vauxhall roundabout) is no longer necessary following further examination of the proposed traffic increases.</p> <p>Both parties agree that critical recommendation 2 (variable message sign at the A47 Acle junction) will be delivered through the final TMP to be produced post-consent.</p>

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
A47 Substation access at Necton	<p>A Substation Access Briefing Note (SABN) related to access proposals off the A47(T) was submitted to Highways England for review. The SABN clarified the approach the Applicant would take for subsequent assessment and design work to ensure that the final junction design will be undertaken to the satisfaction of Highways England.</p> <p>Highways England subsequently identified further areas that required clarification and requested a further technical note be produced addressing these issues (the SACTN). The SACTN was produced by the Applicant and issued to HE at Deadline 4.</p> <p>Highways England subsequently responded to the SACTN within a Briefing Note (BN07) and confirmed agreement in principle to the approaches set out in the SACTN.</p> <p>Requirement 22 of the draft DCO ensures that the siting, design, layout and any access management measures for any new, permanent or temporary means of access to a highway must be approved by the relevant planning authority in consultation with the highway authority. In the case of the A47(T) the relevant authority will be Highways England.</p> <p>Following agreement in principle of the SACTN (and on the understanding that the work outlined within the document is delivered to the satisfaction of Highways England), and with the inclusion of Requirement 22, this will ensure that that any final junction design will be fit for purpose with regard to safety, driver delay and will not obstruct any future plans for dualling the A47(T).</p>	<p>This is now agreed in principle and confirmed within Highways England Briefing Note BN07</p>	<p>The approaches set out in the SACTN related to the substation access off the A47 are agreed to the satisfaction of Highways England.</p> <p>Issues previously raised have now been addressed.</p>


Topic	Norfolk Vanguard Limited position	Highways England position	Final position
A47 Cable Crossing access at Scarning	<p>A separate technical note was produced detailing the access strategy for the A47 cable crossing north west of Scarning – a Cable Crossing Access Technical Note (CCATN).</p> <p>The aim of the CCATN was to address issues raised by Highways England to progress towards ‘Agreement in Principle’ for the A47 cable crossing access strategy.</p> <p>Highways England subsequently responded to the CCATN within a Briefing Note (BN08) and confirmed agreement in principle to the approaches set out in the CCATN.</p> <p>The Applicant will provide the necessary Geotechnical Risk Report and Preliminary Sources Study for each crossing, likely as an appendix to the detailed crossing method statements which will be developed in consultation with HE post-consent.</p>	<p>This is now agreed in principle and confirmed within Highways England Briefing Note BN08.</p> <p>Detailed proposals should be submitted at least six months prior to the anticipated start-of-works at HDD locations to allow a Section 50 Licence (New Roads And Street Works Act 1991) to be entered into and a Geotechnical Certificate to be issued by HE.</p>	<p>The approaches set out in the CCATN are agreed to the satisfaction of Highways England. .</p> <p>Issues previously raised have now been addressed.</p>

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
Abnormal loads	<p>The impact of abnormal loads on traffic and transport receptors has been adequately assessed. The management measures detailed in Outline Construction Traffic Management Plan (Document Reference A8.2) for abnormal loads are appropriate in principle. Further detail and site-specific measures will be developed in the final CTMP(s) secured under Requirement 18 of the draft DCO).</p> <p>The Applicant highlights that it intends, through the development of the Outline CTMP (APP-176), to continue to monitor and consider the impact of Abnormal Indivisible Loads associated with the delivery of cable drums to both the main construction compound and to secondary compounds, as well as direct to the onshore cable corridor.</p> <p>In this regard, the Applicant will give due consideration to transformer abnormal loads to demonstrate feasibility of access to the onshore HVAC booster and onshore HVDC converter/HVAC substation and the details of any specific link works to accommodate the movement of abnormal loads will be confirmed in the final CTMP(s) secured under Requirement 18 of the draft DCO).</p>	<p>At this stage it is not possible to understand fully the impacts of abnormal loads on the SRN, as the applicant has not provided the port location to be used for this project and consequently abnormal load routeings have not yet been identified. The routeings will be reviewed once further information on routeing is provided. Any approval will be provided by the Highways England's Abnormal Loads team. HE will require agreement to be reached prior to any onshore site construction takes place. Any approval will include where necessary site-specific measures to accommodate the abnormal loads along the specified routeings. HE is content that the commitment made by the Applicant to undertake this work is sufficient for this issue to be agreed.</p>	Agreed.

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
Cumulative Impact Assessment (CIA)			
Methodology	<p>The methodology adopted for the CIA and projects assessed for cumulative impacts with Norfolk Vanguard is appropriate. This was discussed and agreed via email communications in March 2018.</p> <p>The final Traffic Management Plan will confirm cumulative traffic impacts with other major projects (namely: Hornsea Project Three and Great Yarmouth Third River Crossing) and set out the measures to ensure that the cumulative environmental impacts are managed to non-significant levels.</p>	Agreed	The CIA methodology and projects identified are appropriate.
Construction co-ordination	<p>A communication plan will be adopted as part of the final Code of Construction Practice (CoCP).</p> <p>The communication plan will set out the process of continued engagement between the Applicant, the Local Highway Authority and other major projects (namely: Hornsea Project Three and Great Yarmouth Third River Crossing). This will ensure that as construction programmes are refined post-consent and that this information is regularly shared between parties, particularly traffic demand on shared road links. This will ensure that commitments to manage cumulative construction traffic demand are fully delivered; for example, on a given road the two projects may have committed to programme works that ensure each scheme's peak traffic does not overlap. Regularly programmed sharing of information will ensure that the final approved TMPs accurately reflect the expected construction traffic demand of both projects and provide certainty to the Local Highway Authority that commitments remain feasible and deliverable.</p>	Agreed – on the understanding that this mechanism for communication is detailed post-consent.	Both parties agree that this detail will form part of the final CoCP (and mirrored within the final TMP) to be produced post-consent.

Topic	Norfolk Vanguard Limited position	Highways England position	Final position
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	The wording of Requirements 21 and 22 provided within Part 3 and Schedule 5 of the draft DCO (and supporting certified documents) for the mitigation of impacts to traffic and transport are considered appropriate and adequate.	Agreed on the understanding that the measures captured in the outline traffic plans will be delivered through the final plans referred to under Requirements 21 and 22	Both parties agree that the measures captured in the outline traffic plans will be delivered through the final plans referred to under Requirement 21 and 22

The undersigned agree to the provisions within this SOCG

Signed	
Name	Eric Cooper
Position	Team Leader, Spatial Planning, Operations (East)
On behalf of	Highways England
Date	30 May 2019

Signed	<i>R. Sherwood</i>
Name	Rebecca Sherwood
Position	Norfolk Vanguard Consents Manager
On behalf of	Norfolk Vanguard Ltd (the Applicant)
Date	30 May 2019